

# **Lee County Alabama 2015 Natural Hazard Mitigation Plan Update**



*April 2014; Lee County Tornado*

**Prepared For:  
The Jurisdictions of Lee County, Alabama**

**Prepared By:  
Lee-Russell Council Of Governments  
2207 Gateway Drive  
Opelika, AL 36801  
334-749-5264  
[www.lrcog.com](http://www.lrcog.com)**

Resolution No. 15-259

**WHEREAS**, the City Council of the City of Auburn recognizes that the City of Auburn has experienced natural hazards that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges and presented general public health and safety concerns; and

**WHEREAS**, the community has assisted with the preparation of the Lee County Natural Hazards Mitigation Plan that outlines the community's options to reduce overall damage and impact from natural hazards;

**NOW THEREFORE, BE IT RESOLVED** that the City Council of the City of Auburn, Alabama does hereby

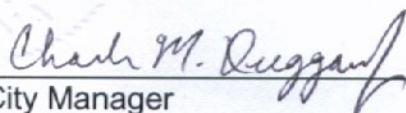
1. Adopt the Lee County Natural Hazards Mitigation Plan.
2. Acknowledges the establishment of the Lee County Natural Hazards Mitigation Plan Advisory Committee which is established as the permanent community advisory body whose members serve a two year term and who will be proposed for membership by the Lee County Emergency Management Agency and approved by the Auburn City Council.
3. Acknowledges that the Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding guidelines as designated.
4. Acknowledges that the Lee County Emergency Management Agency shall give priority attention to the action items recommended by the Lee County Natural Hazards Mitigation Plan.
5. Acknowledges that the Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly or as needed and shall monitor implementation of the plan and shall submit a yearly written progress report to the Auburn City Council in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any events that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. A recommendation for new projects or revised action items which shall be subject to approval by the Auburn City Council.

**ADOPTED AND APPROVED** by the City Council of the City of Auburn, Alabama, this the 17th day of November, 2015.



Mayor

ATTEST:



City Manager



**LEE COUNTY COMMISSION  
NATURAL HAZARDS MITIGATION PLAN ADOPTION RESOLUTION**

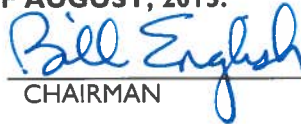
**WHEREAS**, Lee County, Alabama has experienced repetitive disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges, and presented general public health and safety concerns; and

**WHEREAS**, the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards, and has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

**NOW, THEREFORE BE IT RESOLVED THAT:**

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of Lee County.
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Commission may appoint two representatives to this committee. Their duties are as designated in the *Lee County Natural Hazards Mitigation Plan*.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the Lee County Commission or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*.
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly, or as needed. The advisory committee shall monitor implementation of the plan and shall submit a yearly written progress report to the Lee County Commission in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects, revised action items, or other needed changes to the plan. Such recommendations shall be subject to approval by the Lee County Commission.

**PASSED, APPROVED AND ADOPTED THIS 10th OF AUGUST, 2015.**

  
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CHAIRMAN

ATTEST:

  
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SEAL:



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COMMISSIONER

  
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COMMISSIONER

**TOWN OF LOACHAPOKA  
NATURAL HAZARDS MITIGATION PLAN ADOPTION RESOLUTION**

**WHEREAS** Town of Loachapoka, Alabama has experienced repetitive natural disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges, and presented general public health and safety concerns; and

**WHEREAS** the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

**WHEREAS** the *Lee County Natural Hazards Mitigation Plan* has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

**NOW, THEREFORE, BE IT RESOLVED THAT:**

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of the Town of Loachapoka.
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Town Council of the Town of Loachapoka may appoint two members to this committee. The group's duties shall be as designated in the *Lee County Natural Hazards Mitigation Plan*.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the Town Council of the Town of Loachapoka or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*.
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly, or as needed. The advisory committee shall monitor implementation of the plan and shall submit a written progress report to the Town Council of the Town of Loachapoka in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects, revised action items, or other needed changes to the plan. Such recommendations shall be subject to approval by the Town Council of the Town of Loachapoka.

**PASSED, APPROVED, AND ADOPTED** this 3rd day of August, 2015.

ATTEST:

Alice Gout  
CITY CLERK

SEAL:



James Gout  
MAYOR

[Signature]

[Signature]

[Signature]

[Signature]

MEMBERS OF THE TOWN COUNCIL OF THE TOWN  
OF LOACHAPOKA, ALABAMA



RESOLUTION NO 245-15

CITY OF OPELIKA

RESOLUTION ADOPTING HAZARDS MITIGATION PLAN

**WHEREAS**, the City of Opelika, Alabama has experienced repetitive natural disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges, and presented general public health and safety concerns; and

**WHEREAS**, the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

**WHEREAS**, the *Lee County Natural Hazards Mitigation Plan* has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

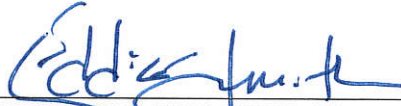
**NOW, THEREFORE, BE IT RESOLVED** by the City Council of the City of Opelika, Alabama, as follows:

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of the City of Opelika.
2. The Lee County Natural Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The Lee County Emergency Management Agency shall designate its members, subject to approval of the City Council of the City of Opelika. They shall serve two-year terms. The group's duties shall be as designated by the *Lee County Natural Hazards Mitigation Plan*.

3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the City Council and the City of Opelika or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*.
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly, or as needed. The advisory committee shall monitor implementation of the plan and shall submit a written progress report to City Council of the City of Opelika in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including the previous year accomplishments.
  - d. A discussion of any implementation problems.
  - e. Recommendations for new projects, revised action items, or other needed changes to the plan. Such recommendations shall be subject to approval by the City Council of the City of Opelika.

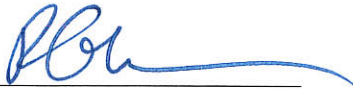


ADOPTED AND APPROVED this the 15<sup>th</sup> day of September, 2015.



PRESIDENT OF THE CITY COUNCIL OF THE  
CITY OF OPELIKA, ALABAMA

ATTEST:



CITY CLERK

SEAL:

## RESOLUTION 2015-227

### **A RESOLUTION FOR THE CITY OF SMITHS STATION, ALABAMA TO ADOPT THE LEE COUNTY NATURAL HAZARDS MITIGATION PLAN.**

**WHEREAS** City of Smiths Station, Alabama has experienced repetitive natural disasters that have damaged commercial, residential and public properties, displaced citizens and businesses, closed streets and bridges, and presented general public health and safety concerns; and

**WHEREAS** the community has prepared the *Lee County Natural Hazards Mitigation Plan* that outlines the community's options to reduce overall damage and impact from natural hazards; and

**WHEREAS** the *Lee County Natural Hazards Mitigation Plan* has been reviewed by community residents, business owners, and federal, state and local agencies, and has been revised to reflect their concerns;

#### **NOW, THEREFORE, BE IT RESOLVED THAT:**

1. The *Lee County Natural Hazards Mitigation Plan* is hereby adopted as an official plan of the City of Smiths Station.
2. The Lee County Natural Hazards Mitigation Plan Advisory Committee is hereby established as the permanent community advisory body. The City Council of the City of Smiths Station may appoint two representatives to this committee. The group's duties shall be as designated in the *Lee County Natural Hazards Mitigation Plan*.
3. The Lee County Emergency Management Agency is charged with supervising the implementation of the Plan's recommendations within the funding limitations as provided by the City Council of the City of Smiths Station or other sources.
4. The Lee County Emergency Management Agency shall give priority attention to the action items recommended by the *Lee County Natural Hazards Mitigation Plan*:
5. The Lee County Emergency Management Agency shall convene the Lee County Natural Hazards Mitigation Plan Advisory Committee yearly, or as needed. The advisory committee shall monitor implementation of the plan and shall submit a written progress report to City Council of the City of Smiths Station in accordance with the following format:
  - a. A review of the original plan.
  - b. A review of any disasters or emergencies that occurred during the previous calendar year.
  - c. A review of the actions taken, including what was accomplished during the previous year.
  - d. A discussion of any implementation problems.



