

The Alabama Tombigbee Regional Commission prepared this plan with guidance from The Conecuh County Emergency Management Agency and the Conecuh County Natural Hazard Steering Committee.

For additional copies or if you have comments or suggestions, contact:

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Appendix 1

Summary of Changes Made in Plan Update Section I. The Hazard Mitigation Plan

The first section of the plan gives a basic overview of the need and purpose of a Hazard Mitigation Plan. For the update, the Conecuh County EMA and the Alabama Tombigbee Regional Commission reviewed this section. Only a minimal amount changes were needed. Section C (Funding) was revised by the Alabama Tombigbee Regional Commission to reflect funding for this update process. Sections A (Conecuh County Natural Hazards Mitigation Plan), B (Authority), D (Scope), E (Purpose), and Section F (Multijurisdictional Planning Participation) were not revised. The information contained in these sections has not changed.

I. The Hazard Mitigation Plan

A. Conecuh County Natural Hazards Mitigation Plan

The <u>Natural Hazards Mitigation Plan for Conecuh County, Alabama</u> is a multi-jurisdictional, multihazard mitigation plan. This plan fulfills the requirements set forth by the Federal Disaster Mitigation Act of 2000 (DMA 2000). It meets all eligibility requirements set forth by the Federal Emergency Management Agency (FEMA) for grant assistance. Geographically, this plan covers the entire county including all unincorporated areas and the municipalities of Evergreen, Repton, and Castleberry.

B. Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a Hazard Mitigation Plan as a condition of receiving federal disaster assistance. Conecuh County's previous mitigation plan was approved on March 30, 2011.

C. Funding

Funding was received from the Hazard Mitigation Grant Program to update the <u>Natural Hazards</u> <u>Mitigation Plan for Conecuh County</u>. <u>Alabama</u>. The Conecuh County Commission received grant monies, and the Alabama Tombigbee Regional Commission facilitated the planning process.</u>

D. Scope

The <u>Natural Hazards Mitigation Plan for Conecuh County, Alabama</u> includes all incorporated and unincorporated areas in Conecuh County plus the Conecuh County School System. The plan addresses all natural hazards identified by the Federal Emergency Management Agency. All hazards that may affect Conecuh County and its residents are identified. Hazard mitigation strategies are discussed in terms of short term and long-term goals. Responsibility for implementation of strategies is discussed and possible funding sources are identified.

E. Purpose

"Mitigation is the cornerstone of emergency management. It is the ongoing effort to lessen the impact disasters have on people's lives and property through damage prevention and flood insurance (http://www.fema.gov/fima/)." The <u>Natural Hazards Mitigation Plan for Conecuh County.</u> <u>Alabama</u> is an effort to evaluate and identify all natural hazards, which may affect Conecuh County. It presents mitigation strategies that address each hazard identified. This plan is only one of many steps Conecuh County will take to achieve a safer, more hazard resistant, environment for its residents.

F. Multi-Jurisdictional Planning Participation

All four jurisdictions in Conecuh County continued to participate in the planning process. These jurisdictions are Conecuh County, Evergreen, Repton, and Castleberry. Each jurisdiction will also formally adopt the updated plan. The Conecuh County School system also participated in the planning process and will adopt the plan. The system participated during the last planning cycle, but did not formally adopt the plan. Participation included completing hazard questionnaires, supplying information on critical facilities, and providing project lists.

Summary of Changes Made in Plan Update Section II. Planning Process

This section contains a variety of organizational and basic information that deals with the update process. Committee and stakeholders lists were updated to reflect current information. The participating jurisdiction section was to add more detail on how each jurisdiction participated. Appendix 1 was added to the plan to document the planning process through meeting notices, sign in sheets, meeting notes, mailing lists, and general correspondence. This appendix is referred to during the discussion of the process in this section. A section containing synopses of the changes made to each section was also added. The section on existing plans was also reviewed and updated.

II. Planning Process

A. Hazard Mitigation Steering Committee

The Conecuh County Hazard Mitigation Plan was developed with the guidance of one committee, the Natural Hazards Steering Committee. The committee was charged with the following task:

To develop and oversee a comprehensive natural hazard mitigation planning process that:

ü Engages public participation and support,

ü Facilitates federal, state, regional, and local agencies' coordination,

ü Constantly monitors and evaluates the potential risks of hazards to life and property

ü Actively mobilizes all available community resources and measures to mitigate the threats of hazards,

ü Results in programmed actions with specific results.

Natural Hazards Steering Committee

The Natural Hazard Steering Committee was selected by the Conecuh County EMA director. The committee was reevaluated for the update and new appointees were identified for the entire five year planning cycle. The following entities are represented on the Natural Hazards Steering Committee:

- ▼ Conecuh EMA Director, Committee Chair
- ▼ Conecuh County Road and Bridge Department, County Engineer
- ▼ Conecuh County Sherriff's Office, Sherriff
- ▼ Volunteer Fire Department Association, President
- ▼ Conecuh County School System, Superintendent
- ▼ Town of Repton, Mayor or Appointee
- ▼ Town of Castleberry, Mayor or Appointee
- ▼ City of Evergreen, Mayor or Appointee
- ▼ Conecuh County Commission, Chairman

Each member of the Steering Committee contributed his/her opinion on the following topics:

- ▼ identification of hazards,
- ▼ identification of existing plans,
- ▼ identification of critical facilities,
- ▼ identification of goals, objectives, and possible projects;
- ▼ development of plan maintenance guidelines.

In addition, the county engineer provided his knowledge of roadways which are prone to flash flooding.

The Conecuh County EMA Director compiled a list of participation requirements for the Natural Hazards Steering Committee that each member must fulfill. Each member of the committee was notified of these requirements in a written letter and verbally. All members stated they understood the requirements. The requirements are as follows:

- ▼ Members, or their representative, are encouraged to attend committee meetings or notify ATRC to receive materials and worksheets from the meeting missed
- ▼ Information requested must be submitted within the specified time frame for that material

▼ Full cooperation (working together, striving to resolve conflicts, showing respect) between municipalities, Conecuh County EMA, and Alabama Tombigbee Regional Commission throughout the entire planning process.

Two planning committee meetings were held during the update, these meetings were also open to the general public. The public was notified of the meetings by meeting notices being posted throughout the county. These notices were posted at Castleberry Town Hall, Evergreen City Hall, Repton Town Hall, and the Conecuh County Courthouse. Meetings were held on May 6, 2014 and August 14, 2014. At these meetings, information regarding each section of the plan was reviewed. In addition, each jurisdiction's specific information was reviewed and revised when requested. All other correspondence took place via phone, fax, and email. The majority of this correspondence occurred during the months of May and June (see Appendix 1).

Each member of the Steering Committee contributed his/her opinion on the following topics:

- ▼ review of hazards (risk assessment),
- ▼ identification of existing plans,
- ▼ review and update of critical facilities,
- ▼ review and update of goals, objectives, and possible projects;
- ▼ review and update of plan maintenance guidelines.

Appendix 1 contains a sample invitation letter and sign in sheets from both committee meetings. The initial meeting held on May 6, 2014 was well attended. Three of the five participating entities had representation present. A number of stakeholders were also present. The second meeting held on August 14, 2014 was poorly attended. The Conecuh EMA will take steps to encourage continued participation by stakeholders and committee members throughout the next update process. Strategies to accomplish this include follow up phone call reminders and email reminders of meetings.

B. Public Involvement

Conecuh County EMA took steps to involve the public in the planning process. Both committee meetings were also public meetings and the public was encourage to participate. Public meeting notices were posted throughout the county advertising the meetings. A copy of the notice is included in Appendix 1. These notices were posted at Castleberry Town Hall, Evergreen City Hall, Repton Town Hall, and the Conecuh County Courthouse.

No members of the general public attended these meetings. If members of the public had attended, their opinions and ideas regarding the hazard mitigation information presented would have been recorded and incorporated into the plan. During the next plan update, the county will expand its public outreach. Meeting notices will be re-evaluated and revised to clearly state that the meetings are public meetings. Language encouraging participation by the public will also be added. Notices for meetings will be advertised in the local newspaper. The EMA will reach out to the local radio station to help promote the meetings. The county will also use social media, such as Facebook, to promote meetings. Survey Monkey or an equivalent online survey website will be used to gather public opinion on hazard issues. Special attention will be given to encouraging neighboring counties (Monroe, Escambia, Butler, and Covington) to participate. EMA will contact them directly to solicit there participation.

The draft plan was posted on the Alabama Tombigbee Regional Commission's website (atrcregion6.org). Copies of the draft were also available for public review at the Conecuh County EMA office. Notices of the draft plan's availability for review were posted throughout the county, a copy of this notice is included in Appendix 1. These notices were posted at Castleberry Town Hall, Evergreen City Hall, Repton Town Hall, and the Conecuh County Courthouse. For the next update, the county will also post notices as local senior centers, volunteer fire departments, and libraries to encourage participation. No comments from the public were received on the draft plan. For the next update, the county will advertise the draft plan's availability in the local newspaper.

A public hearing to receive comments was also held by each jurisdiction prior to plan adoption. These meetings were held on the following dates:

- Conecuh County Commission- (date of meeting prior to adoption to be inserted)
- City of Evergreen- (date of meeting prior to adoption to be inserted)
- Town of Repton- (date of meeting prior to adoption to be inserted)
- Town of Castleberry- (date of meeting prior to adoption to be inserted)
- Conecuh County School System- (date of meeting prior to adoption to be inserted)

C. Interagency and Intergovernmental Coordination

A wide range of state, regional, county, and local entities were contacted regarding the planning process. A copy of the invitation letter is included in Appendix 1. Information was requested from many. Many were contacted as stakeholders. The surrounding counties of Monroe, Escambia, Butler, and Covington were contacted, but did not choose to participate. The following table lists each participating entity and how they participated. In addition, all surrounding jurisdictions were contacted and invited to attend mitigation committee meetings, review the draft, and provide comments. A full mailing list is included in Appendix 1.

Entities Serving on Natural Hazards Steering Committee							
Johnny Brock, Conecuh County EMA							
Johnny Andrews, Conecuh County Commission							
Terri Carter, Town of Repton							
J.B. Jackson, Town of Castleberry							
Jeff Sullivan, City of Evergreen							
Winston Foshee, Conecuh County Road and Bridge Department							
Ronnie Brogden, Conecuh County School System							
Aubrey Padgett, Volunteer Fire Association							
Edwin Booker, Conecuh County Sherriff's Office							

Stakeholders Providing Hazard and Vulnerability Information (Attended Meetings, Reviewed Draft)						
Conecuh County EMS (Michael Lambert, Michael Nelson)						
Conecuh County Rescue (Alonzo Grace)						
Repton Police Department (Daryl Knowles)						
Evergreen Police Department (J.A. Simpson)						
Alabama Forestry Commission (Provided Wildfire Information)						

Stakeholders Invited to Hazard Mitigation Meetings (No Participation)					
Conecuh County Department of Human Resources					
Community Action Agency					
American Red Cross					
Repton Police Department					
Castleberry Police Department					
Monroe County Commission					
Butler County Commission					
Covington County Commission					
Escambia County Commission					
ATRC Area Agency on Aging					
ATRC Rural Transportation					

By inviting a wide range of entities to participate, the plan was more effective in representing the county as a whole. All information, suggestions, and comments from all who participated were reviewed and integrated when appropriate; making Conecuh County's plan a collaborative effort.

D. Participating Jurisdictions

All jurisdictions within Conecuh County have participated in the planning process and will adopt the final plan by formal resolution. These jurisdictions are as follows:

- ▼ Town of Repton: Attended committee meeting, reviewed jurisdiction specific information and provided updates, reviewed draft plan
- ▼ Town of Castleberry: Met with Conecuh EMA Director to review jurisdiction specific information and confirm no changes, reviewed draft plan
- ▼ City of Evergreen: Attended committee meeting, reviewed jurisdiction specific information and provided updates, reviewed draft plan
- ▼ Conecuh County Commission: Attended committee meeting, reviewed jurisdiction specific information and provided updates, reviewed draft plan
- ▼ Conecuh County School System: Met with Conecuh EMA Director to review jurisdiction specific information and confirm no changes, reviewed draft plan

E. Update Process

The update process began with a full review of the existing <u>Natural Hazards Mitigation Plan for</u> <u>Conecuh County</u>, <u>Alabama</u> by the staff at the Alabama Tombigbee Regional Commission and Conecuh County EMA. The two agencies began by identifying all areas where there were known additions, revisions, and deletions. A list was compiled by the Alabama Tombigbee Regional Commission to use as a resource during the compilation of the update, but every section was reevaluated regardless if initial revisions were identified.

For the next update the participating jurisdictions, public, neighboring communities, and stakeholders will convene prior to any revisions to the plan. These groups will be involved in every step of the planning process.

Each section was reviewed as follows:

- ✓ The Hazard Mitigation Plan: The Hazard Mitigation Plan section of the plan was revised prior to the first committee meeting. Section C (Funding) was revised by the Alabama Tombigbee Regional Commission to reflect funding for this update process. Sections A (Conecuh County Natural Hazards Mitigation Plan), B (Authority), D (Scope), E (Purpose), and Section F (Multijurisdictional Planning Participation) were not revised. The information contained in these sections has not changed. All revisions/updates were approved by the participating jurisdictions.
- ✓ Planning Process: The Planning Process was updated after committee meetings were held and the remainder of the plan had been revised. The planning process section was extensively revised by the Alabama Tombigbee Regional Commission (ATRC). Committee and stakeholders lists were updated to reflect current information. More detail was added to the participating jurisdiction on how each jurisdiction participated. Appendix 1 was added to the plan to document the planning process through meeting notices, sign in sheets, meeting notes, mailing lists, and general correspondence. This appendix is referred to during the discussion of the process in this section. A section containing synopses of the changes made to each section was also added. The section on existing plans was also reviewed and updated.
- ✓ County Profile: The Alabama Tombigbee Regional Commission reviewed and updated this the County Profile prior to the first committee meeting. Section A (Geology) was not updated, due to the nature of geology. In Section B (Transportation), the traffic count and railroads sections were updated to reflect the latest information from the Alabama Department of Transportation. Section C (Economy) was revised to provide a narrative description of the county's economy. There were no revisions to Section D (Utilities) and Section E (Media). Section F (Social and Economic Characteristics) was revised extensively to incorporate data from the American Community Survey.
- ✓ Risk Assessment: The Risk Assessment section was initially reviewed and updated prior to the first committee meeting. ATRC reviewed each hazard and researched to find any additional information that could help determine risk. Past occurrences were updated using the Storm Events Database and probabilities were recalculated. The Risk Assessment was reviewed at the first committee meeting and attendees were asked to provide feedback. Attendees provided feedback on additional occurrences of many hazards. No attendee or non-attendee stakeholder requested any changes be made to the risk level assigned to any hazard.
- ✓ Assessing Vulnerability: Sections A-D were revised prior to the first committee meeting. Section A (Overview of Hazard Vulnerability and Impact) was reviewed and only minor changes were made. Section B was updated to reflect the newest American Community Survey information for affected populations. This information was also used to update socially vulnerable populations (Section C). HAZUS-MH was used to get updated building

stock numbers for Section D. Sections A-D were reviewed at the first committee meeting, no attendee had any suggestions or changes. Section E (Identification of Critical Facilities) was reviewed also and participants were asked to identify additional facilities. For Sections F (Critical Facilities by Jurisdiction) and G (Future Critical Facilities), participating jurisdictions were given their critical facility information from the current plan and asked to update it and resubmit it. Section H was compiled once all data was received back from participating jurisdictions and presented at the second committee meeting. Section I was revised prior to the second committee meeting to reflect more up to date population projections and was reviewed with the attendees.

- ✓ Ongoing Mitigation Assessment: A new section Existing Authorities, Policies, Programs, and Resources by Jurisdiction was added to detail capabilities by jurisdiction. Capabilities were determined by talking with each jurisdiction via phone calls. The information on the Conecuh County EMA was moved to Section B.
- ✓ Mitigation Goals, Objectives, and Actions by Jurisdiction: Each participating jurisdiction received their information from the previous plan at the first committee meeting. Jurisdictions with no one present at the meeting were contacted directly. Each jurisdiction reviewed their information and either confirmed there were no revisions or submitted changes.
- ✓ Plan Maintenance: The plan maintenance section was reviewed by ATRC and the Conecuh County EMA. Information regarding evaluation and monitoring of the plan during the last five year cycle was added. The Incorporation in to Existing Planning Mechanisms section was also revised to provide information by jurisdiction. All participating jurisdictions and stakeholders were asked to review the plan maintenance process, including how to solicit more public participation and provide any suggestions for improvement, no suggestions were received.

As noted above, the update process consisted of two Natural Hazards Steering Committee/Local Government Subcommittee meetings held on May 6, 2014 and August 14, 2014 at the Conecuh County EMA, these meetings were also public involvement meetings. As stated before, the Conecuh EMA will reevaluate its public outreach for the next plan update. All other correspondence took place via phone, fax, and email (Appendix 1).

The draft plan was available for review and comment on ATRC's website, atrcregion6.org. Notices of the draft plan's availability for review were posted throughout the county, a copy of this notice is included in Appendix 1. These notices were posted at Castleberry Town Hall, Evergreen City Hall, Repton Town Hall, and the Conecuh County Courthouse. For the next update, the county will also post notices as local senior centers, volunteer fire departments, and libraries to encourage participation. No comments from the public were received on the draft plan. For the next update, the county will advertise the draft plan's availability in the local newspaper.

F. Integration with Existing Plans

Throughout the planning process those who participated identified many plans. Many of these plans were consulted for information. Also, the planning committee took care to ensure that no strategies or proposed actions contradicted with the local municipal and countywide plans that are already in place. These plans include: Evergreen Strategic Plan and the Conecuh County Emergency Operations Plan. The strategies, goals, and objectives identified in the mitigation plan will be integrated into these existing plans as they are updates.

Many reports, plans, and informational sources were consulted during the development of the plan. These sources are cited throughout the plan. These sources include:

- ▼ NOAA and NWS records: past occurrence data
- ▼ Evergreen Strategic Plan: review of goals and objectives
- ▼ Flood Insurance Rate Maps: areas in flood plains
- ▼ Conecuh County Flood Insurance Study
- ▼ <u>A Strategic Plan for the Alabama Tombigbee Region</u>: review of regional goals to ensure mitigation goals and strategies did not conflict
- ▼ Alabama State Data Center Estimates and Projections: socio economic data
- ▼ State of Alabama: State Hazard Mitigation Plan Update: hazard information
- ▼ Conecuh County, Alabama Soil Survey: Soils Information
- ▼ Census 2010, U.S. Department of Commerce: socioeconomic information.
- ▼ American Community Survey, US Census Bureau
- ▼ Maps from Cartographic Research Laboratory, The University of Alabama
- ▼ Geologic Hazards Information the Geologic Survey of Alabama: http://www.gsa.state.al.us
- ▼ Geologic Hazard Information from the United States Geological Survey: http://www.usgs.gov
- ▼ Hazard Information from National Oceanic and Atmospheric Administration: http://www.aoml.noaa.gov
- ▼ Hazard Information: http://www.hazardmaps.gov
- ▼ Landslide Information: http://www.nhoem.state.nh.us/mitigation/fig%203-17.htm
- ▼ Hazard Information from Federal Emergency Management Agency: http://www.fema.gov
- ▼ Wildfire Information: Alabama Forestry Commission
- ▼ Tropical Cyclone Tracking Probability: Historical probability of a tropical cyclone crossing various locations around the world- Florida State University

Summary of Changes Made in Plan Update Section III. County Profile

This section gives a brief overview of the County as a whole. It is intended to help the reader become more familiar with the county. This is not a required section of the mitigation plan. Only minimal changes were made to this section to update transportation system information, the economy, and socioeconomic data. These changes were made after ATRC reviewed the information with the EMA director.

III. County Profile

Conecuh County was established on February 13, 1818. Its size was altered several times before 1868 when its present size was established. In 1898 the county seat was moved from Sparta to Evergreen, which is the county's largest city. Castleberry and Repton are the other two municipalities in Conecuh County. Located in South Alabama, Conecuh County is bordered by Monroe, Butler, Covington and Escambia Counties (Figure 3.1). The name Conecuh comes from the Muskogee language, and has been interpreted to mean "land of cane." Just outside of Evergreen lies an ongoing archaeological site that reveals a Native American culture dating from before Christ. The county is largely rural and possesses vast tracts of forestland. The county spans an area of 853 square miles.





Source: Alabama Tombigbee Regional Commission

A. Geology

Conecuh County lies in the East Gulf Coastal Plain. Geologic units range from the Paleocene to the Holocene. These units are sedimentary in origin and consist of sand, clay, gravel, silt, claystone, marl, limestone, and sandstone. The county lies within the Southern Pine Hills, Dougherty Plain and the Southern Red Hills sub regions.



Last accessed on 12/08/2014

B. Transportation

Roads

Located 91 miles north of Mobile and 71 miles south of Montgomery, Conecuh County holds a key location on I-65. Conecuh County has five interstate exits. Conecuh County is served by United States Highways 31 and 84, and Alabama Highways 83, 41 and 55. Numerous other state routes pass through the county. In addition to the various state and federal routes, there is an extensive

county road system. Figure 3.3 shows selected major highway routes in the county; Table 3.1 gives traffic counts along these routes.



Figure 3.3 Conecuh County Road System

Source: Alabama Tombigbee Regional Commission from US Census Bureau TIGER files

Intersection	Annual Average Daily Traffic Count 2013				
I-65 (Mile Post 95)	23,210				
US 84 (Mile Post 83)	5,710				
US 84 (Mile Post 98)	5,260				
US 31 at US 84	6,130				

Table 3.1 Selected Traffic Counts for Conecuh County

Source: Alabama Department of Transportation http://algis.dot.state.al.us/atd/default.aspx

Railroads

Conecuh County is served by Louisville and Nashville Railroad. Louisville and Nashville Railroad joins with three other Class I railroads in Mobile. Piggyback service, containerized service, reciprocal switching and Amtrak passenger service are available in Mobile. Figure 3.4 shows the major railroads in the county.



Figure 3.4 Major Railways in Conecuh County

Source: Alabama Tombigbee Regional Commission from US Census Bureau TIGER files

Airports

Middleton Field is the municipal airport serving the area. Regional commercial services are provided in both Mobile and Montgomery.

C. Economy

The economy of Conecuh County is primarily wood products. The largest growing segment in the last decade is oil and gas production. Sales tax revenue continues to increase at a large margin as Evergreen is located on I-65. The Board of Education is the largest employer in the county.

D. Utilities

- ▼ Electricity: Evergreen Utilities, Alabama Electric Coop/Southern Pine Electric Cooperative, Alabama Power and REA.
- ▼ Water: Evergreen Utilities, Repton Municipal, Castleberry, Lyeffion,

Brownville-Owassa, Southwest Alabama Water Authority, Hamden Ridge, Pioneer Electric, McCall and Fairview Water System.

- ▼ Natural Gas: South Alabama Gas
- ▼ **Telecommunications**: Bellsouth, Frontier, Castleberry Telephone, GTE, Verizon and CenturyTel.

E. Media

Newspapers:

- ▼ South Alabama News
- ▼ The Evergreen Courant

F. Social and Economic Characteristics

The 2012 American Community Survey (ACS) five year estimates show Conecuh County having a population of 13,188. Fifty one percent of the population is white, while the remaining forty nine percent is minority. Sixty four percent of the population lives in unincorporated areas. ACS estimates identify 30.4% of the county's total population as living in poverty. The county's per capita income was just seventy one percent of the state's average according to the ACS.

Evergreen is the most populated municipality with a population of 3,944. It also serves as the county seat. Castleberry, population 583, is located in the southern part of the county along United States Highway 31. Repton, population 282, is located along United States Highway 84 in the western part of the county.

Evergreen covers the largest area of all the municipalities in the county (Table 3.3). It covers 13.5 more square miles than Castleberry, the next largest municipality. The Town of Repton has the highest population and housing density.

Municipality	Land Area*	Water	Total	Housing	Housing	Population	Population
		Area*	Area*	Units	Density**	-	Density**
Conecuh County	850.79	1.71	852.51	7,103	8.3	13,228	15.5
Town of	1.72	0.02	1.73	358	207	583	337
Castleberry							
City of	15.19	0.06	15.25	1,927	126.4	3,944	259
Evergreen							
Town of	0.52	0.00	0.52	142	273	282	542
Repton							

Table 3.3 Housing and Population Densities by Municipality

*square miles

**density per square mile of land

Source: 2012 American Community Survey (ACS) five year estimates

Summary of Changes Made in Plan Update Section IV. Risk Assessment

The *Risk Assessment* portion of the plan was updated by the Alabama Tombigbee Regional Commission. Each hazard was reviewed and information was updated when it was necessary. There were a number of hazards with no changes made due to their nature.

The Risk Assessment was presented to the Steering Committee. The Steering Committee used this information along with personal knowledge to rank hazards.

The past occurrence data was updated by the staff at the Alabama Tombigbee Regional Commission as a routine part of the update process. The committee and EMA Director reviewed the areas affected and extents of each hazard. They used their knowledge of occurrences and past damages to revise this section.

Changes to the risk assessment section are outlined below.

- > All hazards were reviewed and changes were made where warranted.
- Additional information provided on hurricanes, tornadoes, severe storms, flooding, and earthquakes.
- > The locations susceptible to each identified hazard were updated.
- > The extent of each of the identified hazards was updated.
- ➤ All previous occurrences were updated.
- Probabilities of future occurrences were updated.

IV. Risk Assessment

The risk assessment process is necessary to identify those natural hazards that pose a risk to Conecuh County. This process does not only use empirical data, but also information given by members of the Conecuh County Hazard Mitigation Steering Committee (Table 4.1) to identify these hazards. Each hazard was analyzed and then prioritized as a low, moderate, or high risk. Low risk hazards occur in the county, but have little effect on the economy and livelihood. Moderate hazards may have the potential for extreme effects, but occur rarely. High priority hazards occur on a regular basis and result in heavy losses. Hazards that are not known to occur in the county were classified as no risk. The following section details which hazards will be profiled and why other hazards will not be profiled.

Hazard	Unincorporated	Evergreen	Repton	Castleberry
Avalanche				
Coastal Erosion				
Coastal Storm and	Х	Х	Х	Х
Hurricane				
Dam Failure	Х	Х	Х	Х
Earthquake				
Expansive Soils	Х			
Extreme Heat and	Х	Х	Х	Х
Drought				
Flood	Х	Х	Х	Х
Severe Storms (hail,	Х	Х	Х	Х
high winds, lightning				
and thunderstorms)				
Land Subsidence				
Landslide				
Severe Winter Storm	Х	Х	Х	Х
(Snow & Ice)				
Tornado	Х	X	Х	Х
Tsunami				
Volcano				
Wildfire	Х	X	Х	X

Table 4.1 Hazard Identification Results

A. Identification of Hazards

Avalanche

Avalanches are masses of snow, which slide down mountain slopes. They occur when snow becomes dislodged or unstable on a mountain slope. Conecuh County has neither steep slopes nor any regular snowfall; therefore, there is no risk of this hazard occurring.

Coastal Erosion

Coastal erosion is the breakdown and movement of rock and soil from coastal locations by processes such as weathering. Wind and water are two common moving forces in this process. Conecuh County has no risk of coastal erosion.

Dam Failure

The National Inventory of Dams lists twenty dams as being located in Conecuh County. Table 4.2 gives the number of dams classified in each potential downstream hazard category. There are two dams classified as having high hazard potential; meaning their failure or misoperation would probably result in the loss of human life. Three dams are listed in the significant risk category meaning their failure or misoperation would probably not result in the loss of life, but would result in economic loss, environmental damage, and disruption of lifeline facilities. The remaining fifteen dams in the county are listed as at low risk meaning that their failure or misoperation would not result in the loss of life and only low economic or environmental damage. At this time, the Natural Hazards Steering Committee feels that a dam failure is a low risk hazard.

Table 4.2 Conecuh County Dams by Downstream Hazard						
Hazard Categories Number of Dams						
High	2					
Significant	3					
Low	15					
Undetermined	0					
Total	20					

Earthquakes

The USGS defines an earthquake as a sudden slip on a fault. Earth's tectonic plates are always moving relative to each other, but they can get stuck at their edges due to friction. When the stress on the edge overcomes the friction, there is an earthquake that releases energy in waves that travel through the earth's crust and cause the shaking that we feel. The hazards associated with earthquakes include anything that can affect the lives of humans, including surface faulting, ground shaking, landslides, liquefaction, tectonic deformation, tsunamis, and seiches. Although many areas of the United States are better known for their susceptibility, earthquakes do occur in Alabama There are four seismic zones that affect the state; these zones are the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, Bahamas Fracture Seismic Zone, and the South Carolina Seismic Zone. Although it is located within the Bahamas Fracture Seismic Zone. Although it is located within a seismic zone, there are no earthquakes on record for Conecuh County (Figure 4.2).



Source: Geological Survey of Alabama http://gsa.state.al.us/gsa/geologichazards/Quakes_AL.htm#AdditionalInfo Last Accessed on: 12/8/2014



Earthquake risk is defined as the probability of damage and loss that would result if an earthquake caused by a particular fault were to occur. The peak acceleration value for Conecuh County is around 0.06. (Figure 4.3). Peak acceleration is a measure of how fast the rate of the earth's movement changes compared to the gravitational acceleration rate during an earthquake. A 4%-8% rate translates into a low seismic risk. Based on all the earthquake hazard information compiled, the committee has classified earthquakes as a low risk hazard.

Figure 4.3 Two-Percent of Exceedance in 50 Years Map of Peak Ground Acceleration



http://earthquake.usgs.gov/hazards/products/conterminous/2014/2014_pga2pct50yrs.pdf Last Accessed: 12/8/2014

Expansive Soils

Expansive soils are soils that swell when they come in contact with water. The occurrence of clay is generally the cause of such behavior. Figure 4.4 shows the general soil areas for the state. Conecuh County lies in the Coastal Plain soil classification with a small area of flood plain and terrace soil. Figure 4.5 and Table 4.3 give detailed information on Conecuh County soils. Approximately thirty percent of the area covered by soil is covered by soil with shrink/swell potential. These soils are not suited for urban or residential construction. They are however suitable for crop cultivation, pasture land, and woodland. These soils are located in Nichburg, Nymph, Bellville, Fairview, Cohassett and Flat Rock Due to the widespread presence of expansive soils, the committee feels that this is an important hazard; however, the committee has ranked the hazard as a low priority due to the nature of the hazard.



Source: Cartographic Research Lab, University of Alabama http://alabamamaps.ua.edu/contemporarymaps/alabama/physical/soils_map.jpg Last Accessed: 04/18/2014

Figure 4.5 Generalized Conecuh County Soil Map





Source: Soil Survey of Conecuh County, Alabama 1989 (USDA, NRCS)

Table 4.3 Suitability and Limitations of General Soil Units in Conecuh County

Extensive recreation areas		Good.	Poor: flooding, wetness.	Fair to poor: slope.	y.	: Good.	: Good.	Fair: too clayey.	Fair to poor: too clayey, wetness.
Intensive recreation areas		Fair: flooding, wetness.	Poor: flooding, wetness.	Poor: slope.	Fair: percs slow1	Good to fair slope.	Good to fair slope.	Poor: too clayey.	Poor: too clayey, wetness.
Urban uses		Poor: flooding, vetness.	Poor: flooding, vetness.	Poor: slope, too clayey, stoniness.	Poor: percs slowly.	Good	Good	Poor: low strength, shrink-swell, percs slowly.	Poor: low strength, shrink-swell, percs slowly, flooding.
Woodland		Good	Fair: flooding.	Fair: slope.	GoodGoodGoodGoodGoodGood	Good	Good	Good-	Fair: too clayey, wetness.
Pasture and hayland		Good	Fair to poor: flooding, wetness.	Poor: slope.	Good	Good	Good	Good	Good to fair: wetness.
Cultivated crops		Good to fair: wetness, flooding.	Poor: flooding, wetness.	Poor: slope, depth to bedrock, too clayey.	Fair: slope.	Fair: slope.	Fair: slope.	Poor: too clayey.	Poor: too clayey, wetness.
Extent of area	Pct	٢	m	2	15	45	13	Ś	10
Map unit		1. Izagora-Chrysler- Cahaba	 Bibb-Bigbee-Yonges 	3. Arundel	4. Malbis-Gritney-Fuquay	5. Orangeburg-Troup- Greenville	6. Orangeburg-Troup	7. Luverne-Conecuh	<pre>8. Oktibbeha-Cadeville- Yonges</pre>

Source: Soil Survey of Conecuh County, Alabama 1989 (USDA, NRCS) Extreme Heat and Drought

The National Weather Service defines drought as a persistent and abnormal moisture deficiency having adverse impacts on vegetation, animals, and people. Meteorological, hydrological, and agricultural are the three types of droughts. Meteorological droughts occur when precipitation departs from normal amounts, high temperatures may also play a role in this type of drought. Hydrological droughts are deficiencies in surface or subsurface water levels. Agricultural droughts occur when there is not enough soil moisture to support crop growth. Drought conditions are prevalent in much of the United States during the summer months.

Extreme heat is defined as temperatures that are ten or more degrees or higher than average daily temperatures and last for several weeks. Extreme heat can damage an area economically by resulting in crop losses. The health of persons living and working within the area is also threatened. Health conditions that result from extreme heat range from mild to severe. These conditions include sunburn, heat cramps, heat exhaustion, and heat stroke.

High, subtropical temperatures are common to South Alabama. Under normal conditions, frequent afternoon thunderstorms produce enough precipitation to alleviate drought concerns. However, over that past four years Conecuh County has experienced some degree of drought conditions. Due to the frequency and severity of this hazard, the committee has classified drought and extreme heat as a high priority hazard.

Flood

Generally there are three types of flooding: river flooding, urban/area flooding, and flash flooding. River flooding occurs when rains fill river basins with water too quickly. Basins may be filled with water from successive days of rainfall or from torrential rains that occur as hurricanes move inland. Urban/area flooding occurs from the increased runoff caused by paving large areas. Paved areas cannot absorb rainwater like unpaved or grassy areas, so torrential rains can cause flooding in these areas. Flash flooding is one of the deadliest natural hazards. It can occur almost anywhere and often has a rapid onset; due to this the entire county is at risk for flash flooding. Conecuh County has three unpaved roads that frequently flood. James Mill Road and Winston Bell Road are flooded by Burnt Corn Creek. Brushy Creek Road is flooded by Brushy Creek. Residents along these roads are not affected by these flood events, because there are alternate ways in and out.

Burnt Corn Creek, Big Escambia Creek, Murder Creek, and the Sepulga River are the County's primary flooding threats. The area along these waterways is classified as a Zone A, Special Flood Hazard Area on Flood Hazard Boundary Maps.

Flood hazard areas in Evergreen, Castleberry and Repton are depicted on Figure 4.6-4.11. Most of these flood areas are in unpopulated areas. There are no repetitive loss properties in Conecuh County. Conecuh County, Castleberry, Evergreen, and Repton are all active participants in the National Flood Insurance Program (NFIP).

The Alabama State Hazard Mitigation Plan Update analyzed National Flood Insurance Program claims from 1978-2012. For Conecuh County they found three flood insurance properties. Over the thirty four year span, two of these properties have reported a loss. The total dollar loss on these two properties was \$6,624.00. This data reinforces the fact that Conecuh County there is a significant area of land affected by flooding, but the majority of this land is timberland. Due to this fact, the committee has designated flooding as a moderate risk hazard.



Figure 4.6 Flood Areas in Evergreen (map 1 of 2)

Figure 4.7 Flood Areas in Evergreen (map 2 of 2)







Figure 4.9 Flood Areas in Castleberry (Map 2 of 3)



Figure 4.10 Flood Areas in Castleberry (Map 3 of 3)



Figure 4.11 Flood Areas in Repton


Hurricanes and Coastal Storms

Hurricanes are low-pressure systems over tropical or sub-tropical waters with organized convection present (http://www.aoml.noaa.gov/hrd/tcfaq/A1.html). The Atlantic hurricane season is from June through November. The Atlantic Oceanographic and Meteorological Laboratory analyzed hurricane activity from 1944-1999. A map showing probabilities of a strike that will affect the area sometime during the season was created. Figure 4.12 is the result of this analysis. It shows the results drawn from total hits from hurricanes or storms within one hundred miles of the location. Conecuh County lies within the 18% range.



Figure 4.12 Empirical Probability of a Named Storm

Figure 4.13 shows the results of analysis using hurricanes or storms that struck within sixty miles of a location. This figure illustrates that probability. Conecuh County lies within the 8% range.



Figure 4.13 Probability of a Hurricane

Figure 4.14 shows the probability of an intense hurricane affecting an area during the June through November season. An intense hurricane is defined as a Category 3, 4, or 5 storms. These probabilities were derived from analysis of hurricanes that hit within thirty miles of a location. Conecuh County lies within the 1% range.



1 2 3 4 5 6 Source: Atlantic Oceanographic and Research Laboratory http://www.aoml.noaa.gov/hrd/tcfaq/ih_prob.gif Last accessed on 4/19/14

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Florida State University's Meteorology Department also analyzed hurricane tracks. Their research included hurricanes occurring from 1886-2012. The following figures (4.15-4.17) depict the results of their research.

Figure 4.15 shows that based on FSU's research the probability of a hurricane of any intensity passing over Alabama is between 60% and 80%.



Figure 4.15 Probability of a Tropical Cyclone Eventually Passing over Alabama at Any Intensity Based upon a Given Position (Using 1886-2012 best track)

Figure 4.16 shows that the probability of a storm passing over Alabama with winds exceeding 64 knots (74 miles per hour) is between 15% and 20%.



Figure 4.16 Probability of a Tropical Cyclone Eventually Passing over Alabama at 64+ Knot Intensity Based upon a Given Position (Using 1886-2012 best track)

Figure 4.17 shows the probability of a cyclone passing over Alabama with winds greater than 96 knots (110 miles per hour) is between 1% and 5%.



Figure 4.17 Probability of a Tropical Cyclone Eventually Passing Over Alabama at 96+ Knot Intensity Based Upon a Given Position (Using 1886-2012 best track)

Conecuh County's proximity to the Gulf of Mexico makes it vulnerable to hurricanes. Hurricane Ivan in 2004 caused substantial damage throughout the county. Electricity transmitting lines received heavy damage during Hurricane Ivan, leaving many families without electricity for over a week. Other public utility infrastructure, such as water lines and sewage pump stations also received heavy damage. A substantial amount of timberland was destroyed by Ivan also. Approximately 3,000 homes have been damaged by hurricanes in the past ten years.

The secondary effects of hurricanes, such as high winds and spinoff tornadoes have also caused problems for Conecuh County historically. The remnants of Katrina, Dennis, and several other storms have caused significant damage in the County. Due to the proximity to the coast and historical occurrences, hurricanes are a high priority hazard for Conecuh County.

Landslides

Landslides are the downward and outward movement of soil and rocks under the influence of gravity (http://www.gsa.state.al.us/). Naturally induced landslides occur as a result of weakened rock composition, heavy rain, changes in ground water levels, and seismic activity. Figure 4.18 is a landslide map of the conterminous United States illustrating susceptibility to landslides.



Source: United States Geologic Survey http://pubs.usgs.gov/pp/p1183/plate1.html Last Accessed on 05/02/2014

Conecuh County has low susceptibility and incidence. Figure 4.19 gives a closer look at Conecuh County. This figure also shows low susceptibility and incidence in the County.

Figure 4.19 Map of Conecuh County Landslide Susceptibility and Incidence



Source: United States Geological Survey www.usgs.gov Last accessed on 05/03/2014 The Geological Survey of Alabama (GSA) has one record of a landslide occurrence in Conecuh County in 1997 (Figure 4.20).



Figure 4.20 Conecuh County Landslide (1997)

Source: Geological Survey of Alabama http://gsa.state.al.us/gsa/geologichazards/Landslides.htm Last accessed on 05/03/2014

Although there is a record of a landslide occurring in the county, due to the low susceptibility and low incidence this hazard is considered a low risk in Conecuh County.

Land Subsidence

Land subsidence is the collapse of the ground generally in areas with carbonate bedrock or underlying abandoned mines. Conecuh County has a small area, which is underlain by carbonate rocks (Figure 4.21). There is not an active area of subsidence in Conecuh County (Figure 4.22). At this time, there is no evidence of subsidence affecting any structure or residence in Conecuh County. Due to there being no active area of subsidence, this hazard is not considered a risk in Conecuh County.











Severe Storms (Hail, High Winds, Lightning, Thunderstorms)

Thunderstorms, lightning, hail, and high winds will be grouped into the category of severe storms. Conecuh County has had numerous occurrences of these over the years. Figure 4.23 illustrates the average number of thunderstorm days per year. Conecuh County lies within the 70 thunderstorm days per year range. Figure 4.24 illustrates the average number of days per year with hailstorms. Conecuh County lies within the three days per year with a hailstorm range. Figure 4.25 shows the worldwide distribution of lightning strikes. Conecuh County lies within the 20 flashes/km²/year range, which is a significant figure.

All of these events have occurred historically. These events have resulted not only in property and crop damage, but also injuries have been reported on numerous occasions. These events will continue to occur on a regular basis, leading to these being considered a high priority hazard.



Figure 4.23 Average Number of Thunderstorm Days Each Year

Source: National Oceanic and Atmospheric Administration http://www.srh.noaa.gov/jetstream/tstorms/tstorms_intro.htm Accessed on 11/23/2014



Figure 4.24 Severe Hail Days per Year from 2003-2012 Reports

Conecuh County

Source: National Oceanic and Atmospheric Administration http://www.spc.noaa.gov/wcm/2013/HAIL.png Accessed: 11/23/2014



Source: National Aeronautics and Space Administration http://science.nasa.gov/media/medialibrary/2001/12/02/ast05dec_1_resources/lightningmap_large.gif Accessed: 12/08/2014

Severe Winter Storms (Snow & Ice)

Severe winter storms are associated with strong winds, extreme cold, ice, and snow. These storms are uncommon in Conecuh County, but when they occur they have wide ranging impacts. Ice damages vegetation and often causes limbs to break and trees to fall. Motorists are unaccustomed to traveling in this weather, so accidents occur as a result. Also many homes and buildings, especially in rural areas, lack proper insulation or heating leading to risk of hypothermia. Municipalities generally do not have the resources on hand to deal with winter weather, such as salt, sand, and snow removal equipment. On January 28, 2014, Conecuh County was affected by a winter storm system. The system lead to school closures, road closures, and business closures. The Conecuh County courthouse was also closed as a result. Numerous vehicle accidents were reported throughout the county. Although these events have begun to occur more frequently, this hazard is considered a low priority.

Tornadoes

The National Weather Service defines a tornado as, "A violently rotating column of air in contact with the ground and extending from the base of a thunderstorm (http://www.srh.noaa.gov/oun/severewx/glossary4.php#Tornado)." The occurrence of tornadoes cannot be predicted, but past occurrences and basic weather patterns can be used to identify areas more susceptible. Figure 4.26 shows tornado activity per 1,000 square miles, Conecuh County falls in the one to five tornados per square mile range. The United States Wind Zone map (Figure 4.27) shows how intense and frequent strong winds occur across the United States. Conecuh County lies in Wind Zone III, which have design wind speeds of 150 and 20 miles per hour. Locations within Zone III have experienced significant tornado events. Due to its location in Wind Zone III, this hazard is a high priority



Figure 4.26 Tornadoes per 1,000 square miles

Source: Federal Emergency Management Agency http://www.fema.gov/pdf/library/2ismsec1.pdf Last accessed on 07/27/2014



There are multiple accounts of tornadoes occurring in Conecuh County in the past decade:

- On April 14, 2007, a weak EF-1 tornado developed along the leading edge of a large bow echo just northwest of Castleberry. The tornado blew down trees and damaged a residence just west of County Road 23. Estimated wind speeds were 85 to 90 mph. No injuries occurred.
- On May 15, 2008, a weak EF-0 tornado first touched down just west of Paul. The tornado moved northeast and passed just east of Cohassett. The tornado moved across U. S. Highway 84 at the Conecuh and Covington county line. This is a rural area and the only damage the tornado caused was to trees. Some of the trees landed across the rural roads and had to be moved before anyone could drive on the roads.
- On April 15, 2011 a tornado damaged extreme southeastern Conecuh County. Trees were snapped and uprooted along a 150 yard path.
- On April 7, 2014 an EF-0 tornado affected the City of Evergreen. This tornado resulted in downed trees and minor damage to the city hospital, technical school, and baseball field.

Tsunamis

"A tsunami is a sea wave of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands (http://earthquake.usgs.gov/image_glossary/tsunami.html)." Tsunamis occur predominately in the Pacific Ocean and more specifically as a result of seismic activity in the "Ring of Fire" of the Pacific Rim. Conecuh County is not located in an area at risk for tsunamis; therefore it is not considered a hazard to Conecuh County.

Volcanoes

Volcanoes are accumulations of volcanic materials erupted through volcanic vents on Earth's surface. Within the United States the risk from volcanic activity is only prevalent in the Pacific Northwest, Alaska, and Hawaii. The state of Alabama is not identified as being at risk for volcanic activity; it is not considered a hazard to Conecuh County.

Wildfire

Wildfires are responsible for burning thousands of acres of land each year. These fires are uncontrolled and in dry conditions can spread rapidly through the surrounding vegetation and in some cases structures. There are two types of wildfires; these are wildland fires and urban-wildland interface fires. Wildland fires are those fires that occur in areas where the only development is utilities or infrastructure. Urban-wildland fires occur in areas were development occurs near or within the vegetative cover.

According to the Alabama Forestry Commission, between 2009 and 2014 there were 309 fires that burned 2,542.15 acres. A breakdown of these events by year is given as Table 4.4.

Туре	2009 Incidents	2009 Acres Burned	2010 Incidents	2010 Acres Burned	2011 Incidents	2011 Acres Burned	2012 Incidents	2012 Acres Burned	2013 Incidents	2013 Acres Burned	2014 Incidents	2014 Acres Burned
Arson	4	10	6	30	2	6.3			3	15		
Debris Burning												
(Other)	13	58.5	13	44.35	9	95.1	6	11.1	4	20.1	13	51
Equipment	3	0.1	4	33.6	6	1.2						
Escaped	_			_	_	_	_				_	
Prescribed Burn	5		2	9	5	6	3	65	4	13	7	74.1
False Alarm	4		6	2	7		1		3		9	
Hunter Arson									1	85.4		
Illegal Dump			3	27.25	1	3			1			
Lightning					4	68					1	
Miscellaneous												
(other)	1		3	2.1	1						1	0.1
Powerlines	3	3	1	10							1	5
Railroads					1							
Residential												
Trash	2	2	5	19.5	6	20.75			1			
Structural Fire			3	12	2	1						
Unknown				1,2	2	1						
Causes	4	10	23	489.6	31	663.5	15	147	8	100.4	11	201.1
Unpermitted												
Controlled Burns	1		1		2	0.3	1	6			1	6
Vehicle Fire Escapes			2	9	2	4						
Totals	40	83.6	72	677.6	79	869.15	26	229.1	25	233.9	44	337.3

Table 4.4 Wildland Fire Incidences in Conecuh County 2009-2014

Source: Alabama Forestry Commission, January 2015

The Alabama Forestry Commission has also produced a series of maps for each county to illustrate the state's wildfire risks. Figure 4.28 identifies the communities at risk for wildfire damage in the County. The City of Evergreen is at high risk for damage. The Towns of Castleberry and Repton are both at critical risk.