## RESOLUTION 2015-227

- e. Recommendations for new projects, revised action items, or other needed changes to the plan. Such recommendations shall be subject to approval by the City Council of the City of Smiths Station.

**PASSED, APPROVED, AND ADOPTED** this 11th day of August 2015.

  
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**Mayor Pro Tem Morris Jackson**

  
\_\_\_\_\_  
**Council Member James Moody**

  
\_\_\_\_\_  
**Council Member Richard Key**

  
\_\_\_\_\_  
**Council Member George Stringer, Jr.**

  
\_\_\_\_\_  
**Council Member Richard A Cooley**

**Attested:**

  
\_\_\_\_\_  
**City Clerk Jerry F. Bentley**

**SEAL**



## **SECTION 4: THE PLANNING PROCESS**

### **Section Revisions:**

The following Revisions were made to Section 4: The Planning Process

**General:** Section 4 was re-formatted;

#### **4.1: Overview of Section 4- No changes**

#### **4.2: Agency Coordination in the Planning Process**

- The committee name was changed to Stakeholder and Technical Advisory Committee;
- The meetings of the Stakeholder and Technical Advisory Committee were updated to reflect the 2014 dates and agendas of the meetings;
- The process used to collect data from the Stakeholder and Technical Advisory Committee was updated;
- Tables showing committee representation by jurisdiction and sector were added;
- School Boards and Water Authorities were included as jurisdictions;

#### **4.3: Public Participation in the Planning Process**

- The documentation of public participation in the planning process was updated to include public meeting to present the final plan at County Commission and City and Town Council Meetings;

#### **4.4: Integration with Other Planning Efforts**

- The existing plans, studies, reports and technical information that were reviewed for integration into the updated plan were updated;

### **4.1 Overview of Section 4**

This section documents the planning process which details the opportunities for the public to comment on the plan at all stages of its formation, and the involvement of any neighboring communities, interested agencies, and private and non-profit organizations.

This section will document the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved. The planning process will also include a review of all existing plans or studies and their incorporation, as appropriate.



## 4.2 Agency Coordination in the Planning Process

The planning process for the Lee County Natural Hazards Mitigation Plan Update began with a meeting between the Lee-Russell Council of Governments (LRCOG) and Lee County Emergency Management Agency (LCEMA) on December 16, 2013. The purpose of the meeting was to review the existing plan, determine what entities needed to be involved in the update process, and schedule committee and public meetings.

It was determined to continue with the same municipal and county governments that were in the original plan: City of Auburn, City of Opelika, City of Smiths Station, Town of Loachapoka and Russell County. Auburn University advised that they would complete their own Hazard Mitigation Plan because their situation is unique.

In January and February, 2014, representatives of LRCOG and the Lee County Emergency Management Agency attended the Auburn City Council Meeting, Opelika City Council Meeting, Smiths Station City Council Meeting, Loachapoka Town Council meeting and Lee County Commission Meeting to inform the governing bodies of the Hazard Mitigation Plan Update and request their participation and support of the process. All jurisdictions chose to participate in the update and nominated members to represent them on the Stakeholder and Technical Advisory Committee. (See Table 4.1)

LRCOG, after consultation with LCEMA, contacted additional key personnel to serve on the committee. (A sample invitation letter and mailing list is in Appendix A). Ultimately, committee membership included elected officials, city and county administrators, local public school and junior college representatives, public safety and emergency service representatives, city and county engineers, public works officials, utilities, state agency personnel, representatives from neighboring communities, and medical professionals. Meeting sign in sheets, and agendas are also in Appendix B. Handouts and power point presentations from the committee meetings are kept in the Lee County Natural Hazards Mitigation Plan files.

For this update, Alabama Emergency Management Agency advised that School Boards and non-municipal Water Boards should be categorized as jurisdictions.

**Table 4.1     2014 Jurisdictional Representatives**

<b>Jurisdiction</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Auburn</b>	Tom Wordon (official) Bill James Jay Uphold  Paul Register	Council Member Director of Public Safety Construction and Maintenance Division Manager Police Chief

<b>Jurisdiction</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Lee County</b>	Eric Carson	Water Resource Management Director
	Lee Lamar	Fire Chief
	Karen Delano	Superintendent, Auburn City Schools
	Robert Ham (official)	Commissioner
	Wendy Swann	Governmental Relations Coordinator
	Trent Dykes	Engineer
	Jay Jones	Lee County Sheriff
	Lisa Teel	Lee County Revenue
<b>Loachapoka</b>	David Veel	Building Inspector
	Jeanne O'Donnell (official)	Council Member
<b>Opelika</b>	Terry Woodall	Council Member
	Patsy Jones (official)	Council Member
	John McEachern	Police Chief
	Scott Parker	Engineer
	Larry Prince	Opelika Power
	Micah Peckham	Opelika Utility Director
	Dr. Mark Neighbors	Superintendent, Opelika City Schools
<b>Smiths Station</b>	LaFaye Dellinger (Official)	Mayor
	Jerry Bentley	City Clerk
<b>Lee County Schools</b>	Dr. Jason Wright	Director of Student Services
<b>Loachapoka Water Authority</b>	Shay Gregory	Administrator
<b>Smiths Water and Sewer Authority</b>	Andy Morris	Utilities Director

**Table 4.2 2014 Sector Representatives**

<b>Sector</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Emergency Management</b>	Dee Dee Matthews	Lee County 911, Assist. Director
	Kathrine Carson	Director; Lee County EMA
	Johnny Langley	Deputy Director, Lee County EMA
	Rita Smith	Grant Manager; Lee County EMA
	Chris Tate	Communication Manager; Lee County EMA
<b>Higher Education</b>	Doug Hubbard	Finance; Lee County EMA
	Dr. Phillip Chaney	Geology Professor; Auburn University
	Susan McAllister	Assistant Director Public Safety; Auburn University
<b>Local Government</b>	Dr, Linda North	President; Southern Union College
	See Table 4.1	
<b>Medical</b>	Yuill Graham	Administrator, EAMC
	Marty Nelson	Director, American Red Cross
<b>Neighboring Communities</b>	Steve Cox	Columbus Police Department
	Cathy Kee	Columbus GA



Sector	Committee Representation	Title/Position
<b>Regional Commission</b>	Bob Franklin	Russell County EMA Director
	Lisa Sandt	Director, Lee-Russell Council of Gov
	Suzanne Burnette	Executive Director, Lee-Russell Council of Gov
<b>Utilities</b>	David Roberts	Manager; Alabama Power Company
	Jerry Carroll	Manager; Alagasco
	Steve Williams	Director of Public Relations; Tallapoosa Cooperative

Committee meetings in February and April were open to the public. Meeting announcements were made at Council, Town and Commission meetings and meeting information was posted on the LRCOG website.

The first meeting of the Lee County Hazard Mitigation Stakeholder and Technical Advisory Committee was held on February 26, 2014 in the auditorium at the East Alabama Health Resource Center in Opelika, Alabama. Forty-six individuals, including representatives from all municipal and county governments and Lee County Schools, attended the meeting. Auburn City Schools, Opelika City Schools, Loachapoka Water Authority and Smiths Station Water and Sewer Authority were unable to attend the meeting but did provide information on assets and critical facilities via phone and e-mail and were given the opportunity to review and comment on the meeting materials posted on line. Meeting sign in sheets can be found in Appendix B. No members of the public attended the meeting.

The meeting was facilitated by Barbara Scott of Lee-Russell Council of Governments. The group chose not select a committee chair.

The February meeting included discussion of the following:

- The requirements of a hazard mitigation plan as detailed in 44 CFR201.6,
- The role of the committee members in the process,
- Projected timelines,
- A review of the existing mission
- Risk assessment.

Historical information on the impact of each natural hazard on Lee County was shared with the committee. Based on a review of the past hazard occurrences in Lee County, committee members worked together to complete a Hazard Profile Worksheet and Risk Index Worksheet for each jurisdiction in Lee County.

Following the meeting, the results of the Committee's Mission and Hazard Mitigation Review were tabulated and posted on the internet. The public was invited to view the meeting power point presentation and complete a hazard risk assessment for the County via announcements at Commission, Council and Town Hall meetings. Website records show that the power point and assessment tools were viewed 132 times during April. However, no assessments completed by the public were returned.

The second meeting of the Lee County Hazard Mitigation Stakeholder and Technical Advisory Committee was held on April 23, 2014 at the East Alabama Health Resource Center in Opelika, Alabama. Twenty-two individuals attended the meeting. Again, all municipal and county governments were represented at the meeting. Auburn City Schools, Lee County Schools, Opelika City Schools, Loachapoka Water Authority and Smiths Station Water and Sewer Authority were unable to attend the meeting but did have the opportunity to provide input on the mitigation strategy and to review and comment on the meeting materials posted on line. Sign in sheets from this meeting are also in Appendix B. No members of the public attended the meeting.

At the April meeting, the committee reviewed the results of the risk assessment completed at the first meeting and then focused on updating goals, objectives, mitigation actions and the plan maintenance procedures.

Again working in small groups, members determined which portions of the mitigation strategy should be kept as is, revised or deleted by asking themselves the following questions:

- Has the nature, magnitude, and/or type of risks/vulnerabilities changed;
- Do the goals and objectives address current and expected conditions;
- Are the current resources appropriate for implementing the plan;
- What is the status of implementing the mitigation actions;
- Are there implementation problems associated with the mitigation actions;
- Have the outcomes occurred as expected; and
- How are coordination efforts with the public and other community agencies proceeding?

Before the committee adjourned their April meeting, they agreed to keep the same plan maintenance strategy that was outlined in the existing plan.

Committee members and representatives from school systems and water utilities were contacted by LRCOG staff throughout May, June, July and August to collect and verify information on assets, critical facilities, population change, structural inventories, jurisdiction holdings and future plans for development. This data collection occurred through in person and telephone interviews as well as email requests.

Agencies and individuals not listed in Tables 4.1 and 4.2 who contributed to the Lee County Hazard Mitigation Plan update by providing information via phone, e-mail, or interview are listed below:

#### **Assets and Critical Facilities**

Charles M. Duggan; Auburn City Manager  
James Grout; Mayor of Loachapoka  
Mike Hilyer; Public Works Director, City of Opelika  
Tim Parson; Lee County Department of Revenue  
Oline Price; Lee County Revenue Commissioner  
Roger Rendleman; Lee County Administrator

#### **Major Employers and Development Trends**

Taylor Dobson; Revolving Loan Fund Officer

#### **Hazard Profile Information**

Charles Brown; Director, Lee County Extension; Alabama Cooperative Extension  
Phillip Hicks; ADECA Office of Water Resources  
Matt McCollough; Alabama Forestry Commission

Once the stakeholder committee meetings and public meetings/surveys were complete and all data collection was finalized, committee members and entities who provided information were emailed the draft plan update was available online for review and comment.

Entities who were invited to participate in the Lee County Hazard Mitigation Plan Update but did not participate are listed below.

Macon County EMA  
Bullock County EMA  
Chambers County EMA  
Alabama Department of Public Safety  
Alabama Department of Transportation

The following entities should be included in the next plan update:

Alabama Department of Environmental Management  
Lee County Health Department

### **4.3 Public Participation in the Planning Process**

Public participation was sought through multiple strategies.

All committee meetings were open to the public and announced at Town Meetings, Council Meetings and County Commission meetings and on the LRCOG website.

Committee meeting materials were made available on line at [www.lrcog.com](http://www.lrcog.com). The public was invited to complete their own risk assessment by viewing a power point presentation of historical hazard information and downloading the Risk Assessment worksheet.

A Public Open House was held on June 5, 2014 in the Conference Room at Lee-Russell Council of Governments. The meeting was advertised in the Opelika-Auburn News, on line and via e-mail to all Committee members. Twenty-five citizens attended the Open House. A Citizen Survey was distributed to the public on line and at the HMGP Open House. (Sign in sheets and the OANews advertisement are in Appendix B). The only completed surveys received were from the citizens who attended the Open House.

The draft Plan Update was made available for review and comment by the public on line during September, 2014. However, no public comments were received.

A final opportunity for the public to provide input occurred during the presentation of the approved Lee County Natural Hazards Mitigation Plan Update at jurisdictional council, town, commission and board meetings.

A copy of the final plan approved by FEMA will be placed on the LRCOG website and at the office of the Lee County Emergency Management Agency, Lee County Commission and at the City/Town offices of Auburn, Opelika, Loachapoka, and Smiths Station for further examination by interested citizens. School Boards and Water Boards will also receive copies of the final plan.

#### **4.4 Integration with other Planning Efforts**

At this time, the planning documents that apply and will be integrated into the Lee County Natural Hazards Mitigation Plan include:

- City of Auburn Comp Plan 2030
- City of Auburn Zoning Ordinances
- City of Opelika Comprehensive Plan 2020
- City of Opelika Code of Ordinances
- City of Smiths Station Subdivision Plan
- City of Smiths Station Comprehensive Plan
- Lee County Comprehensive Plan
- Lee County Subdivision Regulations

As other plans are identified or developed by each jurisdiction, it will be reviewed and applicable plans will be integrated into the Lee County Natural Hazards Mitigation Plan.



Please note, the Town of Loachapoka does not have a planner, engineer, public safety official, or planning documents at this time.

## SECTION 3: COMMUNITY PROFILE

### Section Revisions

The following revisions were made to Section 3: Community Profile:

**General:** Section 3 has been re-formatted;

#### **3.1: Physical Environment**

- Maps that depict location, topography, and population density were added;

#### **3.2: Government and Demographic Information**

- A brief description of the government in each jurisdiction was added;

#### **3.3: Income and Poverty**

- Data on population, race and ethnicity, income and poverty was updated;

#### **3.4: Economy**

- Information on employment, unemployment, and employers was updated;

#### **3.5: Public School Systems in Lee County**

- A brief description of school systems in the County was added;

#### **3.6: Infrastructure**

- Information on infrastructure including public and private utilities and departments that provide water, sewer, transportation, natural gas, electrical service and solid waste services was updated;

#### **3.7: Residential Assets**

- Information on residential assets in each jurisdiction was added.

### **3.1 Physical Environment**

Lee County is located in East Central Alabama along the Chattahoochee River, which is also the western boundary of the State of Georgia. Lee County occupies 608 of the 50,744 square miles in Alabama. Of the 608 square miles in Lee County, 59.375 are within the city limits of Auburn, 59 are within the city limits of Opelika, 6.59 are within the city limits of Smiths Station and 1.18 acres are in the Town of Loachapoka. The remaining 481.855 miles are in unincorporated areas of the county.

Bordering Lee County are Tallapoosa, Chambers, Russell and Macon counties in Alabama and Harris and Muscogee counties in Georgia. The county is about two hours southwest of the Atlanta International Airport, two hours southeast of Birmingham, and four hours northeast from Mobile and the Gulf Coast.

The terrain in Lee County is Piedmont Plateau, characterized by hilly topography with gentle to steep slopes. The soil varies from red clay in the north to a sand clay mixture in the center and a more sandy soil in the south.

The Chattahoochee River borders Lee County on the east. Many large creek systems form watersheds in the county. These include Holland Creek, Mill Creek, Pepperall Creek, Rocky Creek, Saugahatchee Creek and Town Creek. Land adjacent to these streams and creeks is wet and swampy.