Figure 4.29 illustrates the risk of a wildfire on a given acre. This risk is assigned based on fuels and historic fire levels. It is apparent that large portions of the County are at high and extreme risk of wildfire. These areas predominantly are located along the I-65 and U.S. 31 corridors.



Ninety one percent of Conecuh County's area is covered by forestland. The economy of the county is also dependent upon these resources. Due to these two factors alone, wildfires are considered a high priority hazard.

Source: Alabama Forestry Commission



Source: Alabama Forestry Commission

Figure 4.29

B. Area Affected by Each Identified Hazard

Table 4.5 illustrates the geographic areas susceptible to each hazard identified in the risk assessment. The nature of the hazards identified by the committee that all areas are susceptible.

Although most areas are susceptible to the same hazards, the extent to which they are susceptible varies. The susceptibility also may vary within a jurisdiction. An example is wildfire susceptibility, while all areas are in fact susceptible; those areas with little or no defensible space are more susceptible. Areas also may have different susceptibility to flooding. Areas of lower elevation or poor drainage are more susceptible than higher better-drained areas.

Tables 4.7-4.33 give more specific location information with regards to historic occurrences. It is evident by the data in these tables that the all areas in the county have been affected by the identified hazards.

Hazard	Unincorporated	Evergreen	Repton	Castleberry
Avalanche				
Coastal Erosion				
Dam Failure	Х			
Earthquakes				
Expansive Soils	Х			
Extreme Heat and	Х	X	Х	Х
Drought				
Flood	Х	X	Х	X
Coastal Storm and	X	X	Х	Х
Hurricane				
Landslides	Х	X	Х	X
Land Subsidence				
Severe Storms (Hail,	X	X	Х	X
High Winds,				
Lightning,				
Thunderstorms)				
Severe Winter Storms	Х	Х	Х	X
(Snow & Ice)				
Tornado	X	X	X	X
Tsunamis				
Volcanoes				
Wildfire	X	X	X	X

 Table 4.5 Locations Susceptible to Each Identified Hazard

C. Extent & Impact of Each Identified Hazard

The extent and impact of each hazard is addressed in Table 4.6. The information in this table is based on the limited historical data that is available and general knowledge.

Hazard	Unincorporated	Evergreen	Repton	Castleberry
Avalanche				
Coastal Erosion				
	5.0	5.0.0	5 (2) (5.0.0
Dam Failure	5-6' of floodwaters: Flooding in pastureland and timberland	5-6' of floodwaters: Flooding in pastureland and timberland	5-6' of floodwaters: Flooding in pastureland and timberland	5-6' of floodwaters: Flooding in pastureland and timberland
Earthquakes				
Expansive Soils	Structural Damage to structures built on soil			
Extreme Heat and Drought	Temperatures above 100°,D4 drought: crop loss, public health concern, wildfire susceptibility	Temperatures above 100°,D4 drought: crop loss, public health concern, wildfire susceptibility	Temperatures above 100°,D4 drought: crop loss, public health concern, wildfire susceptibility	Temperatures above 100°,D4 drought: crop loss, public health concern, wildfire susceptibility
Flood (Flash Floods)	8-10" of flood from runoff and heavy rains: Road closures, property damage, injury or loss of life	8-10" of flood from runoff and heavy rains: Road closures, property damage, injury or loss of life	8-10" of flood from runoff and heavy rains: Road closures, property damage, injury or loss of life	8-10" of flood from runoff and heavy rains: Road closures, property damage, injury or loss of life
Coastal Storm and Hurricane	Category 4-5 Hurricane: Heavy flood and wind damage, loss of life, injuries, temporary loss of utilities, timber loss	Category 4-5 Hurricane: Heavy flood and wind damage, loss of life, injuries, temporary loss of utilities, timber loss	Category 4-5 Hurricane: Heavy flood and wind damage, loss of life, injuries, temporary loss of utilities, timber loss	Category 4-5 Hurricane: Heavy flood and wind damage, loss of life, injuries, temporary loss of utilities, timber loss
Landslides	2-3 acres of land involved: Property loss,	2-3 acres of land involved: Property loss,	2-3 acres of land involved: Property loss,	2-3 acres of land involved: Property loss,

Table 4.6 Extent of Identified Hazards

	death and injury, transportation corridors blocked	death and injury, transportation corridors blocked	death and injury, transportation corridors blocked	death and injury, transportation corridors blocked
Land Subsidence				
Severe Storms (Hail, High Winds, Lightning, Thunderstorms)	Large hail (4-5"), wind damage (6- 70 knots): property damage, crop loss, death, injury	Large hail (4- 5"), wind damage (6-70 knots): property damage, crop loss, death, injury	Large hail (4- 5"), wind damage (6-70 knots): property damage, crop loss, death, injury	Large hail (4- 5"), wind damage (6-70 knots): property damage, crop loss, death, injury
Severe Winter Storms	5-8" of snow, 1- 3" of ice: Tree damage, utility damage, property damage	5-8" of snow, 1-3" of ice: Tree damage, utility damage, property damage	5-8" of snow, 1-3" of ice: Tree damage, utility damage, property damage	5-8" of snow, 1-3" of ice: Tree damage, utility damage, property damage
Tornado	F0-F5: Extensive property damage possible, death, injury	F0-F5: Extensive property damage possible, death, injury	F0-F5: Extensive property damage possible, death, injury	F0-F5: Extensive property damage possible, death, injury
Tsunamis				
Volcanoes				
Wildfire	500-1,000 acres: Property, timber, and revenue losses, death, injury	500-1,000 acres: Property, timber, and revenue losses, death, injury	500-1,000 acres: Property, timber, and revenue losses, death, injury	500-1,000 acres: Property, timber, and revenue losses, death, injury

D. Previous Occurrences

There are previous occurrences on record for each type of hazard identified in this risk assessment. The Conecuh County EMA does not keep records of storm events. The best available data was taken from the National Weather Service. Information on historical occurrences of wildfires was unavailable at the time it was requested. The lack of historical records of storm events has been addressed by the EMA keeping in house records of events.

Once a total review of all National Weather Service records was completed, it was evident that all occurrence numbers were drastically low (Table 4.6).

Table 4.6 also illustrates that the number of reported occurrences vary greatly between jurisdictions.

1 ub	ie 4.01 ast Occurren	ces by surface		
Hazard	Unincorporated	Evergreen	Repton	Castleberry
Avalanche	-	-	-	-
Coastal Erosion	-	-	-	-
Dam Failure	0	0	0	0
Earthquakes	0	0	0	0
Expansive Soils	-	-	-	-
Extreme Heat and		3	2	2
Drought	2			
Flood	5	9	5	5
Coastal Storm and	7	7	7	7
Hurricane				
Landslides	0	0	0	0
Land Subsidence	0	0	0	0
Severe Storms (Hail,				
High winds, Lightning	63	22	5	14
Thunderstorms)				
Severe Winter Storms	5	3	3	3
Tornado	11	4	13	5
Tsunamis	-	-	-	-
Volcanoes	-	-	-	-
Wildfire	N/A	N.A	N/A	N/A

Table 4.6 Past Occurrences by Jurisdiction

E. Past Occurrence Documentation

The information for the hazard profile section of this plan was taken from the National Weather Service's Storm Events Database (http://www4.ncdc.noaa.gov/cgi-

win/wwcgi.dll?wwEvent~Storms) and the Birmingham Office of the National Weather Service's Tornado occurrences (http://www.srh.noaa.gov/bmx/tornadoes/index.html). This data is the best available data for Conecuh County. The storm descriptions are taken from these sources. This section is broken into four parts one for Evergreen, Castleberry, Repton and unincorporated Conecuh County. Time periods available for each hazard may vary; this is a result of incomplete data and could not be corrected. The county is currently working toward addressing these deficiencies.

Past Occurrences by Jurisdiction-Unincorporated Conecuh County

Tables 4.7-4.13 contain the available past occurrence data for unincorporated Conecuh County as a whole. It is evident from this data that the county has experienced a variety of hazards. It is also evident that the county has suffered significant damage as a result of certain hazards, in particular tornadoes and thunderstorms.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Countywide	07/01/2000		Heat	N/A	0	0	0	N/A
2. Countywide	08/08/2007		Heat	N/A	0	0	0	N/A
Totals					0	0	0	N/A

Table 4.7 Unincorporated Conecuh County Past Occurrences-Extreme Heat

- 1. The temperature was 100 degrees or higher five days during the month in Evergreen.
- 2. Heat advisories were issued for a combination of high temperatures and high humidity. Heat index vales were between 110 and 115 degrees. Several public buildings and churches allowed people to come in and cool off during the heat of the day.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Сгор
							Damage	Damage
1. Countywide	03/08/1998	01:30 AM	Flood	N/A	0	0	\$300,000.00	0
2. Countywide	09/29/1998	11:30 AM	Flood	N/A	0	0	0	0
3. Countywide	03/03/2001	12:00 PM	Flash	N/A	0	0	\$15,000.00	0
			Flood					
4. Countywide	07/10/2005	05:30 PM	Flash	N/A	0	0	0	0
			Flood					
5. Countywide	08/29/2008	02:30 PM	Flash	N/A	0	0	0	0
			Flood					
6. Countywide	12/12/2009	N/A	Flash	N/A	0	0	N/A	N/A
· ·			Flood					
Totals							\$315,000.00	0

Table 4.8 Unincorporated Conecuh County Past Occurrences- Floods

1. Heavy rains began on the evening of March 7 and continued through the night before tapering off on the afternoon of March 8. The heavy rainfall caused widespread flooding across the area. Most of the secondary roads throughout the county suffered damage. Most were closed from early Sunday morning until the evening of March 8. Part of I-65 was covered with water for a few hours during the morning of March 8 and traffic had to be rerouted.

- 2. Rainfall estimates of between five and ten inches from Hurricane Georges fell across the county. Several roads around the county were closed for a few hours due to high water. Schools were closed two to three days because of washouts of secondary roads throughout the county. The area east and south of I-65 was the hardest hit from the flooding. The heavy rains also caused several of the creeks and small streams in the county to come out of their banks. Murder, Burnt Corn and Brushy creeks came out of their banks as did the Sepulga River. Other than road damage, no major damage was reported to any homes from the flooded streams.
- 3. Heavy rains across the area caused secondary roads to washout in many areas. The water slowly drained from the roads after the rain ended, and most were able to be reopened after sunset. Radar estimated that four to six inches of rainfall fell across the area.
- 4. Heavy rains from Hurricane Dennis caused street flooding across most of the county. Radar estimated that 3-5 inches of rain fell across most of the county, with isolated amounts of 5-7 inches across the west part. Most of the flooding occurred across the west and south parts of the county.
- 5. Heavy rains from Hurricane Katrina caused flooding across most of the county. Several streets had to be closed off and on throughout the day. Radar estimated that 3-5 inches of rain fell across the county with the heaviest being across the southwest part of the county.
- 6. Flash flooding occurred throughout the county.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Countywide	08/03/1995	09:00 AM	Hurricane Erin	N/A	0	0	N/A	N/A
2. Countywide	10/03/1995	12:00 AM	Hurricane Opal	N/A	0	0	N/A	N/A
3. Countywide	09/25/1998	09:00 AM	Hurricane George	N/A	0	0	N/A	N/A
4. Countywide	08/06/2001	04:00 AM	Tropical Storm Barry	N/A	0	0	N/A	N/A
5. Countywide	09/13/2004	09:00 PM	Hurricane Ivan	N/A	0	0	N/A	N/A
6. Countywide	06/10/2005	03:00 AM	Tropical Storm Arlene	N/A	0	0	N/A	N/A
7. Countywide	07/09/2005	03:00 AM	Hurricane Dennis	N/A	0	0	N/A	N/A
Totals					0	0	N/A	N/A

Table 4.9 Unincorporated Conecuh County Past Occurrences-Hurricanes and Coastal Storms

- 1. Erin moved northwest and moved across Interstate 65 and passed near Stockton during the afternoon and then moved through northeast Mobile County and southern Conecuh and southern Washington Counties. As Erin moved through southwest Alabama, trees and power lines were blown down and many homes were damaged. Preliminary damage estimates were \$25 million. More than 100 homes were damaged.
- 2. Hurricane Opal moved into Southwest Alabama on October 3, 1995. Several short lived tornadoes occurred mostly near and east of the center of the storm. More than 125 homes were destroyed with 150 homes suffering major damage. Preliminary damage estimates were \$48 million with half of that being from

tree damage in the Conecuh National Forest. Preliminary crop damage loss was estimated at \$4 million. Most of the damage in Southwest Alabama was generally along and east of Interstate 65. The greatest amount of rainfall was 8.1 inches in a twenty four hour period in Evergreen.

- 3. For the second time in less than a month, the area was again threatened by a hurricane. Hurricane Georges affected the region September 25 through the 29. Some of the winds recorded across Southwest Alabama and Northwest Florida were as follows. Most of the inland counties in Southeast Mississippi and Southwest Alabama had damage from heavy rains and from trees and power lines being blown down by the persistent winds.. Throughout the area, agriculture took a beating with the cotton, soybean and pecan crop almost totally destroyed. Preliminary damage estimates in Southwest Alabama were 174.2 million dollars, in Northwest Florida 135 million dollars and in Southeast Mississippi 72 million dollars.
- 4. Tropical storm Barry moved inland on the morning of August 6. An Inland Tropical Storm Wind Warning was in effect as Barry tracked across Covington, Conecuh, Monroe and Wilcox counties between 500 am and noon. Near the center and just to the right of the center, numerous trees and light weight structures were damaged. Minor damage occurred in Conecuh, Monroe and Wilcox counties, with most of that being trees blown down.
- 5. Hurricane Ivan affected the region from September 13 through the 16th. The coastal areas were put under a hurricane watch at 900 PM CST on September 13. The area was put under a hurricane warning at 300 PM CST on September 14. The hurricane warning was dropped at 900 AM CST on September 16 and we were put under a tropical storm warning. The tropical storm warning was dropped at 300 PM CST on September 16. Evergreen 7.25 inches. Hurricane force winds were felt across the entire area, including all inland counties. Most of the area probably had hurricane force winds for two to four hours. This caused 100 year old trees to break due to the constant force from the strong winds. Many of the trees fell on homes and vehicles and damaged them. While some structural wind damage would have been expected, most of the major structural damage that occurred over inland areas would not have been as substantial if it had not been for fallen trees. It was estimated that in Alabama over \$500,000,000 damage was done to timber. Power was out for a week or more across the inland areas due to trees across lines. These weak tornadoes occurred in Escambia and Santa Rosa counties in Florida, and in Baldwin, Escambia and Conecuh in Alabama and produced only minor damages. In Conecuh County a 34 year old male died from a car accident when he hit debris still in the road from the storm. Agriculture interests suffered a major blow from Ivan with most of the soybean and pecan crop destroyed. The cotton crop also suffered damage but not as bad as that of the soybean and pecan crop. It will be remembered as one of the most damaging hurricanes to affect the inland counties of Escambia, Conecuh, Monroe, Conecuh and Butler in southwest Alabama.
- 6. Tropical Storm Arlene moved across the area during the afternoon and evening of June 11. The area was put under a Tropical Storm Watch at 300 AM CST on June 10, then a Tropical Storm Warning and a Hurricane Watch at 900 AM CST on June 10. The area was then put under a Hurricane Warning at 900 PM CST on June 10. The Hurricane Warning was dropped to a Tropical Storm Warning at 300 PM CST on June 11. All Tropical Warnings were dropped at 600 PM CST on June 11 as the remains of Arlene moved inland across Southwest Alabama. Arlene tracked north northwest across Southwest Alabama along a similar track that Ivan had taken a few months earlier. Evergreen Airport, sustained wind of 30 knots with gusts to 36 knots. Since Arlene followed along a similar track as Ivan took only nine months earlier, trees that had been damaged by Ivan were blown down as Arlene moved inland. Trees and power lines were blown down along the track of Arlene with most of the damage near the center of the storm. Except for some trees falling onto homes, very little structural damage was reported.
- 7. After Dennis moved through Santa Rosa and Escambia counties in Florida it moved across Escambia, Monroe, Conecuh and Choctaw counties in southwest Alabama. Tree damage was reported in all of these counties as well as Conecuh, Washington and Wilcox counties. Some of the trees fell on structures and damaged them.

Location	Date	Time	Туре	Magnit ude	Deaths	Injuries	Property Damage	Crop Damage
				(inches)			0	U
1. Conecuh	03/22/1981	02:30 PM	Hail	1.75	0	0	0	0
2. Conecuh	03/22/1981	03:50 PM	Hail	1.00	0	0	0	0
3. Conecuh	04/28/1984	04:10 PM	Hail	0.75	0	0	0	0
4. Conecuh	05/03/1984	05:28 AM	Hail	0.75	0	0	0	0
5. Conecuh	04/15/1985	05:16 PM	Hail	1.75	0	0	0	0
6. Conecuh	05/10/1988	03:10 PM	Hail	0.75	0	0	0	0
7. Conecuh	03/30/1992	04:00 PM	Hail	1.75	0	0	0	0
8. Conecuh	06/03/1992	06:35 PM	Hail	0.75	0	0	0	0
9. Lyeffion	04/11/1995	09:02 PM	Hail	1.75	0	0	0	0
10. Brooklyn	12/12/1996	06:44 PM	Hail	0.75	0	0	0	0
11. Paul	03/08/1998	12:50 AM	Hail	0.75	0	0	0	0
12. Brooklyn	04/17/1998	07:45 PM	Hail	0.75	0	0	0	0
13. Brooklyn	05/03/1998	03:45 PM	Hail	0.75	0	0	0	0
14. Owassa	05/03/1995	10:05 PM	Hail	2.75	0	0	\$10,000.00	0
15. Range	08/25/1999	02:35 PM	Hail	0.75	0	0	0	0
16. Owassa	03/12/2001	06:45 AM	Hail	0.75	0	0	0	0
17. Paul	06/19/2002	02:10 PM	Hail	0.88	0	0	0	0
18. Belleville	05/02/2003	07:25 PM	Hail	0.75	0	0	0	0
19. Lenox	04/24/2010	02:07 PM	Hail	1.75	0	0	0	0
Totals							\$10,000.00	\$0

Table 4.10 Unincorporated Conecuh County Past Occurrences-Severe Storms (Hail)

1. None reported.

- 2. None reported.
- 3. None reported.
- 4. None reported.
- 5. None reported.
- None reported. 6.
- 7. None reported.
- None reported. 8.
- Golf ball-size hail was reported near Lyeffion.
 Dime size hail was reported near Brooklyn.
- 11. Dime size hail was reported near Paul.
- 12. Trees and power lines were blown down near Brooklyn. Dime size hail was also reported in the area.

- Dime size hail was reported just west of Brooklyn.
 Baseball size hail was reported near Owassa. Some damage to vehicles was reported.
- 15. Dime size hail was reported near Range.
- 16. None reported.
- None reported.
 None reported
- 19. Severe thunderstorms produced large hail across southwest Alabama.

Location	Date	Time	Туре	Magnitud e (knots)	Deaths	Injuries	Property Damage	Crop Damage
1. Countywide	02/15/1962	09:30 PM	Thunderstorm Winds	60	0	0	0	0
2. Countywide	08/24/1968	01:00 PM	Thunderstorm Winds	N/A	0	0	\$3,000.00	0
3. Countywide	03/01/1971	04:00 PM	Thunderstorm Winds	N/A	0	0	0	0
4. Countywide	04/23/1971	01:10 PM	Thunderstorm Winds	N/A	0	0	0	0
5. Countywide	06/17/1971	01:10 PM	Thunderstorm Winds	N/A	0	0	0	0
6. Countywide	06/07/1973	05:30 PM	Thunderstorm Winds	N/A	0	0	0	0
7. Countywide	02/21/1974	07:50 PM	Thunderstorm Winds	N/A	0	0	0	0
8. Countywide	04/18/1978	07:00 AM	Thunderstorm Winds	N/A	0	0	0	0
9. Countywide	07/03/1979	04:40 PM	Thunderstorm Winds	N/A	0	0	0	0
10. Countywide	05/20/1980	12:45 AM	Thunderstorm Winds	N/A	0	0	0	0
11. Countywide	02/01/1983	06:20 AM	Thunderstorm Winds	N/A	0	0	0	0
12. Countywide	08/05/1983	05:30 PM	Thunderstorm Winds	N/A	0	0	0	0

Table 4.11 Unincorporated Conecuh County Past Occurrences-Severe Storms (Thunderstorms)

13. Countywide	05/03/1984	05:28 AM	Thunderstorm Winds	N/A	0	0	0	0
14. Countywide	09/23/1985	09:57 PM	Thunderstorm Winds	N/A	0	0	0	0
15. Countywide	07/28/1988	04:42 PM	Thunderstorm Winds	N/A	0	0	0	0
16. Countywide	02/10/1990	04:05 AM	Thunderstorm Winds	65	0	0	0	0
17. Countywide	02/16/1990	09:15 AM	Thunderstorm Winds	N/A	0	0	0	0
18. Countywide	04/01/1990	04:15 PM	Thunderstorm Winds	N/A	0	0	0	0
19. Countywide	04/28/1990	11:30 AM	Thunderstorm Winds	N/A	0	0	0	0
20. Countywide	05/12/1990	09:40 PM	Thunderstorm Winds	N/A	0	0	0	0
21. Countywide	12/03/1990	09:30 AM	Thunderstorm Winds	N/A	0	0	0	0
22. Countywide	06/25/1991	05:00 PM	Thunderstorm Winds	N/A	0	0	0	0
23. Countywide	04/20/1992	01:29 PM	Thunderstorm Winds	N/A	0	0	0	0
24. Countywide	07/09/1992	04:24 PM	Thunderstorm Winds	N/A	0	0	0	0
25. Countywide	07/09/1992	04:45 PM	Thunderstorm Winds	N/A	0	0	0	0
26. Lyeffion	06/13/1996	04:30 PM	Thunderstorm Winds	50	0	0	\$2,000.00	0
27. Burnt Corn	12/16/1996	08:35 PM	Thunderstorm Winds	50	0	0	\$1,000.00	0
28. Burnt Corn	01/24/1997	07:30 PM	Thunderstorm Winds	50	0	0	\$2,000.00	0
29. Owassa	01/24/1997	07:45 PM	Thunderstorm Winds	50	0	0	\$15,000.00	0
30. Belleville	04/21/1997	05:00 PM	Thunderstorm Winds	50	0	0	\$2,000.00	0

31. Brooklyn	04/14/1998	07:45 PM	Thunderstorm Winds	50	0	0	\$4,000.00	0
32. Countywide	06/05/1998	11:40 PM	Thunderstorm Winds	60	0	0	\$50,000.00	0
33. Paul	03/13/1999	09:45 PM	Thunderstorm Winds	60	0	0	\$15,000.00	0
34. Paul	08/20/1999	03:45 PM	Thunderstorm Winds	50	0	0	\$2,000.00	0
35. Lenox	03/19/2000	04:55 PM	Thunderstorm Winds	60	0	0	\$5,000.00	0
36. Bermuda	08/10/2000	01:20 PM	Thunderstorm Winds	55	0	0	\$10,000.00	0
37. Nichburg	02/27/2001	04:50 PM	Thunderstorm Winds	55	0	0	\$5,000.00	0
38. Belleville	11/24/2001	04:05 PM	Thunderstorm Winds	55	0	0	\$15,000.00	0
39. Owassa	10/29/2002	12:25 PM	Thunderstorm Winds	50	0	0	\$5,000.00	0
40. Paul	06/27/2004	01:15 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
41. Belleville	07/16/2004	02:25 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
42. Lenox	01/17/2006	10:20 AM	Thunderstorm Winds	50	0	0	\$15,000.00	0
43. Range	02/17/2008	01:57 PM	Thunderstorm Winds	50	0	0	\$12,000.00	0
44. Lenox	06/11/2011	03:45 PM	Thunderstorm Winds	52	0	0	\$5,000.00	0
Totals							\$184,000.00	0

None reported.
 None reported.