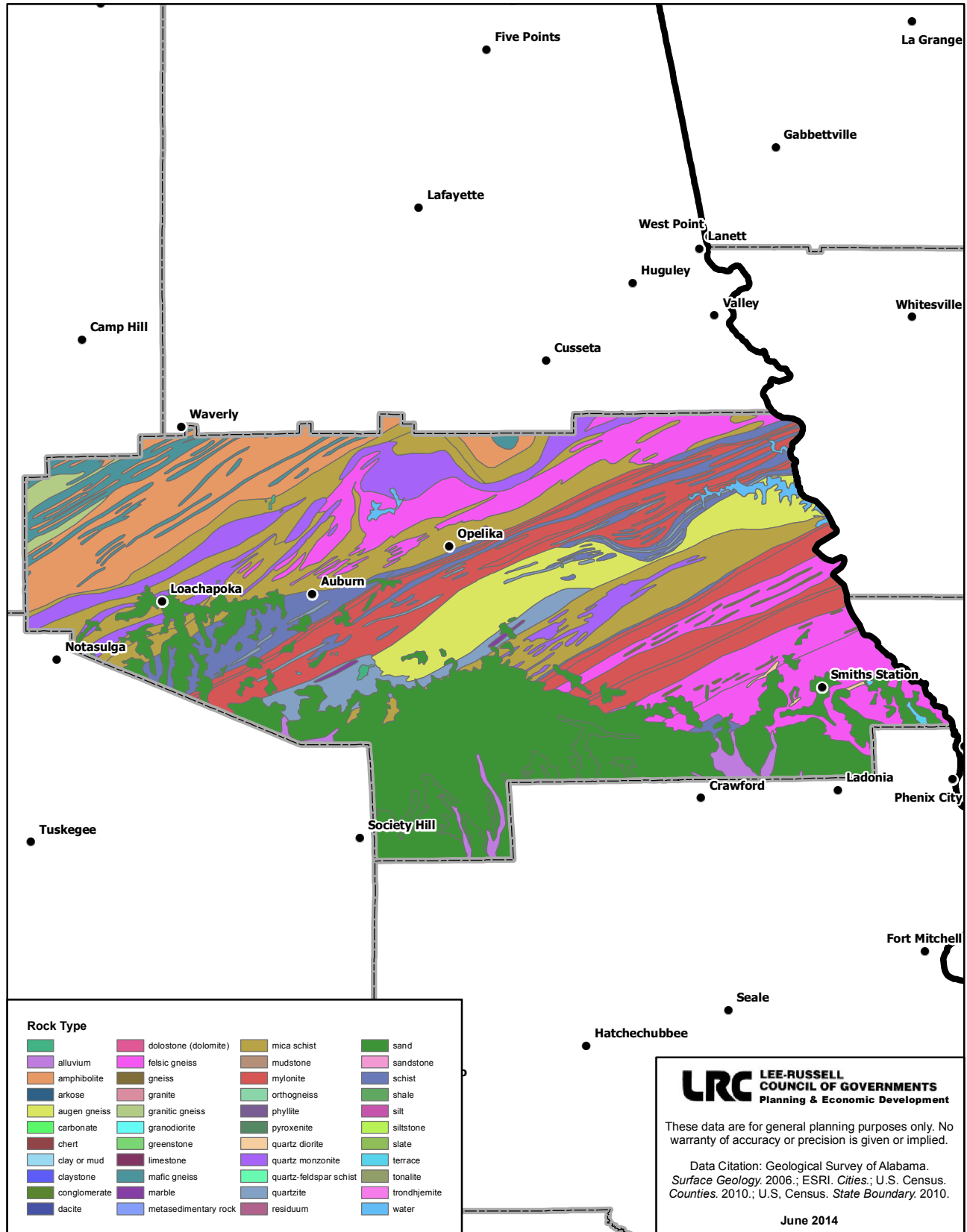
Lee County's climate is characterized by short, mild winters and long, moderately warm summers. The growing season is 230 to 240 days long. The annual mean temperature is near 65° degrees. The county is approximately 700 feet above sea level. The average annual precipitation is about 52 inches. (ADECA, Office of Water Resources)

Natural resources in the county include forestry, clays, and sand and gravel. The network of creeks, the many lakes and Chewalca State Park make the area desirable for both industry and tourism.





Map 3.2 - Rock Type Geology



### 3.2 Government and Demographic Information

Lee County is governed by a Commission of six. The Probate Judge, elected countywide, serves as the chair of the Commission. Each of the five Commissioners serves a four year term and represents one of the County's five districts.

There are four incorporated municipalities in Lee County. The City of Opelika is the County Seat and is centrally located at the junction of US Highway 280, US Highway 431 and Interstate 85. Opelika is governed by a Mayor and a five member council. The Mayor is elected city-wide and each Council Member represents a district in the City. All elected officials serve four year terms.

The most populous municipality in the County is Auburn, also home to Auburn University. Auburn is governed by a Council Manager form of government. The Mayor and eight Council Members are elected to four year terms. The City Manager is appointed by the Council and acts as the City's Chief Administrative Officer.

The City of Smiths Station is located in the southeast corner of the county. It is governed by a Mayor and a five member Council. The Mayor and Council Members are all elected city-wide and serve four year terms.

The Town of Loachapoka, is located in western Lee County. It is the smallest incorporated area in the County. Loachapoka is governed by a Mayor and four Council Members, all elected district wide and all serving four year terms.

According to 2010 United States Census the population of Lee County was 140,247. This was an increase of 25,155 over the 2000 population and reflects a 22% growth rate.

The median age of the population in Lee County was 29.5.

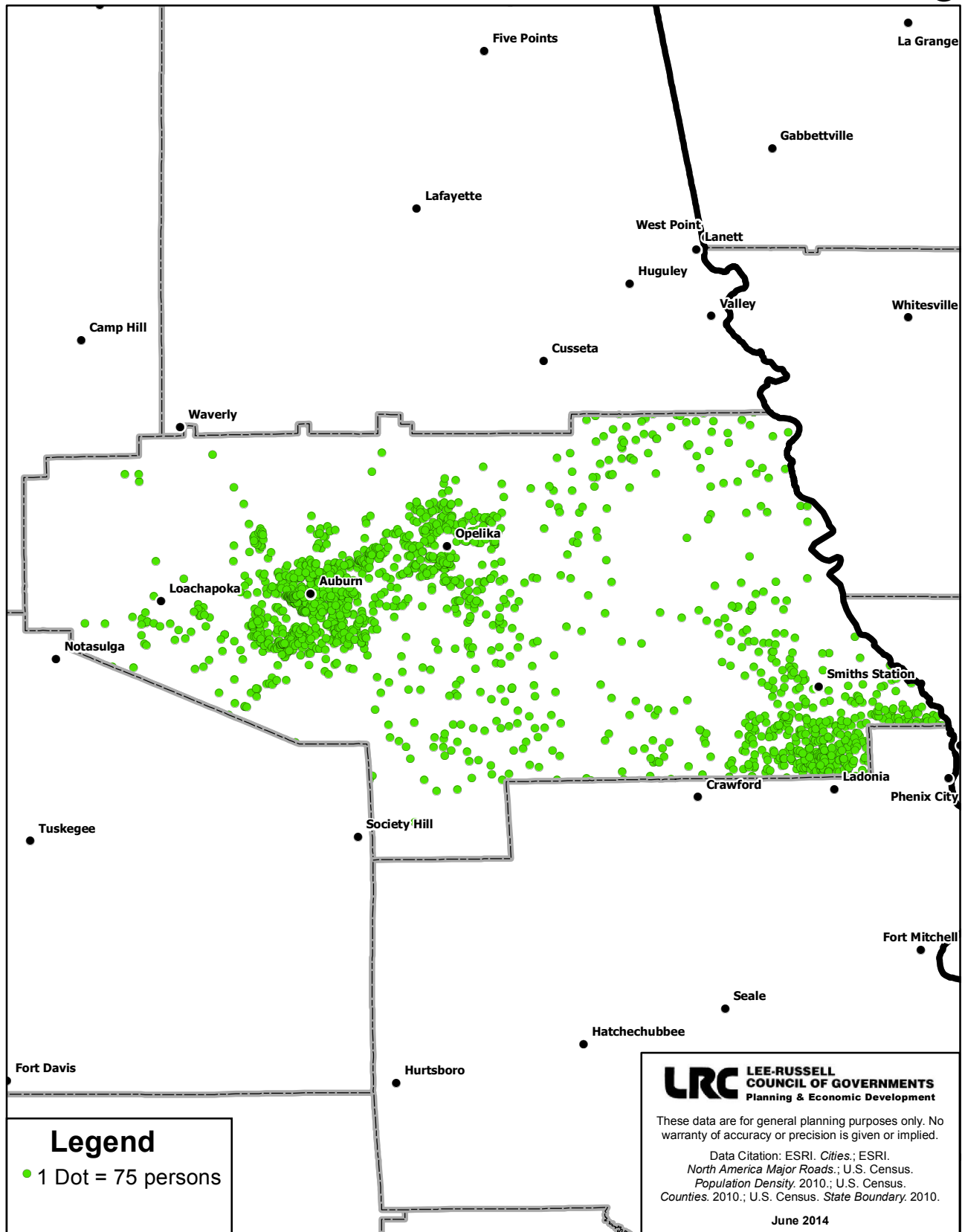
**Table 3.1: Population, Median Age, Households**

<b>Jurisdiction</b>	<b>2010 Population</b>	<b>2010 Median Age</b>	<b>2010 Number of Households</b>
Auburn	53,380	23.3	22,111
Loachapoka	180	47	86
Opelika	26,477	35.5	10,523
Smiths Station	4,926	39.3	1,913
Total Lee County	140,247	29.5	55,682

*Source: 2010 United States Census*

There are 189 persons per square mile in Lee County according to the 2010 United States Census. The most densely populated area Lee County is Auburn. Auburn has a population density of 1,098 persons per square mile. Nearly 33% of the population in Lee County lives in rural areas. The southwestern sections of the Country are the most sparsely populated. Map 3.2 on page 6 depicts population density throughout the County.

Map 3.4 - Population Density



### 3.3 Income and Poverty

The median household income in Lee County in FY 2013 was \$42,539. An estimated 19.3% of the people in Lee County live in poverty, according to the Alabama State Data Center.

### 3.4 Economy

In May, 2014 the Alabama Department of Labor reported the civilian labor force of Lee County was 69,993, with 66,582 workers employed and 1,091 looking for work. The unemployment rate was 4.9%. The unemployment rate for Alabama was 6.8%. According to the Alabama Department of Labor, the average weekly wage in Lee County is \$637.

The county has strong leadership in economic development by elected officials, economic development departments, and the Chamber of Commerce. The major employers in Lee County are listed in Table 3.2.

**Table 3.2 Major Employers in Lee County**

Company	Location	Industry	Number of Employees
Auburn University	Auburn	4 Year University	5,400
East Alabama Medical Center	Opelika	Health	3,200
Lee County Schools	Lee County	Education	1,200
Auburn City Schools	Auburn	Education	990
Walmart Distribution Center	Opelika	Distribution	690
Mando America Corporation	Opelika	Manufacturing	670
Walmart Super Center (2)	Auburn & Opelika	Retail	670

*Opelika Chamber of Commerce, 2014*

### 3.5 Public School Systems in Lee County

There are three public school systems in Lee County.

The Auburn City Schools are a component unit of the City of Auburn. They are governed by a five member School Board. The School Board hires a Superintendent to oversee the day to day operations of the school system. Auburn City Schools serves nearly 8,000 students. The individual schools are listed below.

Auburn High School  
J.F. Drake Middle School  
Cary Woods Elementary  
Richland Elementary  
Pick Elementary  
Yarbrough Elementary

Auburn Junior High  
Auburn Early Education Center  
Dean Road Elementary  
Ogletree Elementary  
Wrights Mill Elementary

The Opelika City Schools are a component unit of the City of Opelika. They are governed by a five member board, appointed by the Opelika City Council. The School Board hires a Superintendent to oversee the day to day operations of the school system. The Opelika schools serve about 4,500 students. The individual schools are listed below.

Opelika High School	Opelika Middle School
Carver Primary School	Morris Avenue Intermediate School
Jeter Primary School	Northside Intermediate School
Southside Primary School	West Forest Intermediate School

The Lee County Schools serve all of Lee County outside of the city limits of Auburn and Opelika. They are governed by a seven member board elected by the citizens of the County. The School Board hires a Superintendent to oversee the day to day operations of the school system. Enrollment in Lee County Schools is nearly 9,800. The individual schools are listed below.

Beauregard High School	Beulah High School
Loachapoka High School	Smiths Station High School
Smiths Station Freshman Center	Sanford Middle School
Smiths Station Junior High	Beauregard Elementary School
Beulah Elementary School	East Smiths Station Elementary School
Loachapoka Elementary School	South Smiths Station Elementary School
Wacoochee Elementary School	West Smiths Station Elementary School

### **3.6 Infrastructure**

#### **➤ Water Services**

There are two municipal water systems and four rural public water authorities that serve Lee County. The six systems serve 93% of the households in Lee County. Rural water systems in Lee County operate independently of any local governments. Approximately 7% of the residents in Lee County do not have access to a public water system and must rely on private wells.

The Water Works Board of the City of Auburn's sources of water are Lake Ogletree, purchased water from Opelika, and groundwater. Auburn Water Resource Management serves 51,000 customers. Daily usage is 7.1 million gallons per day and their total elevated tank storage capacity is 5.5 million gallons.

Opelika Utilities' sources of water are Saugahatchee Lake and Halawakee Creek. The water treatment plants can process 24 million gallons of raw water per day. There are seven storage tanks which provide a combined storage capacity of 9.75 million gallons. The existing system contains 190 miles of transmission mains and serves a population of 37,572 with an average daily use of 8 million gallons.

Beauregard Water Authority's source of water for their 3,376 customers is groundwater and three wells. In addition, they have three water treatment facilities and four water storage tanks



with a capacity to hold 1.95 million gallons. The average usage is 999,296 gallons per day. An elevated water tank has a 1,000,000 gallon storage capacity. Beauregard Water Authority did not participate in this update of the Hazard Mitigation Plan.

Loachapoka Water Authority utilizes 2 wells as their main water source as well as water purchased from the City of Opelika to serve its 3,422 customers. Five water tanks with a storage capacity of 2.8 million gallons are also part of the system. Loachapoka has an average daily usage of 790,483 gallons. Loachapoka participated in the Hazard Mitigation Plan Update.

Smiths Water and Sewer Authority serves a population of 9,450. Their water source is Lake Oliver and the Chattahoochee River. The system contains one pump station, three treatment facilities, a 3.5 million gallon storage capacity, and 2 clear wells. The average daily use for Smiths is 3 million gallons. Smiths Water and Sewer Authority participated in the Hazard Mitigation Plan Update.

The Lee-Chambers Utilities District serves northeast Lee County and has about 3,000 customers. They purchase treated water from Opelika. Their water storage capacity is 1.7 million gallons and daily water usage is approximately 820,000 gallons per day. Lee-Chambers did not participate in this update of the Hazard Mitigation Plan.

#### ➤ **Sewer**

Only Auburn, Opelika, and small portions of Smiths Station are served by a public sewer system. It is estimated that 60% the households in Lee County have access to public sanitary sewer service. For the 40% of households not served by a public sanitary sewer system, septic tanks and filter fields are the primary means of meeting their sewage needs.

The City of Auburn has one wastewater treatment facility that can treat 11.25 million gallons per day. The system contains 350 miles of sanitary sewer lines and fourteen sewer lift stations. Auburn's sewer system serves 56,900 customers.