- 9. None reported.
- 10. None reported.
- 11. None reported.
- 12. None reported.
- 13. None reported.
- 14. None reported.
- 15. None reported.
- 16. None reported.
- 17. None reported.
- 18. None reported.
- 19. None reported.
- 20. None reported.
- 21. None reported.
- 22. None reported.
- 23. None reported.
- 24. None reported.
- 25. None reported.
- 26. Trees and power lines were blown down along county road 30 near Lyeffion.
- 27. Trees and power lines were blown down along County Road 15 near Burnt Corn.
- 28. Several trees were blown down near Burnt Corn.
- 29. Several trees and power lines were blown down near Owassa. A trailer was also damaged. No injuries were reported.
- 30. Trees and power lines were blown down along U.S. Highway 84 near Belleville.
- 31. Trees and power lines were blown down near Brooklyn. Dime size hail was also reported in the area.
- 32. A line of severe thunderstorms moved through the county between 11:40 pm and 12:30 am. Trees and power lines were blown down throughout the county. The most damage was in the west part of the county. No injuries were reported.
- 33. Several trees were blown down in the community by straight line winds
- 34. Several trees were blown down along U.S. Highway 84 north of Paul.
- 35. High thunderstorm winds blew down trees and power lines near the community.
- 36. Trees were blown down by strong thunderstorms north of the community. Most of the downed trees were located between Pine Orchard and Ramah.
- 37. Sheriff reported a large tree and other debris over County Road 19 to the west of the community.
- 38. High thunderstorm winds blew trees down along Highway 84 near Belleville.
- 39. High winds from a thunderstorm blew down several trees near Owassa.
- 40. High winds from a thunderstorm blew down several trees between Paul and Brooklyn.
- 41. High winds from a thunderstorm blew down several trees near Belleville.
- 42. High winds from a line of showers blew down several trees and damaged some lightweight structures near Lenox. At least one manufactured home had awnings torn away by the winds.
- 43. Severe thunderstorms blew down trees and powerlines and also produced large hail.
- 44. Winds estimated at 60 mph downed trees and damaged a barn.

Location or	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop
County							Damage	Damage
1.Countywide	01/27/2000		Sleet	N/A	N/A	N/A	N/A	N/A
2.Countywide	12/21/2000		Winter	N/A	N/A	N/A	N/A	N/A
			Storm					
3.Countywide	01/02/2002		Winter	N/A	N/A	N/A	N/A	N/A
			Storm					
4.Countywide	02/12/2010		Winter	N/A	N/A	N/A	N/A	N/A
			Storm					
5. Countywide	01/28/2014		Winter	N/A	N/A	N/A	N/A	N/A
· ·			Storm					
Totals							N/A	N/A

Table 4.12 Unincorporated Conecuh County Past Occurrences-Severe Winter Storms

- 1. Sleet fell over much of the area during the overnight hours of January 27 and 28. No roads had to be closed and traffic was still able to flow in a normal manner. A couple of the county school systems had closed due to the threat of icing. Most of the snow, heavier sleet and freezing rain fell farther north across central and north Alabama.
- 2. Light Freezing Rain occurred during the early morning hours, resulting in a thin layer of ice on the elevated surfaces of bridges and overpasses. Reports of traffic accidents were received from several locations across Southwest Alabama due to the slippery road conditions.
- 3. A band of sleet and snow fell across the region during the early morning hours Wednesday. Most of the snow fell prior to sunrise, but continued until late morning on a more isolated basis in some locations. Most of the snow occurred along and north of a line extending from Deer Park in Washington County, to Evergreen in Conecuh County, to Luverne in Crenshaw County. Traveling became hazardous across the area, especially on secondary roads and bridges. Several secondary roads and bridges had to be temporarily closed and sanded, however, very few traffic accidents were reported.
- 4. Snow fell throughout the county with up to six inches being reported at Belleville.
- 5. Snow and ice blanketed the county.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Burnt Corn	04/13/1903	07:00 AM	Tornado	F2	N/A	N/A	N/A	N/A
2. Conecuh	12/23/1956	12:50 AM	Tornado	F2	N/A	N/A	N/A	N/A
3. McKenzie	06/28/1957	09:45 AM	Tornado	F2	0	0	\$250,000.0	0
							0	
4. Middleton Field	06/28/1957	10:25 PM	Tornado	F2	0	0	\$25,000.00	0
5. Middleton Field	11/25/1979	11:00 PM	Tornado	F0	0	0	\$25,000.00	0

Table 4.13 Unincorporated Conecuh County Past Occurrences-Tornadoes

6. Range to Lenox	10/15/1984	09:30 AM	Tornado	F2	0	0	\$250,000.0	0
							0	
6.London/Castleberry/	09/23/1985	09:30 AM	Tornado	F2	0	4	\$250,000.0	0
Fairview							0	
7. Lenox	02/21/2003	11:40 PM	Tornado	F0	0	0	\$8,000.00	0
8. Owassa	10/19/2004	07:00 PM	Tornado	F0	0	0	\$10,000.00	0
9. Belleville	01/13/2006	10:01 AM	Tornado	F1	1	0	\$500,000.0	0
							0	
10. Paul	05/15/2008	11:17 AM	Tornado	F0	0	0	\$25,000.00	0
11. Brooklyn	04/15/2011	11:16 PM	Tornado	EF1	0	0	\$615,000.0	0
							0	
Totals					1	4	\$1,686,000.	0
							00	

1. Homes were destroyed along the path. Four people were killed and five were injured in Monroe County as a result of this tornado.

2. Considerable damage was reported.

3. Several homes were unroofed and a church was heavily damaged.

4. This short path tornado destroyed one barn and some timber. Bands from Hurricane Audrey.

5. Two homes sustained damage.

6. Three people were injured in a demolished home. One man was injured as his truck was destroyed by a falling tree. Some structural damage was reported.

7. A weak tornado briefly touched down east of Lenox. The tornado blew down several trees.

8. A weak tornado blew down several trees near Owassa and Interstate 65. The weak tornado stayed on the ground for about a half mile before going back into the clouds.

9. An F1 tornado touched down along County Road 15, just south of the town of Belleville. The tornado tracked north northeast crossing U. S. Highway 84 before dissipating just north of the highway. Most of the damage was along both sides of U. S. Highway 84. Three homes were destroyed, and fifteen other structures and eight vehicles were damaged. Numerous power lines and trees were blown town along the track of the tornado. The Belleville fire department station was destroyed. Only one cinder block wall was left standing at the station. One person was killed when a chimney in her home collapsed on top of her. She had just got into the brick home and was putting her purse down when the chimney fell on top of her. F58PH

10. A weak tornado developed along the leading edge of a large bow echo just northwest of Castleberry. The tornado blew down trees and damaged a residence just west of County Road 23. Estimated wind speeds were 85 to 90 mph. No injuries occurred. Large bow echo continued moving east across Alabama producing significant damage along its path

11. A weak tornado first touched down just west of Paul. The tornado moved northeast and passed just east of Cohassett. The tornado moved across U. S. Highway 84 at the Conecuh and Covington county line. This is a rural area and the only damage the tornado caused was to trees. Some of the trees landed across the rural roads and had to be moved before anyone could drive on the roads. A weak tornado developed in the east part of Conecuh County and moved into the west part of Covington County. The tornado caused mostly tree damage with some structures damaged near the end of the track.

Past Occurrences by Jurisdiction-Castleberry, AL

Tables 4.14-4.20 contain the available past occurrence data for the Town of Castleberry.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Castleberry	07/01/2000		Heat	N/A	0	0	0	0
2. Castleberry	08/08/2007		Heat	N/A	0	0	0	0
Totals							0	0

Table 4.14 Castleberry Past Occurrences-Extreme Heat

1. The temperature was 100 degrees or higher five days during the month.

2. Heat advisories were issued for a combination of high temperatures and high humidity. Heat index vales were between 110 and 115 degrees. Several public buildings and churches allowed people to come in and cool off during the heat of the day.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Castleberry	03/08/1998	1:30 AM	Flood	N/A	0	0	N/A	N/A
2. Castleberry	09/29/1998	11:30 AM	Flood	N/A	0	0	N/A	N/A
3. Castleberry	03/03/2001	12:00 PM	Flash Flood	N/A	0	0	N/A	N/A
4. Castleberry	07/10/2005	05:30 PM	Flash Flood	N/A	0	0	N/A	N/A
5. Castleberry	08/29/2008	02:30 PM	Flash Flood	N/A	0	0	N/A	N/A
6. Castleberry	12/12/2009	N/A	Flash Flood	N/A	0	0	N/A	N/A
Totals							N/A	N/A

Tahla	1 15	Castlaharry	Dast (Occurroncos-	Floods
I able	4.15	Castleberry	Past	Occurrences-	FIOOUS

1. Heavy rains began on the evening of March 7 and continued through the night before tapering off on the afternoon of March 8. The heavy rainfall caused widespread flooding across the area. Most of the secondary roads throughout the county suffered damage. Most were closed from early Sunday morning until the evening of March 8.

- 2. Rainfall estimates of between five and ten inches from Hurricane Georges fell across the county. Several roads around the county were closed for a few hours due to high water. Schools were closed two to three days because of washouts of secondary roads throughout the county.
- 3. Heavy rains across the area caused secondary roads to washout in many areas. The water slowly drained from the roads after the rain ended, and most were able to be reopened after sunset. Radar estimated that four to six inches of rainfall fell across the area.
- 4. Heavy rains in a short period of time caused part of I-65 near Evergreen to flood. Part of the lanes had to be temporarily closed until the rain stopped and the road drained.
- 5. Heavy rains from Hurricane Katrina caused flooding across most of the county. Several streets had to be closed off and on throughout the day. Radar estimated that 3-5 inches of rain fell across the county with the heaviest being across the southwest part of the county.
- 6. Flash flooding occurred throughout the county.

h											
Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop			
							Damage	Damage			
1. Castleberry	08/03/1995	09:00 AM	Hurricane Erin	N/A	0	0	N/A	N/A			
2. Castleberry	10/03/1995	12:00AM	Hurricane Opal	N/A	0	0	N/A	N/A			
3. Castleberry	09/25/1998	09:00 AM	Hurricane	N/A	0	0	N/A	N/A			
			George								
4. Castleberry	08/06.2001	04:00 AM	Tropical Storm	N/A	0	0	N/A	N/A			
			Barry								
5. Castleberry	09/13/2004	09:00 PM	Hurricane Ivan	N/A	0	0	N/A	N/A			
6. Castleberry	06/10/2005	03:00 AM	Tropical Storm	N/A	0	0	N/A	N/A			
			Arlene								
7. Castleberry	07/09/2005	03:00 AM	Hurricane Dennis	N/A	0	0	N/A	N/A			
Totals							N/A	N/A			

Table 4.16 Castleberry Past Occurrences-Hurricanes and Coastal Storms

- 1. Erin moved northwest and moved across Interstate 65 and passed near Stockton during the afternoon and then moved through northeast Mobile County and southern Conecuh and southern Washington Counties. As Erin moved through southwest Alabama, trees and power lines were blown down and many homes were damaged. Preliminary damage estimates were \$25 million. More than 100 homes were damaged.
- 2. Hurricane Opal moved into Southwest Alabama on October 3, 1995. Several short lived tornadoes occurred mostly near and east of the center of the storm. More than 125 homes were destroyed with 150 homes suffering major damage. Preliminary damage estimates were \$48 million with half of that being from tree damage in the Conecuh National Forest. Preliminary crop damage loss was estimated at \$4 million. Most of the damage in Southwest Alabama was generally along and east of Interstate 65. The greatest amount of rainfall was 8.1 inches in a twenty four hour period in Evergreen.
- 3. For the second time in less than a month, the area was again threatened by a hurricane. Hurricane Georges affected the region September 25 through the 29. Some of the winds recorded across Southwest Alabama and Northwest Florida were as follows. Most of the inland counties in Southeast Mississippi and Southwest Alabama had damage from heavy rains and from trees and power lines being blown down by the persistent winds. Throughout the area, agriculture took a beating with the cotton, soybean and pecan crop almost totally destroyed. Preliminary damage estimates in Southwest Alabama were 174.2 million dollars, in Northwest Florida 135 million dollars and in Southeast Mississippi 72 million dollars.

- 4. Tropical storm Barry moved inland on the morning of August 6. An Inland Tropical Storm Wind Warning was in effect as Barry tracked across Covington, Conecuh, Monroe and Wilcox counties between 500 am and noon. Near the center and just to the right of the center, numerous trees and light weight structures were damaged. Minor damage occurred in Conecuh, Monroe and Wilcox counties, with most of that being trees blown down.
- 5. Hurricane Ivan affected the region from September 13 through the 16th. The coastal areas were put under a hurricane watch at 900 PM CST on September 13. The area was put under a hurricane warning at 300 PM CST on September 14. The hurricane warning was dropped at 900 AM CST on September 16 and we were put under a tropical storm warning. The tropical storm warning was dropped at 300 PM CST on September 16. Evergreen 7.25 inches. Hurricane force winds were felt across the entire area, including all inland counties. Most of the area probably had hurricane force winds for two to four hours. This caused 100 year old trees to break due to the constant force from the strong winds. Many of the trees fell on homes and vehicles and damaged them. While some structural wind damage would have been expected, most of the major structural damage that occurred over inland areas would not have been as substantial if it had not been for fallen trees. It was estimated that in Alabama over \$500,000,000 damage was done to timber. Power was out for a week or more across the inland areas due to trees across lines. These weak tornadoes occurred in Escambia and Santa Rosa counties in Florida, and in Baldwin, Escambia and Conecuh in Alabama and produced only minor damages. In Conecuh County a 34 year old male died from a car accident when he hit debris still in the road from the storm. Agriculture interests suffered a major blow from Ivan with most of the soybean and pecan crop destroyed. The cotton crop also suffered damage but not as bad as that of the soybean and pecan crop It will be remembered as one of the most damaging hurricanes to affect the inland counties of Escambia, Conecuh, Monroe, Conecuh and Butler in southwest Alabama.
- 6. Tropical Storm Arlene moved across the area during the afternoon and evening of June 11. The area was put under a Tropical Storm Watch at 300 AM CST on June 10, then a Tropical Storm Warning and a Hurricane Watch at 900 AM CST on June 10. The area was then put under a Hurricane Warning at 900 PM CST on June 10. The Hurricane Warning was dropped to a Tropical Storm Warning at 300 PM CST on June 11. All Tropical Warnings were dropped at 600 PM CST on June 11 as the remains of Arlene moved inland across Southwest Alabama. Arlene tracked north northwest across Southwest Alabama along a similar track that Ivan had taken a few months earlier. Evergreen Airport, sustained wind of 30 knots with gusts to 36 knots. Since Arlene followed along a similar track as Ivan took only nine months earlier, trees that had been damaged by Ivan were blown down as Arlene moved inland. Trees and power lines were blown down along the track of Arlene with most of the damage near the center of the storm. Except for some trees falling onto homes, very little structural damage was reported.
- 7. After Dennis moved through Santa Rosa and Escambia counties in Florida it moved across Escambia, Monroe, Conecuh and Choctaw counties in southwest Alabama. Tree damage was reported in all of these counties as well as Conecuh, Washington and Wilcox counties. Some of the trees fell on structures and damaged them.

Location	Date	Time	Туре	Magnitude (inches)	Deaths	Injuries	Property Damage	Crop Damage
1. Castleberry	04/08/1998	10:12 AM	Hail	1.75	0	0	0	0
2. Castleberry	04/14/2003	05:50 PM	Hail	0.75	0	0	0	0
Totals							0	0

Table 4.17 Castleberry, AL Past Occurrences- Severe Storms (Hail)

- 1. Golf ball size hail was reported just east of Castleberry.
- 2. None reported.

Location	Date	Time	Туре	Magnitud e (knots)	Deaths	Injuries	Property Damage	Crop Damage
1. Castleberry	01/07/1998	05:55 AM	Thunderstorm Winds	50	0	0	\$3,000.00	0
2. Castleberry	01/10/2000	01:55 AM	Thunderstorm Winds	50	0	0	\$5,000.00	0
3. Castleberry	03/19/2000	05:15 PM	Thunderstorm Winds	55	0	0	\$5,000.00	0
4. Castleberry	07/11/2000	05:15 PM	Thunderstorm Winds	55	0	0	\$10,000.00	0
5. Castleberry	03/03/2001	06:05 PM	Thunderstorm Winds	55	0	0	\$5,000.00	0
6. Castleberry	10/13/2001	02:53 PM	Thunderstorm Winds	55	0	0	\$5,000.00	0
7. Castleberry	04/29/2002	03:10 PM	Thunderstorm Winds	50	0	0	\$7,000.00	0
8. Castleberry	06/14/2002	01:10 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
9. Castleberry	07/23/2002	07:00 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
10. Castleberry	12/242/2002	04:20 PM	Thunderstorm Winds	50	0	0	\$5,000.00	0
11. Castleberry	04/14/2007	04:12 PM	Thunderstorm Winds	70	0	0	\$250,000.00	0
12. Castleberry	04/07/2014	05:47 AM	Thunderstorm Winds	61	0	0	\$5,000.00	0
Totals							\$316,000.00	0

Table 4.18 Castleberry, AL Past Occurrences-Severe Storms (Thunderstorms)

1. Several trees were blown down along US Hwy 31 just north of Castleberry.

2. Several trees were blown down along U. S. Highway 31 near Castleberry.

3. Thunderstorm winds blew trees down near the community.

4. A restaurant, near the intersection of Highway 31 and County Road 6, was damaged by fallen trees as thunderstorms moved through the area.

5. Sheriff reported a large tree and other debris over County Road 19 to the west of the community.

6. Several tree limbs were downed on power lines as strong thunderstorms moved through the area.

7. Trees were blown down near Castleberry as thunderstorms moved through the area.

8. Trees were blown down near Castleberry as thunderstorms moved through the area.
- 9. High winds from a thunderstorm blew down several trees south of Castleberry.
- 10. High winds from a thunderstorm blew down several trees north of Castleberry.
- 11. A large bow shaped thunderstorm complex began near Interstate 65 just west of Castleberry. The complex moved east northeast blowing down several trees. Most of the damage occurred near Hwy 31 where the bow shaped complex broad sided several structures. Two homes and one barn were damaged here. This is also where the weak tornado occurred. The system continued tracking east northeast blowing down numerous trees along its path. The bow shaped complex weakened near Nymph.
- 12. Winds estimated at 70mph downed trees and power lines.

Location	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Сгор
							Damage	Damage
1. Castleberry	01/27/2000	10:00 PM	Sleet	N/A	0	0	N/A	N/A
2. Castleberry	12/21/2000	05:00 AM	Winter	N/A	0	0	N/A	N/A
			Storm					
3. Castleberry	01/02/2002	12:00 AM	Winter	N/A	0	0	N/A	N/A
			Storm					
4. Castleberry	01/28/2014	N/A	Winter	N/A	0	0	N/A	N/A
, , , , , , , , , , , , , , , , , , ,			Storm					
Totals							N/A	N/A

Table 4.19 Castleberry Past Occurrences-Severe Winter Storms

- 1. Sleet fell over much of the area during the overnight hours of January 27 and 28. No roads had to be closed and traffic was still able to flow in a normal manner. A couple of the county school systems had closed due to the threat of icing. Most of the snow, heavier sleet and freezing rain fell farther north across central and north Alabama.
- 2. Light Freezing Rain occurred during the early morning hours, resulting in a thin layer of ice on the elevated surfaces of bridges and overpasses. Reports of traffic accidents were received from several locations across Southwest Alabama due to the slippery road conditions.
- 3. A band of sleet and snow fell across the region during the early morning hours Wednesday. Most of the snow fell prior to sunrise, but continued until late morning on a more isolated basis in some locations. Traveling became hazardous across the area, especially on secondary roads and bridges. Several secondary roads and bridges had to be temporarily closed and sanded, however, very few traffic accidents were reported.
- 4. Snow and ice blanketed the county.

Location	Date	Time	Туре	Magnitu de	Deaths	Injuries	Property Damage	Crop Damage
1. Castleberry	03/31/1933	05:15 PM	Tornado	F2	0	40	N/A	N/A
2. Castleberry	12/20/1957	03:00 AM	Tornado	F1	0	0	N/A	N/A
3. Castleberry	11/25/1979	11:00 AM	Tornado	F0	0	0	N/A	N/A
4. Castleberry	09/15/2004	06:40 PM	Tornado	F0	0	0	\$2,000.00	0
5. Castleberry	04/14/2007	04:12 PM	Tornado	EF1	0	0	\$150,000.00	N/A
Totals							\$152,000.00	0

Table 4.20 Castleberry, AL Past Occurrences-Tornadoes

1. 50 shacks were damaged or destroyed in a turpentine camp. Farm homes were destroyed and miles of forest were flattened.

2. Two homes and a barn were destroyed.

3. A brief tornado damaged one home.

4. A weak tornado developed about two miles south of Castleberry and dissipated just southwest of Castleberry. The weak tornado caused minor damage to timber

5. A weak tornado developed along the leading edge of a large bow echo just northwest of Castleberry. The tornado blew down trees and damaged a residence just west of County Road 23. Estimated wind speeds were 85 to 90 mph. No injuries occurred.

Past Occurrences by Jurisdiction-Evergreen, AL

Tables 4.21-4.27 contain the available past occurrence data for the City of Evergreen.

Location or County	Date	Time	Туре	Magnit ude	Deaths	Injuries	Property Damage	Crop Damage
1. Evergreen	06/09/1995	12:00 AM	Heat	N/A	1	0	0	0
2. Evergreen	07/01/2000	12:01 AM	Heat	N/A	0	0	0	0
3. Evergreen	08/08/2007	08:00 AM	Heat	N/A	0	0	0	0
Totals					1		0	0

 Table 4.21 Evergreen, AL Past Occurrences-Extreme Heat

1. A 69-year-old male died from heat stroke apparently after working outside in the direct sunshine. (M69O).

2. The temperature was 100 degrees or higher five days during the month in Evergreen.

3. Heat advisories were issued for a combination of high temperatures and high humidity. Heat index vales were between 110 and 115 degrees. Several public buildings and churches allowed people to come in and cool off during the heat of the day.