Opelika Public Works has two wastewater treatment plants. These plants have the capacity to treat 9 million gallons of wastewater a day. Opelika Public Works maintains 230 miles of sewer lines, 25 lift stations, and serves 9,300 customers.

Smiths Water and Sewer Authority has no wastewater treatment plant, 1 lift station, and maintains approximately 50 miles of sewer lines. The system serves approximately 500 customers.

Unincorporated areas of Lee County and Loachapoka do not have sewer service.

#### ➤ **Transportation**

Lee County is bisected by Interstate 85 and lies midway between the capital cities of both Alabama (Montgomery) and Georgia (Atlanta). I-85 is the main transportation corridor between the Port of Mobile and the east coast.

Lee County is also convenient to Birmingham, the largest metropolitan area in Alabama, which is located 90 miles northwest via state highway 280. Other major arterial roads in the County include US Highway 431, US Highway 80 and US Highway 29.

The Robert J. Pitts airport in Auburn provides services to private planes and corporate jets. A new terminal opened in the fall of 2010. Access to commercial air travel continues to require residents in each jurisdiction of Lee County to drive to Columbus, GA, Montgomery, AL, Birmingham, AL or Atlanta, GA.

Rail freight service in the region is provided by the Norfolk Southern and Seaboard railroads.

The Lee-Russell Council of Governments provides public transit through Lee-Russell Public Transit. The system provides a demand response service Monday-Friday from 6:00 am to 6:00 pm. Auburn University provides Tiger Transit to students, faculty and staff while school is in session and during football weekends. A number of not-for-profit agencies and senior living communities have vans to provide clients with transportation to and from their homes to appointments. There are also several taxi services in Auburn and Opelika.

#### ➤ **Natural Gas Service**

The Alabama Gas Corporation service area includes Auburn, Loachapoka, Opelika and Smiths Station. Portions of unincorporated areas of Lee County do not have natural gas service.

#### ➤ **Electrical Service**

The table below shows the availability of electrical service in the County.

**Table 3.3: Electrical Services in Lee County**

<b>Name of Supplier</b>	<b>Location(s)</b>	<b>Number of Meters/Customers</b>
<b>Alabama Power Company</b>	Auburn	32,226
	Loachapoka	601
	Opelika	1,835
	Balance of Lee County	119
<b>Opelika Power and Light</b>	Opelika	13,000
<b>Tallapoosa River Electric Cooperative</b>	Lee County	7,930
<b>Dixie Electric Cooperative</b>	Lee County	Not provided

#### ➤ **Telecommunications**

AT&T provides adequate telephone service to the jurisdictions in Lee County. Cable, phone and internet service are also available through Charter Communications, Opelika Light and Power, Direct TV, Dish Network, and WOW. Wireless broadband is available through Charter Communication, AT&T, T-Mobile, Verizon and Sprint Nextel Corporation.

### ➤ **Solid Waste**

At this time, jurisdictions in Lee County are disposing their solid waste at two locations. The first location is the Salem Waste Disposal Center which is a regional landfill. The second location is a transfer station operated by Sunflower Waste located in the City of Opelika.

### **3.7 Residential Assets**

According to the 2010 Census there were 22,111 occupied housing units in the City of Auburn. According to the 2008-2012 American Community Survey (ACS) estimates, the median value of homes in Auburn was \$215,200. The ACS estimated there were 1,354 mobile homes in the City.

The Town of Loachapoka has 88 occupied housing units. According to the 2008-2012 American Community Survey (ACS) estimates, the median value of homes in Loachapoka is \$135,700. The ACS estimated there were 6 mobile homes in Loachapoka.

According to the 2010 Census there were 10,523 occupied housing units in the City of Opelika. According to the 2008-2012 American Community Survey (ACS) estimates, the median value of homes in Opelika was \$135,000. The ACS estimated there were 2,382 mobile homes in the City.

According to the 2010 Census there were 1,913 occupied housing units in the City of Smiths Station. According to the 2008-2012 American Community Survey (ACS) estimates, the median value of homes in Smiths Station was \$120,800. The ACS estimated there were 536 mobile homes in the City.

According to the 2010 Census there are 21,047 occupied housing units in unincorporated Lee County. According to the 2008-2012 American Community Survey (ACS) estimates, the median value of homes in unincorporated Lee County was \$122,100. The ACS estimated there were 9,147 mobile homes in the County.

## **SECTION 4: THE PLANNING PROCESS**

### **Section Revisions:**

The following Revisions were made to Section 4: The Planning Process

**General:** Section 4 was re-formatted;

#### **4.1: Overview of Section 4-** No changes

#### **4.2: Agency Coordination in the Planning Process**

- The committee name was changed to Stakeholder and Technical Advisory Committee;
- The meetings of the Stakeholder and Technical Advisory Committee were updated to reflect the 2014 dates and agendas of the meetings;
- The process used to collect data from the Stakeholder and Technical Advisory Committee was updated;
- Tables showing committee representation by jurisdiction and sector were added;
- School Boards and Water Authorities were included as jurisdictions;

#### **4.3: Public Participation in the Planning Process**

- The documentation of public participation in the planning process was updated to include public meeting to present the final plan at County Commission and City and Town Council Meetings;

#### **4.4: Integration with Other Planning Efforts**

- The existing plans, studies, reports and technical information that were reviewed for integration into the updated plan were updated;

### **4.1 Overview of Section 4**

This section documents the planning process which details the opportunities for the public to comment on the plan at all stages of its formation, and the involvement of any neighboring communities, interested agencies, and private and non-profit organizations.

This section will document the planning process, including how the plan was prepared, who was involved in the process, and how the public was involved. The planning process will also include a review of all existing plans or studies and their incorporation, as appropriate.

## 4.2 Agency Coordination in the Planning Process

The planning process for the Lee County Natural Hazards Mitigation Plan Update began with a meeting between the Lee-Russell Council of Governments (LRCOG) and Lee County Emergency Management Agency (LCEMA) on December 16, 2013. The purpose of the meeting was to review the existing plan, determine what entities needed to be involved in the update process, and schedule committee and public meetings.

It was determined to continue with the same municipal and county governments that were in the original plan: City of Auburn, City of Opelika, City of Smiths Station, Town of Loachapoka and Russell County. Auburn University advised that they would complete their own Hazard Mitigation Plan because their situation is unique.

In January and February, 2014, representatives of LRCOG and the Lee County Emergency Management Agency attended the Auburn City Council Meeting, Opelika City Council Meeting, Smiths Station City Council Meeting, Loachapoka Town Council meeting and Lee County Commission Meeting to inform the governing bodies of the Hazard Mitigation Plan Update and request their participation and support of the process. All jurisdictions chose to participate in the update and nominated members to represent them on the Stakeholder and Technical Advisory Committee. (See Table 4.1)

LRCOG, after consultation with LCEMA, contacted additional key personnel to serve on the committee. (A sample invitation letter and mailing list is in Appendix A). Ultimately, committee membership included elected officials, city and county administrators, local public school and junior college representatives, public safety and emergency service representatives, city and county engineers, public works officials, utilities, state agency personnel, representatives from neighboring communities, and medical professionals. Meeting sign in sheets, and agendas are also in Appendix B. Handouts and power point presentations from the committee meetings are kept in the Lee County Natural Hazards Mitigation Plan files.

For this update, Alabama Emergency Management Agency advised that School Boards and non-municipal Water Boards should be categorized as jurisdictions.

**Table 4.1     2014 Jurisdictional Representatives**

<b>Jurisdiction</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Auburn</b>	Tom Wordon (official) Bill James Jay Uphold  Paul Register	Council Member Director of Public Safety Construction and Maintenance Division Manager Police Chief



<b>Jurisdiction</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Lee County</b>	Eric Carson	Water Resource Management Director
	Lee Lamar	Fire Chief
	Karen Delano	Superintendent, Auburn City Schools
	Robert Ham (official)	Commissioner
	Wendy Swann	Governmental Relations Coordinator
	Trent Dykes	Engineer
	Jay Jones	Lee County Sheriff
	Lisa Teel	Lee County Revenue
<b>Loachapoka</b>	David Veel	Building Inspector
	Jeanne O'Donnell (official)	Council Member
<b>Opelika</b>	Terry Woodall	Council Member
	Patsy Jones (official)	Council Member
	John McEachern	Police Chief
	Scott Parker	Engineer
	Larry Prince	Opelika Power
	Micah Peckham	Opelika Utility Director
	Dr. Mark Neighbors	Superintendent, Opelika City Schools
<b>Smiths Station</b>	LaFaye Dellinger (Official)	Mayor
	Jerry Bentley	City Clerk
<b>Lee County Schools</b>	Dr. Jason Wright	Director of Student Services
<b>Loachapoka Water Authority</b>	Shay Gregory	Administrator
<b>Smiths Water and Sewer Authority</b>	Andy Morris	Utilities Director

**Table 4.2 2014 Sector Representatives**

<b>Sector</b>	<b>Committee Representation</b>	<b>Title/Position</b>
<b>Emergency Management</b>	Dee Dee Matthews	Lee County 911, Assist. Director
	Kathrine Carson	Director; Lee County EMA
	Johnny Langley	Deputy Director, Lee County EMA
	Rita Smith	Grant Manager; Lee County EMA
	Chris Tate	Communication Manager; Lee County EMA
<b>Higher Education</b>	Doug Hubbard	Finance; Lee County EMA
	Dr. Phillip Chaney	Geology Professor; Auburn University
	Susan McAllister	Assistant Director Public Safety; Auburn University
<b>Local Government</b>	Dr, Linda North	President; Southern Union College
	See Table 4.1	
<b>Medical</b>	Yuill Graham	Administrator, EAMC
	Marty Nelson	Director, American Red Cross
<b>Neighboring Communities</b>	Steve Cox	Columbus Police Department
	Cathy Kee	Columbus GA

Sector	Committee Representation	Title/Position
<b>Regional Commission</b>	Bob Franklin	Russell County EMA Director
	Lisa Sandt	Director, Lee-Russell Council of Gov
	Suzanne Burnette	Executive Director, Lee-Russell Council of Gov
<b>Utilities</b>	David Roberts	Manager; Alabama Power Company
	Jerry Carroll	Manager; Alagasco
	Steve Williams	Director of Public Relations; Tallapoosa Cooperative

Committee meetings in February and April were open to the public. Meeting announcements were made at Council, Town and Commission meetings and meeting information was posted on the LRCOG website.

The first meeting of the Lee County Hazard Mitigation Stakeholder and Technical Advisory Committee was held on February 26, 2014 in the auditorium at the East Alabama Health Resource Center in Opelika, Alabama. Forty-six individuals, including representatives from all municipal and county governments and Lee County Schools, attended the meeting. Auburn City Schools, Opelika City Schools, Loachapoka Water Authority and Smiths Station Water and Sewer Authority were unable to attend the meeting but did provide information on assets and critical facilities via phone and e-mail and were given the opportunity to review and comment on the meeting materials posted on line. Meeting sign in sheets can be found in Appendix B. No members of the public attended the meeting.

The meeting was facilitated by Barbara Scott of Lee-Russell Council of Governments. The group chose not select a committee chair.

The February meeting included discussion of the following:

- The requirements of a hazard mitigation plan as detailed in 44 CFR201.6,
- The role of the committee members in the process,
- Projected timelines,
- A review of the existing mission
- Risk assessment.

Historical information on the impact of each natural hazard on Lee County was shared with the committee. Based on a review of the past hazard occurrences in Lee County, committee members worked together to complete a Hazard Profile Worksheet and Risk Index Worksheet for each jurisdiction in Lee County.

Following the meeting, the results of the Committee's Mission and Hazard Mitigation Review were tabulated and posted on the internet. The public was invited to view the meeting power point presentation and complete a hazard risk assessment for the County via announcements at Commission, Council and Town Hall meetings. Website records show that the power point and assessment tools were viewed 132 times during April. However, no assessments completed by the public were returned.

The second meeting of the Lee County Hazard Mitigation Stakeholder and Technical Advisory Committee was held on April 23, 2014 at the East Alabama Health Resource Center in Opelika, Alabama. Twenty-two individuals attended the meeting. Again, all municipal and county governments were represented at the meeting. Auburn City Schools, Lee County Schools, Opelika City Schools, Loachapoka Water Authority and Smiths Station Water and Sewer Authority were unable to attend the meeting but did have the opportunity to provide input on the mitigation strategy and to review and comment on the meeting materials posted on line. Sign in sheets from this meeting are also in Appendix B. No members of the public attended the meeting.

At the April meeting, the committee reviewed the results of the risk assessment completed at the first meeting and then focused on updating goals, objectives, mitigation actions and the plan maintenance procedures.

Again working in small groups, members determined which portions of the mitigation strategy should be kept as is, revised or deleted by asking themselves the following questions:

- Has the nature, magnitude, and/or type of risks/vulnerabilities changed;
- Do the goals and objectives address current and expected conditions;
- Are the current resources appropriate for implementing the plan;
- What is the status of implementing the mitigation actions;
- Are there implementation problems associated with the mitigation actions;
- Have the outcomes occurred as expected; and
- How are coordination efforts with the public and other community agencies proceeding?

Before the committee adjourned their April meeting, they agreed to keep the same plan maintenance strategy that was outlined in the existing plan.

Committee members and representatives from school systems and water utilities were contacted by LRCOG staff throughout May, June, July and August to collect and verify information on assets, critical facilities, population change, structural inventories, jurisdiction holdings and future plans for development. This data collection occurred through in person and telephone interviews as well as email requests.

Agencies and individuals not listed in Tables 4.1 and 4.2 who contributed to the Lee County Hazard Mitigation Plan update by providing information via phone, e-mail, or interview are listed below:

#### **Assets and Critical Facilities**

Charles M. Duggan; Auburn City Manager  
James Grout; Mayor of Loachapoka  
Mike Hilyer; Public Works Director, City of Opelika  
Tim Parson; Lee County Department of Revenue  
Oline Price; Lee County Revenue Commissioner  
Roger Rendleman; Lee County Administrator

#### **Major Employers and Development Trends**

Taylor Dobson; Revolving Loan Fund Officer

#### **Hazard Profile Information**

Charles Brown; Director, Lee County Extension; Alabama Cooperative Extension  
Phillip Hicks; ADECA Office of Water Resources  
Matt McCollough; Alabama Forestry Commission

Once the stakeholder committee meetings and public meetings/surveys were complete and all data collection was finalized, committee members and entities who provided information were emailed the draft plan update was available online for review and comment.

Entities who were invited to participate in the Lee County Hazard Mitigation Plan Update but did not participate are listed below.

Macon County EMA  
Bullock County EMA  
Chambers County EMA  
Alabama Department of Public Safety  
Alabama Department of Transportation

The following entities should be included in the next plan update:

Alabama Department of Environmental Management  
Lee County Health Department

### **4.3 Public Participation in the Planning Process**

Public participation was sought through multiple strategies.

All committee meetings were open to the public and announced at Town Meetings, Council Meetings and County Commission meetings and on the LRCOG website.

Committee meeting materials were made available on line at [www.lrcog.com](http://www.lrcog.com). The public was invited to complete their own risk assessment by viewing a power point presentation of historical hazard information and downloading the Risk Assessment worksheet.

A Public Open House was held on June 5, 2014 in the Conference Room at Lee-Russell Council of Governments. The meeting was advertised in the Opelika-Auburn News, on line and via e-mail to all Committee members. Twenty-five citizens attended the Open House. A Citizen Survey was distributed to the public on line and at the HMGP Open House. (Sign in sheets and the OANews advertisement are in Appendix B). The only completed surveys received were from the citizens who attended the Open House.