Location or County	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Evergreen	07/25/1999	02:50 PM	Flash Flood	N/A	0	0	\$2,000.00	0
2. Evergreen	07/20/2002	04:50 PM	Flash Flood	N/A	0	0	0	0
3. Evergreen	07/16/2003	11:15 PM	Flash Flood	N/A	0	0	0	0
4. Evergreen	4/14/2007	05:30 PM	Flash Flood	N/A	0	0	0	0
5. Evergreen	03/08/1998	01:30 AM	Flood	N/A	0	0	N/A	0
6. Evergreen	09/29/1998	11:30 AM	Flood	N/A	0	0	0	0
7. Evergreen	03/03/2001	12:00 PM	Flash Flood	N/A	0	0	N/A	0
8. Evergreen	07/10/2005	05:30 PM	Flash Flood	N/A	0	0	0	0
9. Evergreen	08/29/2008	02:30 PM	Flash Flood	N/A	0	0	0	0

Table 4.22 Evergreen, AL Past Occurrences- Floods

10. Evergreen	12/12/2009	N/A	Flash Flood	N/A	0	0	N/A	N/A
Totals							\$2,000.00	0

- 1. Heavy rains caused water to rise rapidly over US Hwy 84 east of Evergreen. The water was nearly a foot deep over the road in spots.
- 2. Heavy rains in a short period of time caused part of I-65 near Evergreen to flood. Part of the lanes had to be temporarily closed until the rain stopped and the road drained.
- 3. Heavy rains caused several streets in the Evergreen area to become impassable. Over three inches of rain fell in less than an hour across the area. The flooded streets quickly drained as the thunderstorms moved out of the area.
- 4. Heavy rains from slow moving thunderstorms dropped 3 to 5 inches of rainfall across the central part of the county. Several secondary roads had to be closed for about an hour due to high water. Large bow echo continued moving east across Alabama producing significant damage along its path.
- 5. Heavy rains began on the evening of March 7 and continued through the night before tapering off on the afternoon of March 8. The heavy rainfall caused widespread flooding across the area. Most of the secondary roads throughout the county suffered damage. Most were closed from early Sunday morning until the evening of March 8. Part of I-65 was covered with water for a few hours during the morning of March 8 and traffic had to be rerouted during the day on Sunday.
- 6. Rainfall estimates of between five and ten inches from Hurricane Georges fell across the county. Several roads around the county were closed for a few hours due to high water. Schools were closed two to three days because of washouts of secondary roads throughout the county. The area east and south of I-65 was the hardest hit from the flooding. The heavy rains also caused several of the creeks and small streams in the county to come out of their banks. Murder, Burnt Corn and Brushy creeks came out of their banks as did the Sepulga River. Other than road damage, no major damage was reported to any homes from the flooded streams.
- 7. Heavy rains across the area caused secondary roads to washout in many areas. The water slowly drained from the roads after the rain ended, and most were able to be reopened after sunset. Radar estimated that four to six inches of rainfall fell across the area.
- 8. Heavy rains in a short period of time caused part of I-65 near Evergreen to flood. Part of the lanes had to be temporarily closed until the rain stopped and the road drained.
- 9. Heavy rains from Hurricane Katrina caused flooding across most of the county. Several streets had to be closed off and on throughout the day. Radar estimated that 3-5 inches of rain fell across the county with the heaviest being across the southwest part of the county.
- 10. Flash flooding occurred throughout the county.

Location or County	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Evergreen	08/03/1995	09:00 AM	Hurricane Erin	N/A	0	0	N/A	N/A
2. Evergreen	10/03/1995	12:00 AM	Hurricane Opal	N/A	0	0	N/A	N/A
3. Evergreen	09/25/1998	09:00 AM	Hurricane George	N/A	1	0	N/A	N/A
4. Evergreen	08/06/2001	04:00 AM	Tropical Storm Barry	N/A	0	0	N/A	N/A
5. Evergreen	09/13/2004	09:00 PM	Hurricane Ivan	N/A	0	0	N/A	N/A

Table 4.23 Evergreen Past Occurrences-Hurricanes and Coastal Storms

6. Evergreen	06/10/2005	03:00 AM	Tropical Storm Arlene	N/A	0	0	N/A	N/A
7. Evergreen	07/09/2005	03:00 AM	Hurricane Dennis	N/A	0	0	N/A	N/A
Totals							N/A	N/A

- 1. Erin moved northwest and moved across Interstate 65 and passed near Stockton during the afternoon and then moved through northeast Mobile County and southern Conecuh and southern Washington Counties. As Erin moved through southwest Alabama, trees and power lines were blown down and many homes were damaged. Preliminary damage estimates were \$25 million. More than 100 homes were damaged.
- 2. Hurricane Opal moved into Southwest Alabama on October 3, 1995. Several short lived tornadoes occurred mostly near and east of the center of the storm. More than 125 homes were destroyed with 150 homes suffering major damage. Preliminary damage estimates were \$48 million with half of that being from tree damage in the Conecuh National Forest. Preliminary crop damage loss was estimated at \$4 million. Most of the damage in Southwest Alabama was generally along and east of Interstate 65. The greatest amount of rainfall was 8.1 inches in a twenty four hour period in Evergreen.
- 3. For the second time in less than a month, the area was again threatened by a hurricane. Hurricane Georges affected the region September 25 through the 29. Some of the winds recorded across Southwest Alabama and Northwest Florida were as follows. Most of the inland counties in Southeast Mississippi and Southwest Alabama had damage from heavy rains and from trees and power lines being blown down by the persistent winds.. Throughout the area, agriculture took a beating with the cotton, soybean and pecan crop almost totally destroyed. Preliminary damage estimates in Southwest Alabama were 174.2 million dollars, in Northwest Florida 135 million dollars and in Southeast Mississippi 72 million dollars.
- 4. Tropical storm Barry moved inland on the morning of August 6. An Inland Tropical Storm Wind Warning was in effect as Barry tracked across Covington, Conecuh, Monroe and Wilcox counties between 500 am and noon. Near the center and just to the right of the center, numerous trees and light weight structures were damaged. Minor damage occurred in Conecuh, Monroe and Wilcox counties, with most of that being trees blown down.
- 5. Hurricane Ivan affected the region from September 13 through the 16th. The coastal areas were put under a hurricane watch at 900 PM CST on September 13. The area was put under a hurricane warning at 300 PM CST on September 14. The hurricane warning was dropped at 900 AM CST on September 16 and we were put under a tropical storm warning. The tropical storm warning was dropped at 300 PM CST on September 16. Evergreen 7.25 inches. Hurricane force winds were felt across the entire area, including all inland counties. Most of the area probably had hurricane force winds for two to four hours. This caused 100 year old trees to break due to the constant force from the strong winds. Many of the trees fell on homes and vehicles and damaged them. While some structural wind damage would have been expected, most of the major structural damage that occurred over inland areas would not have been as substantial if it had not been for fallen trees. It was estimated that in Alabama over \$500,000,000 damage was done to timber.. Power was out for a week or more across the inland areas due to trees across lines. These weak tornadoes occurred in Escambia and Santa Rosa counties in Florida, and in Baldwin, Escambia and Conecuh in Alabama and produced only minor damages. In Conecuh County a 34 year old male died from a car accident when he hit debris still in the road from the storm. Agriculture interests suffered a major blow from Ivan with most of the soybean and pecan crop destroyed. The cotton crop also suffered damage but not as bad as that of the soybean and pecan crop It will be remembered as one of the most damaging hurricanes to affect the inland counties of Escambia, Conecuh, Monroe, Conecuh and Butler in southwest Alabama.
- 6. Tropical Storm Arlene moved across the area during the afternoon and evening of June 11. The area was put under a Tropical Storm Watch at 300 AM CST on June 10, then a Tropical Storm Warning and a Hurricane Watch at 900 AM CST on June 10. The area was then put under a Hurricane Warning at 900 PM CST on June 10. The Hurricane Warning was dropped to a Tropical Storm Warning at 300 PM CST on June 11. All Tropical Warnings were dropped at 600 PM CST on June 11 as the remains of Arlene moved inland across Southwest Alabama. Arlene tracked north northwest across Southwest Alabama along a similar track that Ivan had taken a few months earlier. Evergreen Airport, sustained wind of 30 knots with gusts to 36 knots. Since Arlene followed along a similar track as Ivan took only nine months earlier, trees that had been damaged by Ivan were blown down as Arlene moved inland. Trees and power lines were blown down along the track of Arlene with most of the damage near the center of the storm. Except for some trees falling onto homes, very little structural damage was reported.

7. After Dennis moved through Santa Rosa and Escambia counties in Florida it moved across Escambia, Monroe, Conecuh and Choctaw counties in southwest Alabama. Tree damage was reported in all of these counties as well as Conecuh, Washington and Wilcox counties. Some of the trees fell on structures and damaged them.

Location or	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop
County				(inches)			Damage	Damage
1. Evergreen	03/15/1995	02:15 PM	Hail	0.50	0	0	0	0
2. Evergreen	04/11/1995	08:55 PM	Hail	0.75	0	0	0	0
3. Evergreen	05/03/1998	07:35 PM	Hail	0.75	0	0	0	0
4. Evergreen	04/08/2004	07:50 AM	Hail	1.00	0	0	0	0
5. Evergreen	04/21/2005	05:40 PM	Hail	0.75	0	0	0	0
6. Evergreen	12/28/2007	12:10 PM	Hail	0.75	0	0	0	0
7. Evergreen	01/31/2008	07:10 PM	Hail	0.88	0	0	0	0
Totals							0	0

Table 4.24 Evergreen, AL Past Occurrences- Severe Storms (Hail)

1. Marble-size hail was reported just west of Evergreen.

2. Dime-size hail was reported just west of Evergreen.

3. Dime size hail was reported near Evergreen.

- 4. None reported.
- 5. None reported.
- 6. A thunderstorm produced penny size hail in Evergreen.
- 7. A line of thunderstorms moved across southwest Alabama causing tree and power line damage and producing hail.

Location or	Date	Time		Magnitude	Death	Injuries	Property	Cron
County	Dutt	Thire	Type	(knots)	s	injunes	Damage	Damage
1. Evergreen	05/15/1994	07:40 PM	Thunderstorm Winds	0	0	0	\$5,000.00	0
2. Evergreen	07/08/1995	03:00 PM	Thunderstorm Winds	0	0	0	\$2,000.00	0
3. Evergreen	12/16/1996	08:35 PM	Thunderstorm Winds	50	0	0	\$2,000.00	0
4. Evergreen	04/17/1998	06:45 PM	Thunderstorm Winds	50	0	0	\$5,000.0	0
5. Evergreen	08/19/2000	03:30 PM	Thunderstorm Winds	55	0	0	\$5,000.00	0

 Table 4.25 Evergreen, AL Past Occurrences-Severe Storms (Thunderstorms)

6. Evergreen	03/12/2001	12:10 PM	Thunderstorm Winds	90	0	1	\$1,300,000.00	0
7. Evergreen	05/27/2001	03:30 PM	Thunderstorm Winds	50	0	0	\$3,000.00	0
8. Evergreen	10/13/2001	06:45 PM	Thunderstorm Winds	50	0	0	\$15,000.00	0
9. Evergreen	07/06/2002	06:15 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
10. Evergreen	07/20/2002	04:30 PM	Thunderstorm Winds	50	0	0	\$8,000.00	0
11. Evergreen	05/03/2003	08:50 AM	Thunderstorm Winds	55	0	0	\$25,000.00	0
12. Evergreen	07/16/2003	10:25 PM	Thunderstorm Winds	50	0	0	\$5,000.00	0
13. Evergreen	06/12/2007	05:00 PM	Thunderstorm Winds	50	0	0	\$10,000.00	0
14. Evergreen	01/31/2008	07:10 PM	Thunderstorm Winds	50	0	0	\$10,000.00	0
15. Evergreen	04/07/2014	05:52 AM	Thunderstorm Wind	61	0	0	\$5,000.00	0
Totals					0	1	\$1,408,000.00	0

1. Trees were downed by thunderstorm winds along Interstate 65 three miles southwest of the Butler-Conecuh County line.

2. Trees and power lines were blown down around Burnt Corn and also in the city of Evergreen.

- 3. A line of thunderstorms moved across southwest Alabama causing tree and power line damage and producing hail.
- 4. Several trees and power lines were blown down in Evergreen.
- 5. A thunderstorm blew down some trees south of the community.
- 6. A very intense downburst along a line of severe thunderstorms produced extensive and widespread wind damage to trees, structures and some vehicles throughout the Evergreen area. A large wall of the building housing a local clothing store collapsed, temporarily trapping several people in the building, two of whom received minor injuries. A vehicle outside the building was crushed by the collapsed wall. In addition, the extremely strong winds damaged or destroyed at least 28 other buildings and homes. Several eyewitnesses said no "freight train" sound was heard. It just sounded like a "puff" of wind!
- 7. Trees were blown down by high thunderstorm winds along US Highway 84 just east of Evergreen.
- 8. High winds from a thunderstorm blew down several trees and power lines in and around Evergreen.
- 9. High winds from a thunderstorm blew down several trees and power lines in and around Evergreen.
- 10. Trees were blown down by high winds from a thunderstorm near Evergreen.
- 11. High winds from a thunderstorm blew down several trees near Evergreen. A home had minor roof damage when one of the trees fell on it. No one was injured.
- 12. High winds from a thunderstorm blew down several trees near Evergreen.

- 13. High winds from a thunderstorm blew down trees and produced small hail in Evergreen. Severe thunderstorms produced large hail and wind damage across parts of Southwest Alabama.
- 14. A line of thunderstorms moved across southwest Alabama causing tree and power line damage and producing hail.
- 15. High winds caused roof damage to the local hospital.

<u> </u>											
Location or County	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage			
county							Duniuge	Duniuge			
1. Evergreen	01/27/2000	10:00 PM	Sleet	N/A	0	0	N/A	N/A			
2. Evergreen	12/21/2000	05:00 AM	Winter	N/A	0	0	N/A	N/A			
5			Storm								
3. Evergreen	01/02/2002	12:00 AM	Winter	N/A	0	0	N/A	N/A			
5			Storm								
4. Evergreen	01/28/2014	N/A	Winter	N/A	0	0	N/A	N/A			
0			Storm								
Totals							N/A	N/A			

 Table 4.26 Evergreen Past Occurrences-Severe Winter Storms

1. Sleet fell over much of the area during the overnight hours of January 27 and 28. No roads had to be closed and traffic was still able to flow in a normal manner. A couple of the county school systems had closed due to the threat of icing. Most of the snow, heavier sleet and freezing rain fell farther north across central and north Alabama.

2. Light Freezing Rain occurred during the early morning hours, resulting in a thin layer of ice on the elevated surfaces of bridges and overpasses. Reports of traffic accidents were received from several locations across Southwest Alabama due to the slippery road conditions.

3. A band of sleet and snow fell across the region during the early morning hours Wednesday. Most of the snow fell prior to sunrise, but continued until late morning on a more isolated basis in some locations. Most of the snow occurred along and north of a line extending from Deer Park in Washington County, to Evergreen in Conecuh County, to Luverne in Crenshaw County. Traveling became hazardous across the area, especially on secondary roads and bridges. Several secondary roads and bridges had to be temporarily closed and sanded, however, very few traffic accidents were reported.

4. Snow and ice blanketed the county.

Location or County	Date	Time	Туре	Magnitu de	Deaths	Injuries	Property Damage	Crop Damage
1. Evergreen	10/04/1995	05:30 PM	Tornado	F0	0	0	\$10,000.00	0
2. Evergreen	11/24/2001	04:42 PM	Tornado	F0	0	0	\$15,000.00	0
3. Evergreen	08/19/2002	02:25 PM	Funnel Cloud	N/A	0	0	0	0
4. Evergreen	02/02/2006	03:25 PM	Tornado	F0	0	0	\$10,000.00	0
Totals							\$35,000.00	0

Table 4.27 Evergreen, AL Past Occurrences-Tornadoes

1. A tornado briefly touched down near Evergreen. Trees and power lines were blown down.

2. A weak tornado downed trees and power lines around the community.

3. Several sightings of a funnel cloud were reported near Evergreen. The funnel never touched down, but remained visible for about five minutes. No damage was reported from the storm.

4. A weak tornado briefly touched down just inside the Conecuh county line, just east of Pine Orchard. The tornado blew down several trees and power lines.

Past Occurrences by Jurisdiction-Repton, AL

Tables 4.28-4.34 contain the available past occurrence data for the Town of Repton.

Location or County	Date	Time	Туре	Magnitu de	Deaths	Injuries	Property Damage	Crop Damage
1. Repton	07/01/2000	12:01 AM	Heat	N/A	0	0	0	0
2. Repton	08/08/2007	08:00 AM	Heat	N/A	0	0	0	0
Totals							0	0

 Table 4.28 Repton Past Occurrences-Extreme Heat

- 1. The temperature was 100 degrees or higher five days during the month.
- 2. Heat advisories were issued for a combination of high temperatures and high humidity. Heat index vales were between 110 and 115 degrees. Several public buildings and churches allowed people to come in and cool off during the heat of the day.

Location or County	Date	Time	Туре	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
1. Repton	03/08/1998	01:30 AM	Flood	N/A	0	0	N/A	N/A
2. Repton	09/29/1998	11:30 AM	Flood	N/A	0	0	N/A	N/A
3. Repton	03/03/2001	12:00 PM	Flash Flood	N/A	0	0	N/A	N/A
4. Repton	07/10/2005	05:30 PM	Flash Flood	N/A	0	0	N/A	N/A
5. Repton	08/29/2008	02:30 PM	Flash Flood	N/A	0	0	N/A	N/A
6. Repton	12/12/2009	N/A	Flash Flood	N/A	0	0	N/A	N/A
Totals							N/A	N/A

Table 4.29 Repton Past Occurrences- Floods

- 1. Heavy rains began on the evening of March 7 and continued through the night before tapering off on the afternoon of March 8. The heavy rainfall caused widespread flooding across the area. Most of the secondary roads throughout the county suffered damage. Most were closed from early Sunday morning until the evening of March 8. Part of I-65 was covered with water for a few hours during the morning of March 8 and traffic had to be rerouted.
- 2. Rainfall estimates of between five and ten inches from Hurricane Georges fell across the county. Several roads around the county were closed for a few hours due to high water. Schools were closed two to three days because of washouts of secondary roads throughout the county. The area east and south of I-65 was the hardest hit from the flooding. The heavy rains also caused several of the creeks and small streams in the county to come out of their banks. Murder, Burnt Corn and Brushy creeks came out of their banks as did the Sepulga River. Other than road damage, no major damage was reported to any homes from the flooded streams.

- 3. Heavy rains across the area caused secondary roads to washout in many areas. The water slowly drained from the roads after the rain ended, and most were able to be reopened after sunset. Radar estimated that four to six inches of rainfall fell across the area.
- 4. Heavy rains in a short period of time caused part of I-65 near Evergreen to flood. Part of the lanes had to be temporarily closed until the rain stopped and the road drained.
- 5. Heavy rains from Hurricane Katrina caused flooding across most of the county. Several streets had to be closed off and on throughout the day. Radar estimated that 3-5 inches of rain fell across the county with the heaviest being across the southwest part of the county.
- 6. Flash flooding occurred throughout the county.

•		1						
Location or	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop
County							Damage	Damage
1. Repton	08/03/1995	09:00 AM	Hurricane Erin	N/A	0	0	N/A	N/A
2. Repton	10/03/1995	12:00 AM	Hurricane Opal	N/A	0	0	N/A	N/A
3. Repton	09/25/1998	09:00 AM	Hurricane George	N/A	0	0	N/A	N/A
4. Repton	08/06.2001	04:00 AM	Tropical Storm Barry	N/A	0	0	N/A	N/A
5. Repton	09/13/2004	09:00 PM	Hurricane Ivan	N/A	0	0	N/A	N/A
6. Repton	06/10/2005	03:00 AM	Tropical Storm Arlene	N/A	0	0	N/A	N/A
7. Repton	07/09/2005	03:00 AM	Hurricane Dennis	N/A	0	0	N/A	N/A
Totals							N/A	N/A

Table 4.30 Repton Past Occurrences-Hurricanes and Coastal Storms

- 1. Erin moved northwest and moved across Interstate 65 and passed near Stockton during the afternoon and then moved through northeast Mobile County and southern Conecuh and southern Washington Counties. As Erin moved through southwest Alabama, trees and power lines were blown down and many homes were damaged. Preliminary damage estimates were \$25 million. More than 100 homes were damaged.
- 2. Hurricane Opal moved into Southwest Alabama on October 3, 1995. Several short lived tornadoes occurred mostly near and east of the center of the storm. More than 125 homes were destroyed with 150 homes suffering major damage. Preliminary damage estimates were \$48 million with half of that being from tree damage in the Conecuh National Forest. Preliminary crop damage loss was estimated at \$4 million. Most of the damage in Southwest Alabama was generally along and east of Interstate 65. The greatest amount of rainfall was 8.1 inches in a twenty four hour period in Evergreen.
- 3. For the second time in less than a month, the area was again threatened by a hurricane. Hurricane Georges affected the region September 25 through the 29. Some of the winds recorded across Southwest Alabama and Northwest Florida were as follows. Most of the inland counties in Southeast Mississippi and Southwest Alabama had damage from heavy rains and from trees and power lines being blown down by the persistent winds.. Throughout the area, agriculture took a beating with the cotton, soybean and pecan crop almost totally destroyed. Preliminary damage estimates in Southwest Alabama were 174.2 million dollars, in Northwest Florida 135 million dollars and in Southeast Mississippi 72 million dollars.

- 4. Tropical storm Barry moved inland on the morning of August 6. An Inland Tropical Storm Wind Warning was in effect as Barry tracked across Covington, Conecuh, Monroe and Wilcox counties between 500 am and noon. Near the center and just to the right of the center, numerous trees and light weight structures were damaged. Minor damage occurred in Conecuh, Monroe and Wilcox counties, with most of that being trees blown down.
- 5. Hurricane Ivan affected the region from September 13 through the 16th. The coastal areas were put under a hurricane watch at 900 PM CST on September 13. The area was put under a hurricane warning at 300 PM CST on September 14. The hurricane warning was dropped at 900 AM CST on September 16 and we were put under a tropical storm warning. The tropical storm warning was dropped at 300 PM CST on September 16. Evergreen 7.25 inches. Hurricane force winds were felt across the entire area, including all inland counties. Most of the area probably had hurricane force winds for two to four hours. This caused 100 year old trees to break due to the constant force from the strong winds. Many of the trees fell on homes and vehicles and damaged them. While some structural wind damage would have been expected, most of the major structural damage that occurred over inland areas would not have been as substantial if it had not been for fallen trees. It was estimated that in Alabama over \$500,000,000 damage was done to timber.. Power was out for a week or more across the inland areas due to trees across lines. These weak tornadoes occurred in Escambia and Santa Rosa counties in Florida, and in Baldwin, Escambia and Conecuh in Alabama and produced only minor damages. In Conecuh County a 34 year old male died from a car accident when he hit debris still in the road from the storm. Agriculture interests suffered a major blow from Ivan with most of the soybean and pecan crop destroyed. The cotton crop also suffered damage but not as bad as that of the soybean and pecan crop It will be remembered as one of the most damaging hurricanes to affect the inland counties of Escambia, Conecuh, Monroe, Conecuh and Butler in southwest Alabama.
- 6. Tropical Storm Arlene moved across the area during the afternoon and evening of June 11. The area was put under a Tropical Storm Watch at 300 AM CST on June 10, then a Tropical Storm Warning and a Hurricane Watch at 900 AM CST on June 10. The area was then put under a Hurricane Warning at 900 PM CST on June 10. The Hurricane Warning was dropped to a Tropical Storm Warning at 300 PM CST on June 11. All Tropical Warnings were dropped at 600 PM CST on June 11 as the remains of Arlene moved inland across Southwest Alabama. Arlene tracked north northwest across Southwest Alabama along a similar track that Ivan had taken a few months earlier. Evergreen Airport, sustained wind of 30 knots with gusts to 36 knots. Since Arlene followed along a similar track as Ivan took only nine months earlier, trees that had been damaged by Ivan were blown down as Arlene moved inland. Trees and power lines were blown down along the track of Arlene with most of the damage near the center of the storm. Except for some trees falling onto homes, very little structural damage was reported.
- 7. After Dennis moved through Santa Rosa and Escambia counties in Florida it moved across Escambia, Monroe, Conecuh and Choctaw counties in southwest Alabama. Tree damage was reported in all of these counties as well as Conecuh, Washington and Wilcox counties. Some of the trees fell on structures and damaged them.

Location or County	Date	Time	Туре	Magnitude (inches)	Deaths	Injuries	Property Damage	Crop Damage
1. Repton	04/17/1998	06:00 PM	Hail	2.75	0	0	\$10,000.00	\$2,000.00
Totals							\$10,000.00	\$2,000.00

Table 4.31 Repton, AL Past Occurrences-Severe Storms (Hai

1. Baseball size hail fell along U S Highway 84 from the Monroe and Conecuh county line to just east of Repton. Vehicles in this area had damage to windshields and pings in their exterior. Many homes suffered roof damage and windows that were facing west were broken out. The storm that produced this large hail event had earlier produced large hail in parts of Monroe County.

Location or	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop
County				(knots)			Damage	Damage
1. Repton	04/06/1999	05:55 PM	Thunderstorm	50	0	0	\$5,000.00	0
*			Winds					
2. Repton	12/16/2000	04:45 PM	Thunderstorm	55	0	0	\$5,000.00	0
- -			Winds					
3. Retpon	10/13/2001	02:53 PM	Thunderstorm	60	0	0	\$15,000.00	0
-			Winds					
4. Repton	11/24/2001	05:10 PM	Thunderstorm	55	0	0	\$10,000.00	0
			Winds					
Totals							\$35,000.00	0

Table 4.32 Repton, AL Past Occurrences-Severe Storms (Thunderstorms)

1. High winds blew trees down.

- 2. Trees were blown down near Repton from high winds during a thunderstorm.
- 3. Trees were blown down as a line of thunderstorms passed through the community.
- 4. Trees were blown down along Highways 84 and 7, just to the east of Repton.

Location or	Date	Time	Туре	Magnitude	Deaths	Injuries	Property	Crop
County							Damage	Damage
1. Repton	01/27/2000	10:00 PM	Sleet	N/A	0	0	N/A	N/A
2. Repton	12/21/2000	05:00 AM	Winter	N/A	0	0	N/A	N/A
·			Storm					
3. Repton	01/02/2002	12:00 AM	Winter	N/A	0	0	N/A	N/A
-			Storm					
4. Repton	01/28/2014	N/A	Winter	N/A	0	0	N/A	N/A
-			Storm					
Totals							N/A	N/A

Table 4.33 Repton Past Occurrences-Severe Winter Storms

- 1. Sleet fell over much of the area during the overnight hours of January 27 and 28. No roads had to be closed and traffic was still able to flow in a normal manner. A couple of the county school systems had closed due to the threat of icing. Most of the snow, heavier sleet and freezing rain fell farther north across central and north Alabama.
- 2. Light Freezing Rain occurred during the early morning hours, resulting in a thin layer of ice on the elevated surfaces of bridges and overpasses. Reports of traffic accidents were received from several locations across Southwest Alabama due to the slippery road conditions.
- 3. A band of sleet and snow fell across the region during the early morning hours Wednesday. Most of the snow fell prior to sunrise, but continued until late morning on a more isolated basis in some locations. Most of the snow occurred along and north of a line extending from Deer Park in Washington County,

to Evergreen in Conecuh County, to Luverne in Crenshaw County. Traveling became hazardous across the area, especially on secondary roads and bridges. Several secondary roads and bridges had to be temporarily closed and sanded; however, very few traffic accidents were reported.
4. Snow and ice blanketed the county.

F. Probability of Future Occurrences

By calculating the probability of future occurrences one can empirically provide the probability that a certain type of hazard will occur. Conecuh County EMA has decided to provide two sets of probabilities due to the insufficient amount of past occurrence data available. The first set of data (Tables 4.34.-4.37) provides probabilities calculated from the historic numbers. Some hazards do not have historic occurrences and/or damage values available; therefore, these are assigned a value of NA or not available. The formulas used in these tables are as follows:

Probability of Occurrence = Number of historic occurrences/ Time frame in which they occurred Expected Damages= Damages from historic occurrences/ Number of historic occurrences.

Hazard	Past Occurrences	Time Frame	Past Damages (\$)	Probability of Occurrence (per year)	Expected Damages (\$)
Avalanche	-	-	-	-	-
Coastal Erosion	-	-	-	-	-
Dam Failure	-	-	-	-	-
Earthquakes	-	-	-	-	-
Expansive Soils	-	-	-	-	-
Extreme Heat and					
Drought	2	14	N/A	14%	-
Flood	6	16	\$315,000	38%	\$52,500
Coastal Storm and					
Hurricane	7	19	N/A	37%	N/A
Landslides	N/A	-	N/A	-	-
Land Subsidence	-	-	-	-	-
Severe Storms (Hail,					
High Winds,					
Lightning,	63	52	\$194,000	100%	\$3,079
Thunderstorms)					
Severe Winter Storms	5	14	N/A	36%	-
Tornado	11	111	1,686,000	-	\$153,272
Tsunamis	-	-	-	-	-
Volcanoes	-	-	-	-	-
Wildfire	N/A	N.A	N/A	N/A	N/A

Table 4.34 Probabili	y of Future	Occurrence	Based on	Historical	Data -	Unincor	porated	County
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Hazard	Past Occurrences	Time Frame	Past Damages (\$)	Probability of Occurrence (per year)	Expected Damages (\$)
Avalanche	-	-	-	-	-
Coastal Erosion	-	-	-	-	-
Dam Failure	-	-	-	-	-
Earthquakes	-	-	-	-	-
Expansive Soils	-	-	-	-	-
Extreme Heat and					
Drought	2	14	N/A	14%	-
Flood	6	16	N/A	38%	
Coastal Storm and					
Hurricane	7	19	N/A	37%	N/A
Landslides	N/A	-	N/A	-	-
Land Subsidence	-	-	-	-	-
Severe Storms (Hail,					
High Winds,	12	16	\$316,000	75%	\$26,333
Lightning,					
Thunderstorms)					
Severe Winter Storms	4	14	N/A	29%	-
Tornado	5	81		6%	\$30,400
Tsunamis	-	-	-	-	-
Volcanoes	-	-	-	-	-
Wildfire	N/A	N.A	N/A	N/A	N/A

Table 4.35 Probability of Future Occurrence Based on Historical Data - Castleberry

Hazard	Past Occurrences	Time Frame	Past Damages (\$)	Probability of Occurrence (per year)	Expected Damages (\$)
Avalanche	-	-	-	-	-
Coastal Erosion	-	-	-	-	-
Dam Failure	1	-	-	-	-
Earthquakes	1	-	-	-	-
Expansive Soils	-	-	-	-	-
Extreme Heat and					
Drought	3	19	N/A	16%	-
Flood	10	15	\$2,000	66%	\$20
Coastal Storm and					
Hurricane	7	19	N/A	37%	N/A
Landslides	N/A	-	N/A	-	ſ
Land Subsidence	-	-	-	-	-
Severe Storms (Hail,					
High Winds,					
Lightning,	22	20	\$1,408,000	100%	\$64,000
Thunderstorms)					
Severe Winter Storms	4	14	N/A	29%	-
Tornado	4	19	\$35,000	21%	\$8,750
Tsunamis	-	-	-	-	-
Volcanoes	-	-	-	-	-
Wildfire	N/A	N.A	N/A	N/A	N/A

Table 4.36 Probability of Future Occurrence Based on Historical Data - Evergreen

Hazard	Past Occurrences	Time Frame	Past Damages (\$)	Probability of Occurrence (per year)	Expected Damages (\$)
Avalanche	-	-	-	-	-
Coastal Erosion	-	-	-	-	-
Dam Failure	-	-	-	-	-
Earthquakes	-	-	-	ſ	ſ
Expansive Soils	-	-	-	-	-
Extreme Heat and					
Drought	2	14	N/A	14%	-
Flood	6	16	N/A	38%	-
Coastal Storm and					
Hurricane	7	19	N/A	38%	N/A
Landslides	N/A	-	N/A	-	-
Land Subsidence	-	-	-	ſ	ſ
Severe Storms (Hail, High Winds, Lightning, Thunderstorms)	5	16	\$45,000	31%	\$9,000
Severe Winter Storms	4	14	N/A	21%	N/A
Tornado	-	-	-	-	-
Tsunamis	-	-	-	-	-
Volcanoes	-	-	-	-	-
Wildfire	N/A	N.A	N/A	N/A	N/A

Table 4.37 Probability of Future Occurrence Based on Historical Data - Repton

Due to insufficient storm event data the Conecuh County EMA feels these probabilities are significantly lower than they should be for every hazard with the exception of tornadoes. Table 4.38 provides generalized probabilities that are based on estimated numbers and additional research. These probabilities apply to all areas within the county, unless otherwise noted.

	Probability
	of
Hazard	Occurrence
	(per year)
Avalanche	-
Coastal Erosion	-
Dam Failure	Unlikely
Earthquakes	Unlikely
Expansive Soils	-
Extreme Heat and	Likely
Drought	-
Flood	Likely
Coastal Storm and	
Hurricane	Likely
Landslides	Likely
Land Subsidence	-
Severe Storms (Hail,	
High Winds,	Highly
Lightning,	Likely
Thunderstorms)	
Severe Winter Storms	Likely
Tornado	Likely
Tsunamis	-
Volcanoes	-
Wildfire	Highly
	Likely

Table 4.38 Alternate Probabilities by Type of Event (Countywide)

Summary of Changes Made in Plan Update Section V. Assessing Vulnerability

The *Assessing Vulnerability* section of the mitigation plan was also reviewed by the steering committee. The Committee elected to make changes to this section in order to provide more current information. The Committee used their personal knowledge and statistical data provided by ATRC to make all judgments in this section.

• All hazards that were profiled were discussed in the Overview of Hazard Vulnerability and Impact.

 $\cdot\,$ The Identification of Socially Vulnerable Populations section was updated with current demographic information.

 $\cdot\,$ Each jurisdiction reviewed their critical facilities and provided updated information when necessary.

· Critical Facilities by Hazard table was updated.

· Analyzing Development Trends section was reviewed, but no changes were necessary.

V. Assessing Vulnerability

The Conecuh County Hazard Steering Committee reviewed all risk assessment analysis. Upon review, the committee felt the following hazards posed the greatest threats: coastal storms or hurricanes, extreme heat and drought, floods, severe storms, tornadoes, and wildfire. These hazards will be discussed further in this section.

A. Overview of Hazard Vulnerability and Impact

Coastal Storm or Hurricane

Atlantic hurricane season is from June 1 to November 30. According to NOAA the highest number of Atlantic hurricanes to make landfall in the United States is six (in 1960 and 1985), while the lowest is zero, which has occurred often

(http://www.aoml.noaa.gov/hrd/tcfaq/E9.html). Based on geography alone, the entire population of the county is at risk for the effects of hurricanes. Over the past fifty years Conecuh County has been affected by hurricanes. Severe storms, tornadoes, high winds, hail, torrential rains, river flooding, and flash flooding are all associated with hurricanes. Potentially all of Conecuh County is at risk. The effects of a hurricane are like those of a tornado. The loss of life, property and possessions is common. Interruption of utility and communication service is expected. Conecuh County is far enough inland that advance warning of the approaching storm can be heeded and residents can prepare themselves. In instances such spawned tornadoes and flash flooding where warning time may be short or nonexistent the risk factors are higher. In addition, low-lying areas and areas prone to flooding are at higher risk of hurricane related damage. Another concern regarding hurricanes is the large amount of debris that results. Debris blocks roadways and makes travel unsafe. Debris removal is a major cost with regards to hurricanes.

Extreme Heat and Drought

Both extreme heat and drought could occur at any location in the continental United States according to FEMA. Droughts would most greatly affect agriculture and water supply. Extreme heat could lead to heatstroke, heat cramps, and heat exhaustion. A widespread extreme heat event could possibly overcrowd local clinics and emergency rooms with persons suffering from the heat's effects. Increased use of electricity to run fans and air conditioners may also put a strain on electric utilities. In addition, during droughts the risk of wildfire is greater. All 13,228 residents of Conecuh County are at risk to the effects of extreme heat and drought.

Floods

Flash floods may lead to property damage or loss depending on severity. Their rapid onset makes them even more deadly. Often waters rise so quickly that people have little time to protect themselves. These floods can also lead to death and injury. Flash flooding on roadways is a major risk. Many times drivers underestimate water depth and become stranded in floodwaters. Residents along James Mill Road, Winston Bell Road, and Brushy Creek Road have had to deal with flash flooding on a frequent basis. Also residents in low lying areas along Murder Creek, Burnt Corn Creek, and the Sepulga River must deal with flooding. There are no repetitive loss properties in Conecuh County.

Severe Storms (Hail, high winds, lightning and thunderstorms)

Damage from severe storms can have a wide range of severity. Common incidences are a result of falling trees and flying debris. Lightning can cause substantial property damage and death. Utility disruption and blocked roadways are common. Historically Conecuh County has experienced these storms every year with varying frequency and intensity. Winds of 70 knots have been recorded during these events within the county. Hailstorms as large as 3.5 inches have occurred in the area with property damage resulting. Generally severe storms follow no common track or an exact pathway; therefore, the whole county is at risk.

Tornadoes

There are two tornado seasons in Alabama; these are in May and November. Tornadoes are not constrained to follow any definite path, so every area and every resident of Conecuh County is at risk. A tornadoes path is generally 300-400 yards wide and four miles long (NOAA 1973). Areas within that path may suffer from slight to severe damage depending on the tornadoes strength. Injury and death can occur as a result of even the weakest tornado. In Conecuh County, historically there have been F0, F1 & F2 tornados recorded. Table 5.1 gives wind speeds and general damage descriptions for the Fujita –Pearson scale which measures tornado strength.

FUJITA SCA		FA SCALE		DERIVED EF SCALE		TIONAL CALE
F Number	Fastest 1/4- mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85	0	65-85
1	73-112	79-117	1	86-109	1	86-110
2	113-157	118-161	2	110-137	2	111-135
3	158-207	162-209	3	138-167	3	136-165
4	208-260	210-261	4	168-199	4	166-200
5	261-318	262-317	5	200-234	5	Over 200

Table 5.1 Fujita- Pearson Tornado Scale

Source: National Oceanic and Atmospheric http://www.spc.noaa.gov/faq/tornado/ef-scale.html The effects of any tornado may be far reaching. Life, property, and personal items are all at risk. Interruption of electric, telephone and other utility and communications services may occur. Transportation corridors may be blocked or in some cases destroyed. Debris must be removed and this is often a costly task. Citizens may suffer from posttraumatic syndrome, depression, anxiety, and grief for lost loved ones. Also another concern in rural areas, such as Conecuh County, is the lack of emergency response personnel. When large storms with widespread damage and injuries occur, these areas have a more difficult time responding to all calls they receive.

Wildfire

Due to the large areas of forest-covered land in Conecuh County, wildfires are a real threat to all residents of Conecuh County. These fires can ignite and spread quickly, charring everything in their path. In Conecuh County, wildfires are a threat to the residents' property and health. Fires can encroach on homes and destroy subdivisions. These fires not only threaten the lives of residents, but also may cause respiratory problems for many residents. Smoke from these fires may lead to limited visibility along roadways increasing the probability of accidents. In addition to these effects, wildfires in Conecuh County threaten the economic livelihood of the county. The economy has a large timber component that could be damaged by wildfire.

B. Overview of Affected Populations by Hazard The population affected by natural disasters varies by hazard type. Table 5.2 gives a broad overview of the estimated populations that are at risk from each designated hazard.

	Unincorporated			
Hazard	County	Evergreen	Repton	Castleberry
Avalanche	N/A	N/A	N/A	N/A
Coastal	N/A	N/A	N/A	N/A
Erosion				
Coastal	8,419	3,944	282	583
Storm and				
Hurricane				
Dam	N/A	N/A	N/A	N/A
Failure				
Earthquake	N/A	N/A	N/A	N/A
Expansive	N/A	N/A	N/A	N/A
Soils				
Extreme	8,419	3,944	282	583
Heat &				
Drought				
Floods	8,419	3,944	282	583
Severe	8,419	3,944	282	583
Storms				
(lightning,				
hail, wind)				
Landslides	N/A	N/A	N/A	N/A
Land	N/A	N/A	N/A	N/A
Subsidence				
Severe	8,419	3,944	282	583
Winter				
Storms				
(Snow &				
Ice)				
Tornado	8,419	3,944	282	583
Tsunamis	N/A	N/A	N/A	N/A
Volcanoes	N/A	N/A	N/A	N/A
Wildfire	8,419	3,944	282	583

Table 5.2 Population Affected by Individual Hazards

C. Identification of Socially Vulnerable Populations

Table 5.3 shows vulnerability due to physical location. Location is not the only factor in determining vulnerability. Social and economic characteristics can also be studied to determine vulnerability. Certain populations are generally more affected by any type of natural hazard and their after effects. These populations can be defined in terms of social, racial, and economic characteristics. The following section identifies Conecuh County's socially vulnerable populations by jurisdiction.

The American Community Survey Five Year Estimates 2008-2012 is the most up to date data available for Conecuh County. This data was used in the following analysis.

Vulnerability Characteristics

There are four jurisdictions in Conecuh County: Castleberry, Evergreen, Repton, and the unincorporated county. In terms of vulnerability, the larger the population of an area the more people and structures that could possibly be damaged or destroyed. Figure 5.1 shows the population of the county by census tract. Tract 9606, which includes a portion of the City of Evergreen, is the most populated tract. Tract 9604, which includes the area just south of Evergreen and the Town of Castleberry, is the second most populated.



Figure 5.1 Population by Census Tract

The population over sixty-five years of age and under eighteen years of age is especially vulnerable to natural hazards due to their age. These groups are at a higher risk for injury and medical complications that may occur during or as a result of a natural disaster. Also, these groups often need evacuating and special shelter. The areas with the highest percentage of these populations are the northern and eastern portions of the County. Figures 5.2 and 5.3 show these populations by census tract.





Figure 5.3 Percent of the Population under 18 by Census Tract



Minority populations are also generally considered to be more vulnerable. These populations may not have the resources necessary to recover as quickly or completely from natural disasters. Generally minorities have higher percentages of inadequate medical coverage, inadequate property or housing insurance, and inadequate home construction. All areas of the County have over twenty-five percent of their population belonging to a minority. Figure 5.4 shows minority populations by census tract for the county.



Figure 5.4 Percent of the Population that is a Minority by Census Tract

In addition to the racial and age composition within the county, income levels are also important when identifying vulnerable populations. Lower income individuals may not have the resources to prepare or recover from natural disasters. In Conecuh County, the area covered by Tract 9604 has the lowest income levels. It should be noted, the County as whole is well below the state and national averages for income. Figure 5.5 ad 5.6 show the median and per capita income for the county by census tract.



Figure 5.5 Medium Household Income by Census Tract

Housing is always a concern when you are looking at mitigation planning. The concentration and type of housing are two main concerns. In Conecuh County, there are a total of 7,103 housing units. Tract 9606 has the highest number of housing units, followed by Tract 9604. Figure 5.7 shows the housing units per census tract for the county.



Figure 5.7 Housing Units by Census Tract

Not only are concentrations of units important, but also the type of unit is important. Within Conecuh County there are a significant number of mobile homes. These homes are more vulnerable to damage from natural hazards. Tracts 9602 and 9604 have at least twenty five percent of their housing stock being mobile homes. Figure 5.8 shows the percentage of the housing stock that is mobile homes for each census tract. The number of multiple unit structures was also compiled for each tract, but there were no significant percentages belonging to this designation



Figure 5.8 Percentage of Housing Units that are Mobile Homes by Census Tract

D. Overview of County Building Stock

In addition to populations, it is also important to examine the number and value of potential structures that may be damaged by natural hazards. Figure 5.9 is provided for reference. Table 5.3 gives building counts by general occupancy for each census tract. Census Tracts 9606 and 9604 have been identified as areas with the largest building stocks. These tracts contain the bulk of the residences in the county. The county's largest city and county-seat, Evergreen, is located partially in Tract 9606. This tract contains the most agriculture, religious, educational, industrial, and commercial buildings.



Figure 5.9 Conecuh County Census Tracts

 Table 5.3 Building Stock by Census Tract (General Occupancy)

Tract #	Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
9602	1,158	-	_	-	_	-	_	1,158
9603	936	19	4	1	2	3	_	965
9604	1,950	20	7	2	4	3	1	1,987
9605	887	56	11	4	4	8	3	973
9606	2,799	77	33	6	16	4	8	2,943

Source: Hazus-MH

Table 5.4 provides exposure numbers for the building stock by census tract.

Tract #	Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
9602	\$ 82.272.000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 82.272.000
0603	¢ c0 490 000	¢ 5 112 000	¢ 602.000	¢ 142.000	¢ 632.000	¢ 261.000	\$	¢ 67.971.000
9603	\$ 103.799.000	\$ 5,112,000 \$ 4,138,000	\$ 6.440.000	\$ 143,000 \$ 276.000	\$ 032,000 \$ 1.230.000	\$ 301,000 \$ 1.115.000	- \$ 953.000	\$ 07,271,000 \$ 117,951,000
9605	\$ 6,146,400	\$ 28,474,000	\$ 5,068,000	\$ 739,000	\$ 2,655,000	\$ 3,949,000	\$ 2,077,000	\$ 49,108,400
9606	\$ 175,826,000	\$ 30,530,000	\$ 39,146,000	\$ 1,463,000	\$ 8,931,000	\$ 649,000	\$ 9,592,000	\$ 266,137,000

 Table 5.4 Exposure by Census Tract (General Occupancy)

Source: Hazus-MH

E. Identification of Critical Facilities

The Conecuh County Hazard Mitigation Steering Committee identified critical facilities in the following six categories:

- A. A critical facility is critical to the health and welfare of the entire jurisdiction. They become essential in the event of a natural disaster. These facilities include police stations, fire stations, schools, and hospitals.
- B. Critical facilities are lifelines that provide the jurisdiction with necessities such as potable water.
- C. Critical facilities include the transportation corridors necessary to keep the jurisdiction connected.
- D. Critical facilities include those facilities that house persons with special needs (jails, nursing homes). They may also include locations where large groups often meet.
- E. Critical facilities include locations with hazardous materials. These materials may pose a threat to health and safety if disrupted.
- F. Critical facilities include those in which potential losses, both human and economic, are high.

Tables 5.5-5.9 detail specific facilities that were identified in each category, except category F. Specific facilities for Category F were not listed due to their presence in other categories.

Name	City
Repton Junior High	Repton
Castleberry Elementary	Castleberry
Hillcrest High School	Evergreen
Compass School	Evergreen
Sparta Academy	Evergreen
Evergreen Elementary	Evergreen
Marshall Middle School	Evergreen
Lyeffion Junior High	Evergreen
Conecuh County Junior High School	Castleberry
Conecuh County Sheriff's Department	Evergreen
Evergreen Police Department	Evergreen
Evergreen Medical Center	Evergreen
Conecuh County Road and Bridge Department	Evergreen

 Table 5.5

 A. Critical Facilities Vital to the Health and Welfare

Source: Mitigation Committee

Table 5.6 B. Lifeline Facilities

Conecuh County Water Systems
Castleberry Water System
Evergreen Water Works
Fairview Water System
Lyeffion Water and Fire Protection Authority
Repton Water Works
Owassa Brownsville Water Authority
Hamden Ridge Water Authority

 Table 5.7

 C. Critical Facilities: Transportation Corridors

Facility Name	Location
Highway 84 and I-65	Repton
Highway 31 and I-65	Castleberry
Highway 31 and I-65	Evergreen
Highway 84 and I-65	Evergreen
Highway 83 and I-65	Evergreen

Source: Conecuh County

	Table 5.8	
D. Critical Facilities: S	pecial Needs and/or Meeting Place	es

Facility Name	Location
Evergreen Nursing Home	Evergreen
Town Hall/Police Department	Evergreen

Source: Municipalities

E. Chucai Facilities. Flazardous Materials		
Facility Name	Location	
Southern Precision Corporation	Evergreen	
Knud Nielson Company	Evergreen	
Farmers Favorite Fertilizers	Evergreen	

Table 5.9	
E. Critical Facilities: Hazardous	Materials

Source: Hazus- MH

F. Critical Facilities by Jurisdiction

Tables 5.10-5.13 break down critical facilities by jurisdiction. Also cost estimates are given. The municipalities provided the estimates listed under each municipality. These values were taken from insurance records. Other values were provided by the individual entities. All categories of critical facilities are included.

Facility	Estimated Value
Lyeffion Junior High	\$15,000,000
Fairview Water System	N/A
Lyeffion Water and Fire Protection Authority	N/A
Owassa Brownsville Water Authority	N/A
Hamden Ridge Water Authority	N/A
TOTAL VALUE OF CRITICAL FACILITIES	\$15,000,000

Table 5.10 Critical Facilities Located in Unincorporated Areas

Facility	Estimated Value
Town Hall/VFD/PD	1,310,637
Conecuh County Junior High	15,000,000
Hillcrest Apartments	1,000,000
Castleberry Water System	N/A
TOTAL VALUE OF CRITICAL FACILITIES	\$17,310,637

Table 5.12 Critical Facilities Located in Evergreen

Facility	Estimated Value
Courthouse	17,000,000
Evergreen Nursing Home	2,000,000
Evergreen Elementary School	17,000,000
Marshall Middle School	11,500,000
Hillcrest High School	24,000,000
Sparta Academy	2,000,000
Compass School	350,000
EMC	10,000,000
Town Hall/PD	1,500,000
Evergreen VFD	3,000,000
City of Evergreen Utility	1,500,000
Conecuh County Road & Bridge	15,000,000
Conecuh County Sherriff's Department	2,500,000

Conecuh County E-911	5,000,000
Evergreen Water System	50,000,000
TOTAL VALUE OF CRITICAL	
FACILITIES	\$162,350,000

Table 5.13 Critical Facilities Located in Repton

Facility	Estimated Value
Repton VFD	1,000,000
Town Hall	375,000
Repton Junior High	1,000,000
Repton Water Works	N/A
TOTAL VALUE OF CRITICAL FACILITIES	\$2,375,000

Future Critical Facilities

Each jurisdiction was asked to provide a list of all critical facilities scheduled to be completed within the next five years.

• Medical Center (Evergreen)
G. Facilities by Hazard

Due to the nature of the hazards identified by Conecuh County, all critical facilities are at the same risk level, even though Conecuh County has had no repetitive damage by any hazard in the last five years. During the next update, flash flooding will be looked at in greater detail to better delineate an affected area and population.

Table 5.14 breaks these facilities down by potential loss to each hazard. The sum value of all critical facilities affected by each hazard was used to compute these numbers.

Example: Castleberry Chilear Facilities For	Cilital L035C5
Facility	Estimated Value
Town Hall/VFD/PD	1,310,637
Conecuh County Junior High	15,000,000
Hillcrest Apartments	1,000,000
Castleberry Water System	N/A
TOTAL VALUE OF CRITICAL FACILITIES	\$17,310,637

Example: Castleberry Critical Facilities Potential Losses

	Unincorporated			
Hazard	County	Evergreen	Repton	Castleberry
Avalanche	N/A	N/A	N/A	N/A
Coastal	N/A	N/A	N/A	N/A
Erosion				
Dam	N/A	N/A	N/A	N/A
Failure				
Earthquake	N/A	N/A	N/A	N/A
Expansive	N/A	N/A	N/A	N/A
Landslides	N/A	N/A	N/A	N/A
Land	N/A	N/A	N/A	N/A
Subsidence				
Severe	N/A	N/A	N/A	N/A
Winter				
Storms				
(Snow &				
lce)				
Tsunamis	N/A	N/A	N/A	N/A
Volcanoes	N/A	N/A	N/A	N/A
Coastal	\$15,000,000	\$162,350,000	\$2,375,000	\$17,310,637
Storms and				
Hurricanes			<u> </u>	
Extreme	\$15,000,000	\$162,350,000	\$2,375,000	N/A
Heat & Drought				
Floods	*	*	*	*
Severe	\$15,000,000	\$162 350 000	\$2 375 000	\$17 310 637
Storms	910,000,000	φ10 <i>ω</i> ,000,000	<i>ç</i> ≈,010,000	¢17,010,007
(lightning.				
hail, wind)				
Tornado	\$15,000,000	\$162,350,000	\$2,375,000	\$17,310,637
Wildfire	\$15,000,000	\$162,350,000	\$2,375,000	\$17,310,637

* Insufficient data

Tables 5.15 and 5.16 give estimates of potential housing losses by jurisdiction. Housing unit totals in Table 5.16 were taken from American Community Survey 2012 estimates. These numbers were obtained by insurance values.

	Unincorporated				
Hazard	County	Evergreen	Repton	Castleberry	Totals
Avalanche	N/A	N/A	N/A	N/A	N/A
Coastal	N/A	N/A	N/A	N/A	N/A
Erosion					
Dam Failure	N/A	N/A	N/A	N/A	N/A
Earthquake	N/A	N/A	N/A	N/A	N/A
Expansive Soils	N/A	N/A	N/A	N/A	N/A
Landslides	N/A	N/A	N/A	N/A	N/A
Land Subsidence	N/A	N/A	N/A	N/A	N/A
Severe Winter Storms (Snow & Lce)	N/A	N/A	N/A	N/A	N/A
Tsunamis	N/A	N/A	N/A	N/A	N/A
Volcanoes	N/A	N/A	N/A	N/A	N/A
Fytreme	N/A	N/A	N/A	N/A	N/A
Heat & Drought	1 1/11	1 1/ 1 1	11/11	11/11	1 1/ 7 1
Floods	*	*	*	*	*
Coastal Storms and Hurricanes	7,103	1,927	142	358	9,530
Severe Storms (lightning, hail, wind)	7,103	1,927	142	358	9,530
Tornado	7,103	1,927	142	358	9,530
Wildfire	5,269	1,536	129	331	7,265

Table 5.15-Housing Units by Jurisdiction by Hazard

* Insufficient data

For Table 5.16 potential loss totals were calculated by multiplying by the median value of a housing unit in each jurisdiction by the number of units in that jurisdiction. Example:

Repton Potential Housing Losses = Number of units in Town of Repton (142 * Median Value of Housing Unit in Town of Repton (\$75,000) = \$10,650,000

					T-4-1
	Unincorporated	Repton	Castleberry	Evergreen	l otal
Avalanche	N/A	N/A	N/A	N/A	N/A
Coastal Erosion	N/A	N/A	N/A	N/A	N/A
Dam Failure	N/A	N/A	N/A	N/A	N/A
Earthquake	N/A	N/A	N/A	N/A	N/A
Expansive Soils	N/A	N/A	N/A	N/A	N/A
Landslides	N/A	N/A	N/A	N/A	N/A
Land Subsidence	N/A	N/A	N/A	N/A	N/A
Tsunamis	N/A	N/A	N/A	N/A	N/A
Volcanoes	N/A	N/A	N/A	N/A	N/A
Coastal Storms					
and Hurricanes	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Extreme Heat					
and Drought	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Flash Flood	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Severe Storms					
(Snow and Ice)	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Severe Winter					
Storms	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Tornado	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900
Wildfire	\$527,042,600	\$10,650,000	\$20,155,400	\$145,873,900	\$703,721,900

Table 5.16-Dollar Exposure of Housing Facilities by Hazard

H. Analyzing Development Trends

Figure 5.10 is a land cover map of Conecuh County. Green, brown and yellow shades represent forest, pasture and shrubs. By examining the map it is apparent that the majority of the county is dedicated to these land uses. The red tones indicate developed land. Developed land is indicated in the Evergreen and Repton areas and along Interstate 65 corridor. The Evergreen area, the I-65 corridor and areas along Murder Creek are expected to grow. The remainder of the County will stay predominantly rural with the majority of land being forests or pastures.



Figure 5.10 Land Use/ Land Cover Map of Conecuh County

Data from the United States Census Bureau (Table 5.17) shows that the county's population is expected t steadily decline over the next twenty five years. The county is projected to have a 18.4% decrease between 2010 and 2040. Based on these figures, no significant increase in residential construction is expected. There are also no expected increases in commercial or industrial land uses expected.

	Census	Census							Change 2	2010-2040
	2000	2010	2015	2020	2025	2030	2035	2040	Number	Percent
Conecuh	14,089	13,228	12,886	12,543	12,163	11,728	11,259	10,797	-2,431	-18.4

Table 5.17 Population Projections 2015-2040

Source: U.S. Census Bureau and Center for Business and Economic Research, The University of Alabama

Future land use and development trends will likely stay the same. Growth can be expected in the municipality of Evergreen, but at a manageable rate. No significant growth is expected in Castleberry and Repton. No significant changes in land use are anticipated countywide. Forested land will continue to make up the majority of land use. Residential land use will increase, but this will also be at a manageable, expected rate.

Summary of Changes Made in Plan Update Section VI. Ongoing Mitigation Assessment

Ongoing Mitigation Assessment: A new section Existing Authorities, Policies, Programs, and Resources by Jurisdiction was added to detail capabilities by jurisdiction. Capabilities were determined by talking with each jurisdiction via phone calls. The information on the Conecuh County EMA was moved to Section B.

VI. Capability Assessment

A. Existing Authorities, Policies, Programs, and Resources by Jurisdiction

A brief assessment was conducted by each jurisdiction before goals, objectives, and strategies were discussed. This assessment was completed by contacting local officials by phone, regional planning commission knowledge, and internet research. Table 6.1 details the results of the assessment by jurisdiction.

Hazard Mitigation Existing Authorities, Policies, Programs, and									
	Resources b	y Jurisdiction	U						
Conecuh County									
Commission	Castleberry	Evergreen	Repton						
Road and Bridge	Utility	Public Works							
Department	Department	Department	Utility Department						
Emergency									
Management	Ability to tax	Ability to tax	Ability to tax						
Sheriff's Office	Building Codes	Building Codes	Building Codes						
Volunteer Fire	Police	Police							
Departments	Department	Department	Police Department						
	Volunteer Fire	Volunteer Fire	Volunteer Fire						
Member of NFIP	Department	Department	Department						
Regional Hazmat									
Teams	Member of	Member of							
	NFIP	NFIP	Member of NFIP						
	Regional	Regional	Regional Hazmat						
Emergency	Hazmat Teams	Hazmat Teams	Teams						
Operations Plan									
		Zoning							
		Ordinance							
		Planning							
		Commission							
		Strategic Plan							

The extent to which each jurisdiction can expand on existing policies and programs varies. In the State of Alabama, home rule is limited by its Constitution. While municipalities have the power to levy taxes (subject to constitutional limitations on ad valorem taxes), adopt zoning regulations, annex property, select and change their form of government, construct streets and assess the cost against the abutting property, engage in redevelopment and urban renewal projects and establish public agencies to operate hospitals, libraries, recreational facilities, counties do not. Counties that hold these powers have received them through legislative acts, which are written at the local level and presented to the state legislature.

With regards to zoning ordinances, Evergreen may amend them to address any issues that may arise as long as adequate public notice and a public comment period are given. Evergreen has an active planning commission that hears all requests with regards to the ordinances. For municipalities with no zoning ordinances (Castleberry and Repton), ordinances can be drafted and enacted as long as adequate public notice and a public comment period are given. In order for the Conecuh County Commission to enact a zoning ordinance, an act must be passed by the Alabama legislature in Montgomery. At this time, there is no indication that jurisdictions without ordinances in place desire to enact a new set of ordinances. Each jurisdiction in the county has the ability to enforce building codes to the extent it sees fit. Depending on budget and available personnel, these jurisdictions may modify the extent of their enforcement at any time. Funding for public works, utility departments, police, and fire also depend on each jurisdiction's available funding. Taxes are the most significant source of funding for these activities. Municipalities may enact new taxes without legislative approval, but county's may not.

Comprehensive planning is an area where every jurisdiction has the opportunity to analyze hazard mitigation. Planning at this time is limited to those jurisdictions that can afford to pay for a plan or have been accepted into the Alabama Communities of Excellence Program. The City of Evergreen has participated in the Alabama Communities of Excellence program where extensive strategic planning has occurred.

B. Conecuh County Emergency Management Agency

The Conecuh County EMA Director is available 24 hours a day. The EMA is located in the Emergency Operations Center in Evergreen. The Conecuh County EMA is capable of communicating with all law enforcement, emergency medical, fire, search and rescue personnel, amateur radio users, adjacent jurisdictions, and the State Emergency Operations Center by phone and radio. Conecuh County EMA uses the Weather Channel, NOAA weather radio, and EAS weather information. Doppler radar is also received at the Emergency Operations Center.

The Conecuh County EMA is also using social media to help keep citizens aware. The office currently has a Facebook page. Notifications regarding weather and closings is posted. Information regarding awareness and safety is also shared.

Summary of Changes Made in Plan Update Section VII. Mitigation Goals, Objectives, and Strategies

The *Mitigation Goals, Objectives, and Actions* section of the plan was also revised. Each jurisdiction reviewed their goals, objectives, and actions. A number of jurisdictions modified projects and estimates. Columns were added to indicate project status and timeframes.

VII. Mitigation Goals, Objectives, and Strategies

After the risk assessment update for the county was completed, each jurisdiction was asked to reprioritize the list of hazards which they felt should be profiled. Prioritization was based on information from the risk assessment and personal knowledge of their jurisdiction. They were also asked to provide goals, objectives, and strategies based on the findings. FEMA's definitions of goals and objectives were used.

"Goal: General guidelines that explain what you want to achieve. They are usually broad policy-type statements that are long term and represent global visions."

"Objective: Define strategies or implementation steps to attain the identified goals."

Each committee member and everyone attending the committee meetings were asked to reevaluate possible goals, objectives, and strategies for the jurisdiction they represented. A copy of the last plan was provided to aid in the process. The reevaluation of goals was based solely on what the individual felt the jurisdiction needed. Objectives were reviewed based on determining ways to work towards achieving the stated goals.

Each jurisdiction was also asked to reevaluate mitigation strategies. Members were asked to consider the following: funding options, political support, public support, legality, preservation of the environment, and staff capability. The committee was also reminded to look at each strategy in terms of costs and benefits. Not only were direct costs and benefits considered, but indirect costs and benefits were also acknowledged. Indirect costs and/or benefits are often intangible things such as social effects. Simply put, if a project's benefits outweighed its' cost and did so in a reasonable amount of time, the project was considered to be a good strategy for the jurisdiction.

Once strategies had been reevaluated based on these criteria, each jurisdiction was asked to prioritize them. Ongoing, Low, Medium, or High priority was assigned to each strategy. Prioritization was also based on the before mentioned considerations. Strategies with Low priority have a time frame of 5-7 years, Medium priority strategies have timeframes of 3-5 years, and High priority strategies will be undertaken within the next three years depending on funding. All new strategies are to be considered only possibilities at this point. These actions must be considered only possibilities due to budgetary and political concerns.

The following pages detail the mitigation goals, objectives, and strategies of each municipality.

Please refer to the following when using project listings: Priority

Low- Actions classified as needed (5-7 year timeframe) Medium- Actions classified as important (3-5 year timeframe) High- Actions classified as most important (1-3 year timeframe)

Status

Complete- Action has been completed Partially Complete- A percentage of the project has been completed Active- Project is underway Planned- Project is planned, but contingent on available funding

Conecuh County <u>Prioritized Threat by Jurisdiction (1=highest priority)</u>

1 Hurricanes

- 2. Severe Storms & Tornadoes
- 3 Extreme Heat and Drought

4. Flood

5. Wildfire

6. Snow & Ice

<u>Goals</u>

- ▼ Minimize losses due to natural disasters in Conecuh County.
- ▼ Minimize injury and death due to natural disasters in Conecuh County.
- ▼ Improve public awareness of safety issues concerning natural hazards.
- ▼ Achieve a plan that will insure the continuity of county government will not be significantly disrupted by disasters.
 - ▼ Enhance training equipment and availability of first responders to emergencies.
 - ▼ *Minimize the impact of natural disasters on the economic vitality of the county.*

Objectives

- ▼ Research and identify funding opportunities for mitigation related activities.
 - ▼ Educate citizens on safety issues related to natural hazards.
- ▼ Educate local business owners on how businesses may be affected by natural hazards.
 - ▼ Research and identify funding opportunities for local first responders.

The following pages detail projects that the Conecuh County Commission has identified as being priorities to the county. Many of the projects included in the last updated plan are also included here due to the fact the project is considered active or has not been pursued. The majority of the projects from the previous plan are included because they have not been completed due to funding limitations. Additional projects have been added and prioritized.

Priority	Status	Timeframe (Years)	Mitigation Action	Hazards Addressed	Responsible Agency	Funding	Estimated Cost
High	Active	1-3	Continued participation in National Flood Insurance Program	Flooding	Conecuh County Commission	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Continue to enforce the County's Flood Damage Prevention Ordinance	Flooding	Flood Plain Manager	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Continue to clear debris from roads and drainage ways	All	County Road and Bridge Department	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Continue to improve and maintain county road system	All	County Road and Bridge Department	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Promotion of safe rooms/individual shelters in new residences.	Tornado, Severe Storms	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time

Possible Mitigation Actions

High	Active	1-3	Provide information to municipalities regarding natural hazards and general principles outlining procedures	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Contact utilities in the event of natural hazard so they can inspect their infrastructure for damage	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Continue to offer shelter to individuals and families affected by natural hazards	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Encourage jurisdictions to commit matches for grants dealing with mitigation	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Provide the public information on actions to take during severe weather through newspaper and radio announcements	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time

High	Active	1-3	Research procedures for keeping historical storm data with location, magnitude, and loss values for each event	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Begin maintaining an inventory of critical facilities with value and contact information	All	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Active	1-3	Community Storm Shelters	Severe storms, tornadoes, hurricanes	Conecuh County Emergency Management	CDBG, PDM, HMGP grants	7,500,000
High	Partially Complete/ Planned	1-3	Individual Storm Shelters	Severe storms, tornadoes, hurricanes	Conecuh County Emergency Management	HMGP grants	5,000,000
High	Active	1-3	Promotion of safe rooms in new residences	Tornado, Severe Storms	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time

High	Partially Complete⁄ Planned	1-3	Purchase generators for water and sewer systems	All	Conecuh County EMA, Water and Sewer Systems	HMGP, Water Systems, Sewer Systems	1,500,000
High	Complete	1-3	Research and Investigate the need for Community Storm Shelters	Severe Storms, Tornadoes, Hurricanes	Conecuh County Emergency Management	Conecuh County Budget	Conecuh County staff time
High	Planned	1-3	Drainage projects in areas identified as being prone to flooding	Flood	Conecuh County	CDBG, HMGP grants	14,000,000
High	Planned	1-3	Storm water Management Projects throughout county	Flood, rain	Conecuh County	EPA, PDM grants	15,000,000
High	Planned	1-3	Retrofitting critical facilities	Wind events	Conecuh County	HMGP, PDM grants	14,000,000

High	Planned	4	Apply for funding to update mitigation plan as needed	All	Conecuh County EMA/Commissi on	Conecuh EMA/Co mmission, HMGP, PDM	25,000
High	Planned	1-3	Purchase generators for critical facilities and fire stations	All	Conecuh County	HMGP Grants	1,200,000
High	Active	1-3	Put into place better process of documenting mitigation plan annual review process	All	Conecuh County EMA	Conecuh County EMA Budget	EMA Staff Time
Medium	Planned	3-5	Purchase of Tornado Sirens	Tornado	Conecuh County	HMGP Grants	750,000

Town of Castleberry <u>Prioritized Threat by Jurisdiction (1=highest priority)</u>

1 Hurricane

- 2. Severe Storms & Tornadoes
- 3 Extreme Heat and Drought

4. Flood

- 5. Wildfire
- 6. Snow & Ice

<u>Goals</u>

- ▼ Achieve a plan that will insure the continuity of local government will not be significantly disrupted by disasters.
- ▼ Enhance training equipment and availability of first responders to emergencies and educate the public with regards to the emergency response system.

Objectives

- ▼ Prepare plans and identify resources to facilitate establishing city operations after a disaster.
- ▼ Provide the public information regarding natural hazards and in particular the emergency response system.

The following pages detail projects that the Town of Castleberry has identified as being priorities to the town. The following pages detail projects that the Conecuh County Commission has identified as being priorities to the county. Many of the projects included in the last updated plan are also included here due to the fact the project is considered active or has not been pursued. The projects from the previous plan are included because they have not been completed due to funding limitations.

Priority	Status	Timeframe	Mitigation	Hazards	Responsible	Funding	Estimated
		(Years)	Action	Addressed	Agency		Cost
High	Active	1-3	Continued participation in National Flood Insurance Program/ Continue to enforce Town's flood ordinance	Flooding	Town of Castleberry	Town of Castleberry budget	Town's staff time
High	Active	1-3	Continue enforcing City of Castleberry zoning regulations	All	Town of Castleberry	Town of Castleberry budget	Town's staff time
High	Active	1-3	Continued enforcement of Castleberry building codes	All	Town of Castleberry	Town of Castleberry budget	Town's staff time
High	Active	1-3	Continued enforcement of Castleberry subdivision regulations	All	Town of Castleberry	Town of Castleberry budget	Town's staff time

High	Completed/Active	1-3	Continue to send law enforcement to Emergency Response Training	All	Town of Castleberry	Town of Castleberry budget	Town's staff time
High	Planned	1-3	Drainage Projects	Heavy rain, floods	Town of Castleberry	CDBG, HMGP, PDM funds	600,000
High	Planned	1-3	Storm water management	Heavy rain, floods	Town of Castleberry	PDM, EPA funds	450,000
High	Planned	1-3	Community Shelter	Severe storms, tornadoes, hurricanes	Town of Castleberry	CDBG, HMGP, PDM funds	500,000
High	Planned	1-3	Purchase generators for water and sewer systems	All	Town of Castleberry	Town of Castleberry, HMGP	125,000

High	Planned	1-3	Purchase generators for Town Hall, Police Department, and Fire Department	All	Town of Castleberry	Town of Castleberry, HMGP	75,000
Medium	Completed		Research possible grants for first responder training and equipment	All	Town of Castleberry	Town of Castleberry budget	Town's staff time
Medium	Planned	3-5	Provide information regarding the Emergency Response System to the public in the form of a brochure or handout	All	Town of Castleberry	Town of Castleberry budget	Town's staff time
Medium	Planned	3-5	Portable Generators	All	Town of Castleberry	Town of Castleberry, HMGP	175,000

City of Evergreen <u>Prioritized Threat by Jurisdiction (1=highest priority)</u>

1 Hurricane

- 2. Severe Storms & Tornadoes
- 3 Extreme Heat and Drought

4. Flood

5. Wildfire

6. Snow & Ice

Goals

▼ Minimize losses due to natural disasters in the Evergreen area.

▼ Minimize injury and death due to natural disasters in the Evergreen area.

Objectives

▼ Provide warning system for Evergreen residents.

▼ Educate the public regarding natural hazards, including mitigation activities.

The following pages detail projects that the City of Evergreen has identified as being priorities to the city. Many of the projects included in the original plan are also included here due to the fact the project is considered active or has not been completed. Many of the projects included in the last updated plan are also included here due to the fact the project is considered active or has not been pursued. The projects from the previous plan are included because they have not been completed due to funding limitations.

Priority	Status	Timeframe (Years)	Mitigation Action	Hazards Addressed	Responsible Agency	Funding	Estimated Cost
High	Active	1-3	Participation in the National Flood Insurance Program/Continue to enforce flood ordinance	Flood	City of Evergreen	City of Evergreen budget	City of Evergreen staff time
High	Active	1-3	Continue to send law enforcement and fire personnel to emergency response training	All	City of Evergreen	City of Evergreen budget	City of Evergreen staff time
High	Active	1-3	Continue to apply for grants to fund training and equipment for Evergreen Fire Department	All, specifically wildfire	Fire Department	City of Evergreen budget	City of Evergreen staff time
Completed	Complete	N/A	Purchase generators for water system pumps	All	City of Evergreen, Evergreen Water Works Board	HMGP, Evergreen Water Works Board, City of Evergreen	N/A

Possible Mitigation Actions

Completed	Complete	N/A	Purchase generators for Town Hall (including police station and fire department)	All	City of Evergreen	City of Evergreen	N/A
Completed	Complete	N/A	Purchase of NOAA weather radios for community residents	Tornado, hurricane, severe storms, severe winter storms	City of Evergreen	City of Evergreen, HMGP	N/A
Medium	Planned	3-5	Post extreme heat warnings with health risks outlined in public areas	Extreme Heat	City of Evergreen	City of Evergreen budget	City of Evergreen staff time
Medium	Planned	3-5	Post drought notices in area businesses and City Hall	Drought	City of Evergreen	City of Evergreen budget	City of Evergreen staff time
Completed			Purchase of Tornado Sirens	Tornado	City of Evergreen	City of Evergreen, HMGP	N/A

Medium	Planned	3-5	Community Storm Shelter	Severe Storms, Tornadoes, Hurricanes	City of Evergreen	CDBG, HMGP, PDM Grants	17,500,000
Medium	Planned	3-5	Drainage Projects	Flood, heavy rain	City of Evergreen	City of Evergreen, CDBG, HMGP	15,000,000
Medium	Planned	3-5	Storm water management projects	Flood, heavy rain	City of Evergreen	City of Evergreen, EPA, PDM funds	13,500,000
Medium	Planned	3-5	Portable Generators	All	City of Evergreen	City of Evergreen, HMGP	400,000
Low	Planned	5-7	Promotion of safe rooms in new residences.	Tornado, Severe Storms	City of Evergreen	City of Evergreen budget	City of Evergreen staff time

Town of Repton <u>Prioritized Threat by Jurisdiction (1=highest priority)</u>

1 Hurricane

- 2. Severe Storms & Tornadoes
- 3 Extreme Heat and Drought
- 4. Flood
- 5. Wildfire
- 6. Snow & Ice

<u>Goals</u>

▼ Improve public awareness of safety issues concerning natural hazards.

▼ Improve training of first responders.

Objectives

- ▼ Educate citizens on safety issues related to hazards.
- ▼ Provide more extensive training for first responders.

The following pages detail projects that the Town of Repton has identified as being priorities to the Town. Many of the projects included in the original plan are also included here due to the fact the project is considered ongoing or has not been completed. Many of the original projects have not been completed due to funding limitations. Additional projects have been added and prioritized. The Town did not identify any projects in the original plans that have been completed.

Priority	Status	Timeframe (Years)	Mitigation Action	Hazards Addressed	Responsible Agency	Funding	Estimated Cost
High	Active	1-3	Participation in the National Flood Insurance Program/Continue to enforce flood ordinance	Flood	Town of Repton	Town of Repton budget	Town's staff time
High	Active	1-3	Continue to send law enforcement and fire personnel to emergency response training	All	Town of Repton	Town of Repton budget	Town's staff time
High	Planned	1-3	Community Storm Shelter	Severe Storms, Tornadoes, Hurricanes	Town of Repton	CDBG, PDM, HMGP Grants	350,000
High	Planned	1-3	Generators	All	Town of Repton	HMGP Grants, Town budget	125,000

High	Active	1-3	Research funding opportunities for first responder training	All	Town of Repton	Town of Repton budget	Town's staff time
Completed	Completed	N/A	Purchase generators for water and sewer systems	All	Town of Repton, Repton Utilities Board	HMGP, Repton Utilities Board	N/A
Medium	Planned	3-5	Purchase of NOAA weather radios for community residents	Tornado, hurricane, severe storms, severe winter storms	Town of Repton	HMGP Grants, Town budget	45,000
Medium	Planned	3-5	Post extreme heat warnings with health risks outlined in public areas	Extreme Heat	Town of Repton	Town of Repton budget	Town's staff time
Medium	Planned	3-5	Purchase of Tornado Sirens	Tornado	Town of Repton	HMGP Grants	50,000

Medium	Planned	3-5	Drainage	Heavy rain, flood	Town of Repton	CDBG, HMGP Grants	750,000
Medium	Planned	3-5	Storm water management	Heavy rain, flood	Town of Repton	PDM, EPA Grants	250,000

Conecuh County Schools <u>Prioritized Threat (1=highest priority)</u>

1 Hurricanes

- 2. Severe Storms & Tornadoes
- 3 Extreme Heat and Drought
- 4. Flood
- 5. Wildfire
- 6. Snow & Ice

<u>Goals</u>

- ▼ Provide better warning system to students.
- ▼ Minimize the loss of life and injury to students.
 - ▼ Ensure continuity of education system.
 - ▼ Ensure safety of campuses from hazards.

Objectives

- ▼ Weather sirens at schools.
- ▼ Storm shelters at schools.
- ▼ Retrofit school buildings.

▼ Correct drainage/storm water management issues on campuses.

The following pages detail projects that the County School Board feels are priorities. The School System did not include a project listing in the original plan.

Priority	Status	Timeframe (Years)	Mitigation Action	Hazard Addressed	Responsible Agency	Funding	Estimated Cost
High	Planned	1-3	Provide storm shelters at schools	Tornado	Conecuh County School Board, Conecuh County	ALDOE, HMGP Grants	15,000,000
High	Planned	1-3	Purchase generators for schools	All	Conecuh County School Board	ALDOE, HMGP Grants	250,000
High	Planned	1-3	Retrofitting of schools	Wind Events	Conecuh County School Board	ALDOE, HMGP Grants	25,000,000
High	Planned	1-3	Correct storm water management/drainage issues on school grounds	Flood	Conecuh County School Board	ALDOE, HMGP Grants	15,000,000

Possible Mitigation Actions

Summary of Changes Made in Plan Update Section VII. Plan Maintenance

Plan Maintenance: The plan maintenance section was reviewed by ATRC and the Conecuh County EMA. Information regarding evaluation and monitoring of the plan during the last five year cycle was added. The Incorporation in to Existing Planning Mechanisms section was also revised to provide information by jurisdiction.

VIII. Plan Maintenance

The planning cycle for the <u>Conecuh County Hazard Mitigation Plan</u> is five years. The Natural Hazards Steering Committee determined this planning cycle. In addition the plan maintenance section was compiled using suggestions from the Natural Hazards Steering Committee.

Hazard Mitigation Committee Structures

The structure of the committee will be kept as it was for the development of this plan. The Hazard Mitigation Steering Committee will consist of the mayors of all municipalities located within the county. If the mayor so chooses he/she can designate a representative to serve as their municipality's representative. Also, the following is the list of agencies or positions that will be requested to serve on the committee:

- ▼ Emergency Management Agency, Director , Chairman of Hazard Mitigation Steering Committee
- ▼ Public Health Officer, Conecuh County
- ▼ Regional Planning Agency, planner
- ▼ Chamber of Commerce, Director
- ▼ Public Safety Officials
- ▼ Alabama Department of Transportation Officials
- ▼ Public Utilities Officials
- ▼ Representatives from each hospital, Administrator
- ▼ Representatives from employers of over 200 persons in the county.
- ▼ Conecuh EMA Director, Committee Chair
- ▼ Conecuh County Road and Bridge Department, Engineer
- ▼ Conecuh County Sherriff's Office, Sheriff
- ▼ Volunteer Fire Department Association, President
- ▼ Conecuh County School System, Superintendent
- ▼ Town of Repton, Clerk & Mayor
- ▼ Town of Castleberry, Clerk & Mayor
- ▼ City of Evergreen, Clerk & Mayor
- ▼ Conecuh County Commission, Commissioners& Administrator

Monitoring and Evaluation of the Plan

The county's EMA director, who also serves as the Chairman of the Hazard Mitigation Steering Committee, has been in charge of monitoring and evaluating the plan. Annually during the month of January, he has contacted each participating jurisdiction by telephone to monitor the implementation of the mitigation plan. Appendix 1 contains a letter from EMA detailing the method he has used each year. After the EMA has monitored the progress of all participants involved in implementing mitigation strategies, the information gathered has been used to evaluate the mitigation plan. The following criteria will be used will be used to monitor the plan's effectiveness:

- **§** Do the goals and objectives outlined in the plan still apply to current conditions?
- S Has the nature, magnitude, and/or type of risk changed?
- **§** Are the resources currently available to implement the plan appropriately?
- **§** Has any jurisdiction had implementation problems and if so, what is the nature of them (technical, political, funding, etc.)?

§ Have the outcomes from implemented strategies been the expected outcomes?

§ Has each jurisdiction or agency worked toward its hazard mitigation goals?

After this evaluation if the EMA director feels that the plan is not satisfying the above criteria, he/she will call a meeting of the Natural Hazards Steering Committee. The plan is also evaluated after each disaster declaration.

This method of evaluation has worked well during the last planning cycle. Participating jurisdictions, the natural hazards steering committee, and stakeholders were asked for recommendations to improve the evaluation process. No suggestions were received. All participating jurisdictions felt the annual process was sufficient and should be used for this planning cycle also. During this planning cycle, the EMA will formally request a response in order to document participation in the maintenance and evaluation process.

Updating the Plan

The Conecuh County Natural Hazards Mitigation Plan will be updated every five years as required by FEMA. At the beginning of the fifth year, the EMA director will begin making arrangements for the plan's update. The process of updating the plan will be undertaken in the same way as the development of the plan. The Natural Hazards Mitigation Steering Committee will help in the updating of the plan. All participating jurisdictions will participate in the update. The public participation component will also be included.

At least two public meetings will be held to involve the public in the update process. The public did not actively participate during this update process. During the next plan update, the county will expand its public outreach to encourage more participation from the public. Meeting notices will be re-evaluated and revised to clearly state that the meetings are public meetings. Language encouraging participation by the public will also be added. Notices for meetings will be advertised in the local newspaper. The EMA will reach out to the local radio station to help promote the meetings. The county will also use social media, such as Facebook, to promote meetings. Survey Monkey or an equivalent online survey website will be used to gather public opinion on hazard issues. Drafts of the updated plan will also be available for public comment.

Within the five-year cycle, a jurisdiction may request to update the plan. If the jurisdiction would like to update only a jurisdiction specific portion, such as mitigation goals/strategies it may do so. Any jurisdiction MUST contact the EMA director in order to ensure he has an amended copy of their part of the plan. Private citizens and/or local businesses may request an update within the five-year planning cycle also. All request made by private citizens and/or local businesses must be made directly to the EMA. When the EMA receives a request to update any portion of the plan that is not jurisdiction specific, the Natural Hazards Steering Committee will meet to determine the necessity of the update.

Incorporation into Existing Planning Mechanisms

The <u>Conecuh County Hazard Mitigation Plan</u> will be incorporated into existing planning mechanisms in all participating jurisdictions:

Conecuh County Commission: No formal planning is in place for unincorporated areas in Conecuh County. If the county undertakes any planning effort, such as a comprehensive plan, mitigation goals and objectives will be reflected. No strategies will be included that would hinder natural hazard mitigation.

Town of Castleberry: No formal planning is in place for the Town of Castleberry. If the town undertakes any planning effort, such as a comprehensive plan, mitigation goals and objectives will be reflected. No strategies will be included that would hinder natural hazard mitigation. *Town of Repton:* No formal planning is in place for the Town of Repton. If the town undertakes any planning effort, such as a comprehensive plan, mitigation goals and objectives will be reflected. No strategies will be included that would hinder natural hazard mitigation. *Town of Reptor:* No formal planning is in place for the Town of Repton. If the town undertakes any planning effort, such as a comprehensive plan, mitigation goals and objectives will be reflected. No strategies will be included that would hinder natural hazard mitigation. *City of Evergreen:* The City of Evergreen will consider hazard mitigation while considering adjustments to building and zoning ordinances. No ordinances will be modified in such a way that mitigation efforts will be hindered. Hazard mitigation goals, objectives, and strategies will be reviewed and incorporated in the event the city updates its strategic plan.

Continued Public Involvement

Copies of the plan will be available to the public by submitting a request to the EMA. Copies of the plan will also be available in each jurisdiction. Information regarding where to send comments on the plan is provided inside of the front cover of the document. The EMA will be responsible for keeping a file of all comments received. These comments will be considered during any update of the plan, whether it be regularly scheduled or between cycles.

APPENDIX 1
HAZARD MITIGATION PLAN UPDATE MEETING

1st meeting

The Conecult County EMA and Alabama Tombigbee Regional Commission are in the process of updating Conecuh County's Hazard Mitigation Plan. This plan is a multijurisdictional effort to evaluate and mitigate all natural hazards that may affect Conecuh County and its residents. A meeting will be held on May 6, 2014 at 9 AM at the County EMA Office (100 County Shop Road, Evergreen) regarding this update. If you require special accommodations and plan on attending, contact the Conecuh County Commission at least 24 hours prior to the meeting at 251-578-1921.

NAME Alonzo Broce Victured Lambest Uhni Welson CONECUH COUNTY HAZARD MITIGATION PLAN UPDATE MEETING J. CONECUH COUNTY EMA OFFICE Padyett Aubrer @Bell Scin Jprock O Cameinle EMAIL ccims @bellsouth, with te dKoute 2002@yohoo.com grace 20 11 & yahoo. c on 5ulliver deversmaling 272 J. S. mpsen O Fuendleen cherry man a hughes MAY 6, 2014 - 9 A.M. nacarter may ana 1/ . com Montionnet. Inca h 11-00 2 ENTITY/GROUP REPRESENTED Repton Condeh Rescue Every rear Policepapt Corch ENS ONCIUM WEach anicuk EMS LUR. to con P.D. Runge VKD C. Shew FIMA Ť

121 meeting Sign in

and meeting HAZARD MITIGATION

PLAN UPDATE MEETING

The Conecuh County EMA and Alabama Tombigbee Regional Commission are in the process of updating Conecuh County's Hazard Mitigation Plan. This plan is a multijurisdictional effort to evaluate and mitigate all natural hazards that may affect Conecuh County and its residents. A meeting will be held on August 14, 2014 at 9 AM at the County EMA Office (100 County Shop Road, Evergreen) regarding this update. If you require special accommodations and plan on attending, contact the Conecuh County Commission at least 24 hours prior to the meeting at 251-578-1921.

						Johny Bruck	Brandz Wellerow	NAME	CONECUH COUNTY	
							Woundy Wilkerso. @ Cate not	EMAIL	HAZARD MITIGATION PLAN UPDAT AUGUST 14, 2014 - 9 A.M. NECUH COUNTY EMA OFFICE	
						Convecuh EMA	ATRC	ENTITY/GROUP REPRESENTED	'E MEETING	2 rd meeting sign

Draft Availability Notice

HAZARD MITIGATION DRAFT AVAILABLE FOR REVIEW

The Conecuh County EMA and Alabama Tombigbee Regional Commission are in the process of updating Conecuh County's Hazard Mitigation Plan. This plan is a multijurisdictional effort to evaluate and mitigate all natural hazards that may affect Conecuh County and its residents. A draft of the plan update is available for review at atrcregion6.org. The public is encouraged to review the plan

and submit comments.

Posted at Courthouse, Repton Town Hall, Evergreen City Hall, Castleberry Town Hall



Draft Quailability

Wilkerson, Brandy

From: Sent:	Johnny Brock <jbrock@conecuhcounty.us> Wednesday, November 12, 2014 2:10 PM</jbrock@conecuhcounty.us>	
Subject:	FW: Hazard Mitigation Meeting	This email was
Ronnie Brogden – Superintender J.B. Jackson – Mayor of Castlebe Aubrey Padgett – Conecuh Count Edwin Booker – Conecuh County Daryl Knowles – Repton Chief of Tracy Hawsey – Castleberry Chie Conecuh County Forestry Angie Hendrix – Evergreen Medi City of Evergreen Public works Town of Castleberry Public works	nt of Ed. rry ty Volunteer Fire Association Sheriff Police f of Police cal Center	sent in addition to letters mailed but to the Committee & Stakeholders list.

From: Johnny Brock [mailto:jbrock@conecuhcounty.us]
Sent: Tuesday, April 29, 2014 10:40
To: Alonzo Grace (lgrace2011@yahoo.com); James Simpson (jsimpson@evergreenal.org); Jeff Sullivan (jsullivan@evergreenal.org); bbqpig@frontiernet.net; Michael Lambert (ccems@bellsouth.net); Pete Wolff (co840@bellsouth.net); terribcartermayor@gmail.com
Subject: Hazard Mitigation Meeting

Conecuh County EMA is in the process of updating its Hazard Mitigation plan. This plan must be adopted by the County Commission, Board of Education and all three municipalities. In order to receive mitigation grant funds, this plan must be adopted. We currently have a plan in place that will expire in 2015.

We will be conducting the first of several planning meetings on Tuesday, May 6, 2014 at 9 a.m. at my office. It is important that we have our elected officials, first responders and public works people involved in this process.

Please make plans to attend this important meeting.

Johnny Brock, CLEM P.O. Box 347 Evergreen, Alabama 36401 Office:(251)578-1921 Cell:(251)230-0554 Linc: 1*77*221 **Conecuh County Natural Hazards**

Organization

Conecuh County Road and Bridge Department Conecuh County Volunteer Fire Association Conecuh County Sheriff's Department Conecuh County Board of Education Conecuh County Commission Town of Castleberry City of Evergreen Town of Repton

Steering Committee Member List

Title	Address	City	State	Zip	
County Engineer	100 County Shop Road	Evergreen	Alabama	ñ	6401
Superintendent	100 Jackson Street	Evergreen	Alabama	ŝ	6401
Sheriff	104 Liberty Street	Evergreen	Alabama	3	6401
President	P.O. Box 265 B	Evergreen	Alabama	ñ	6401
Chairman	P.O. Box 347	Evergreen	Alabama	ñ	6401
Mayor	P.O. Box 35	Repton	Alabama	ñ	6475
Mayor	P.O. Box 97	Castleberry	Alabama	ŝ	6432
Mayor	P.O. Box 229	Evergreen	Alabama	ŝ	6401

Conecuh County Hazard Mitigation Plan Update Stakeholders List

Organization	Title	Address	City	State	dip
Alabama Forestry Commission	Conecuh County Forester	1473 Owassa Road	Evergreen	Alabama	36401
Conecuh County DHR	Director	PO Drawer 565	Evergreen	Alabama	36401
Community Action Agency of Baldwin, Escambia, Clarke, Monroe, & Conecuh Counties	Director	26440 N Pollard Road	Daphne	Alabama	36526
American Red Cross South Central Chapter	Director	234 Hillcrest Drive	Andalusia	Alabama	36420
Repton Police Department	Chief	P.O. Box 35	Repton	Alabama	36475
Castleberry Police Department	Chief	P.O. Box 97	Castleberry	Alabama	36432
Evergreen Police Department	Chief	P.O. Box 229	Evergreen	Alabama	36401
Monroe County Commission	Chairman	P.O. Box 8	Monroeville	Alabama	36460
Butler County Commission	Chairman	P.O. Box 756	Greenville	Alabama	36037
Covington County Commission	Chairman	P.O. Box 188	Andalusia	Alabama	36420
Escambia County Commission	Chairman	P.O. Box 848	Brewton	Alabama	36427
Alabama Tombigbee Area Agency on Aging	Director	107 Broad Street	Camden	Alabama	36726
AIRC Kural Iransportation	Director	107 Broad Street	Camden	Alabama	36726
Evergreen Chamber of Commerce	Director	30480 Stagecoach Blvd	Evergreen	Alabama	36401
Conecuh County Road and Bridge Department	County Engineer	100 County Shop Road	Evergreen	Alabama	36401
Conecun County Board of Education	Superintendent	100 Jackson Street	Evergreen	Alabama	36401
*					

participation.

Wilkerson, Brandy

From:	Johnny Brock <jbrock@conecuhcounty.us></jbrock@conecuhcounty.us>
Sent:	Tuesday, May 20, 2014 1:23 PM
То:	Wilkerson, Brandy
Subject:	FW: Haz Mit Update Evergreen
Attachments:	Haz Mit Update Evergreen (a).jpg; Haz Mit Update Evergreen (b).jpg; Haz Mit Update
	Evergreen (c).jpg; Haz Mit Update Evergreen (d).jpg

This is the only response I have received so far. I will follow up with the others.

From: jsullivan@evergreenal.org [mailto:jsullivan@evergreenal.org] Sent: Tuesday, May 13, 2014 06:53 To: Johnny Brock Subject: Haz Mit Update Evergreen

Johnny:

I need to attend Honors Day at Sparta at 8:30. See attachments for the updates for City of Evergreen.

Jeff Sullivan City Projects Manager P.O. Box 229 Evergreen, AL 36401 Office 251.578.7215 Cell 251.227.0203 Link 1*19*1010

Repton updated their Information at-first Committee meeting. BPW



Johnny Brock DIRECTOR Conecuh County Emergency Management Agency P.O. Box 347 Evergreen, Alabama 36401 E-Mail: jbrock@conecuhcounty.us



PHONE: (251) 578-1921 FAX: (251) 578-9291

December 11, 2014

In January of each year, I have evaluated the <u>Natural Hazards Mitigation Plan for Conecuh County</u>. I have contacted each participant by telephone to discuss hazard mitigation, their efforts toward implementing projects, and any concerns they may have. Contact is made with the county commission chairman and county administrator for the county. The mayor and clerk are contacted in each municipality. The school superintendent is contacted at the school system.

Once I have discussed mitigation with each participant I evaluate the plan using the following:

- > Do the goals and objectives outlined in the plan still apply to cuttent conditions?
- > Has the nature, magnitude, and/or type of risk changed?
- > Are the resources currently available to implement the plan appropriately?
- Has any jurisdiction had implementation problems and if so, what is the nature of them (technical, political, funding, etc.)?
- > Have the outcomes from implemented strategies been the expected outcomes?
- > Has each jurisdiction or agency worked toward its hazard mitigation goals?

During the past five years, the plan has not needed to be revised or updated. I will continue to monitor and evaluate the plan using these methods during the next five years.

Johnny Brock, CLEM Director, Conecuh County EMA