The draft Plan Update was made available for review and comment by the public on line during September, 2014. However, no public comments were received.

A final opportunity for the public to provide input occurred during the presentation of the approved Lee County Natural Hazards Mitigation Plan Update at jurisdictional council, town, commission and board meetings.

A copy of the final plan approved by FEMA will be placed on the LRCOG website and at the office of the Lee County Emergency Management Agency, Lee County Commission and at the City/Town offices of Auburn, Opelika, Loachapoka, and Smiths Station for further examination by interested citizens. School Boards and Water Boards will also receive copies of the final plan.

#### **4.4 Integration with other Planning Efforts**

At this time, the planning documents that apply and will be integrated into the Lee County Natural Hazards Mitigation Plan include:

- City of Auburn Comp Plan 2030
- City of Auburn Zoning Ordinances
- City of Opelika Comprehensive Plan 2020
- City of Opelika Code of Ordinances
- City of Smiths Station Subdivision Plan
- City of Smiths Station Comprehensive Plan
- Lee County Comprehensive Plan
- Lee County Subdivision Regulations

As other plans are identified or developed by each jurisdiction, it will be reviewed and applicable plans will be integrated into the Lee County Natural Hazards Mitigation Plan.

Please note, the Town of Loachapoka does not have a planner, engineer, public safety official, or planning documents at this time.



## SECTION 5: RISK ASSESSMENT

### Section Revisions:

The following revisions were made to Section 5, Risk Assessment:

**General:** Section 5 was re-formatted;

**5.1 Overview of Section 5:** No changes;

### 5.2 Identifying Hazards

- Dam/Levee failure was determined by the Committee to be man-made rather than a natural hazard and was not profiled in this update;
- Hail was profiled as a separate hazard;
- “Severe Storms” was changed to “Thunderstorms” in this update;
- Tropical Depressions were included as a part of Tropical Storms

### 5.3 Profiling Hazard Events

- Hazards are listed in alphabetical order;
- Maps were updated;
- Some illustrations, not specific to Alabama or Lee County were removed;
- Data sources were updated;
- Information relating to previous occurrences and future probability for each hazard was updated;
- The rankings of each hazard based on the risk to the jurisdictions were changed to reflect the work done by the committee and input from the public.

### 5.4 Assessing Vulnerability: Identifying Assets and Estimating Potential Dollar Losses

- Each jurisdiction’s current asset inventory and critical facility designation was updated;
- Asset valuations were updated;

### 5.5 Assessing Vulnerability: Analyzing Development Trends

- Information from the City of Auburn Comp Plan 2030, Lee County Master Plan, and Opelika 2020 Comprehensive Plan, Center for Business and Economic Research,

Alabama Center for Real Estate, and Bureau of Economic Analysis was used to update development trends in Lee County;

- Development goals from the 2009 CEDS, were removed because they were outdated.

## **5.1 Overview of Section 5**

The Risk Assessment Section provides a detailed description of all the natural hazards that could affect the jurisdictions of Lee County along with an analysis of the jurisdictions' vulnerability to those hazards. These jurisdictions include City of Auburn, City of Opelika, Lee County (Unincorporated areas), City of Smiths Station, and the Town of Loachapoka.

Specific information about numbers and type of structures, potential dollar losses and overall description of land use trends in the jurisdictions are also included in this section. Any risk that affects only certain sections of the planning areas is addressed separately in the context of the affected area.

The Auburn City Schools share the same risks and vulnerabilities as the City of Auburn. The Opelika City Schools share the same risks and vulnerabilities as the City of Opelika. The Lee County Schools share the same risks and vulnerabilities as Lee County. Loachapoka Water Works shares the same risks and vulnerabilities as the Town of Loachapoka. Smiths Water and Sewer Authority shares the same risks and vulnerabilities as the City of Smiths Station.

## **5.2 Identifying Hazards**

The Lee County Stakeholder and Technical Advisory Committee considered all the natural hazards that could affect the citizens and property in Lee County. The committees used personal and professional experience, internet information, risk assessment reports, past occurrences, public input and other resources to identify hazards that are most likely to affect each jurisdiction in Lee County.

The Committee identified eleven natural hazards as having possible impacts on the City of Auburn, City of Opelika, Lee County, City of Smiths Station, and Town of Loachapoka. This vulnerability analysis was a result of extensive input by the subcommittee and the sources listed above to determine the overall vulnerability ranking for each hazard.

The Lee County Natural Hazards Profile and Risk Index was utilized as the Committee evaluated the hazards that presented a risk to the jurisdictions of Lee County. This worksheet was completed in order to provide a broad profile for each hazard relative to one another.

The Committee classified the vulnerability of each jurisdiction to each hazard according to the potential frequency and magnitude, of previous events by examining past property and crop damage, loss of function, length of the event and the impact of personal safety.

The result of this process was the creation of a risk index, which established numeric ratings for each hazard relative to one another. Based on this analysis, the Lee County Stakeholder and Technical Advisory Committee identified the following natural hazards as ones that continuously impact the jurisdictions of Lee County:

- Drought/Heat Wave
- Earthquakes
- Flood
- Hail

- Lightning
- Sinkholes
- Thunderstorms (Includes Strong Wind)
- Tropical Depressions/Tropical Storms/Hurricanes
- Tornadoes
- Wildfire
- Winter Storms (Includes Ice Storms, Heavy Snow)

The Advisory and Stakeholder Committees agreed with the determination made in previous plans that landslides, volcanoes and tsunamis were not a threat to the jurisdictions of Lee County. These assessments were based on no reports of past occurrences and no real probability of occurrence in the future. It was also determined that dams were manmade and would not be included in the Natural Hazard Mitigation Plan Update.

On page 5 you will find the **Hazard Profile and Risk Index Rating Key** used by the committees to determine the impact and extent of natural hazards on each jurisdiction. The results of the Committee's analysis are shown in **Table 5.1: Lee County Natural Hazard and Risk Index** on page 6-7.

The Advisory and Stakeholder Committee meetings were advertised on the Lee-Russell Council of Governments and Lee County EMA websites. Citizens were invited to attend the meetings and/or access meeting materials and the Lee County Natural Hazard and Risk Index on line. Additionally, citizen surveys were available during the Lee County Hazard Mitigation Open House on June 5, 2014. Twenty-four surveys were completed and provided insight into the public's preparedness for natural hazards. The survey results can be found on pages 8-9.

**2014 LEE COUNTY  
NATURAL HAZARDS PROFILE AND RISK INDEX  
RATING KEY**

**Frequency:**                      **How often the event will occur;**  
 Highly Likely                      Near 100% probability in the next year  
 Likely                                Between 10% and 100% in the next year, or 1 chance in every 10 years  
 Possible                              Between 1% and 10% in the next year, or 1 chance in every 100 years  
 Unlikely                              Less than 1% probability in the next 100 years

**Magnitude:**                      **The percentage of the jurisdiction affected by the hazard;**  
 Large                                More than 50% affected  
 Moderate                            25%-50% affected  
 Small                                 10%-25% affected  
 Very Small                         Less than 10% affected

**Severity Level:**                      **How much damage to safety, property and function can be expected from the event;**

	<b>Safety</b>	<b>Property</b>	<b>Function</b>
Catastrophic (C )	Multiple deaths or injuries possible	More than 50% of property is severely damaged	Complete shutdown for more than 30 days.
Critical (CR)	Injuries/illnesses result in permanent disabilities	More than 25% of property is severely damaged	Complete shutdown of critical facilities for more than 1 week.
Limited (L)	Injuries/illnesses do not result in permanent disabilities	More than 10% of property is severely damaged	Complete shutdown of critical facilities for more than 1 day.
Negligible (N)	Very few injuries; treatable with first aid	Less than 10% of property is severely damaged	Shutdown of critical facilities for less than 24 hours.

**Duration:**                      **The length of time the hazard event lasts;**  
 Long                                 Days  
 Medium                              Hours  
 Short                                 Minutes

**Vulnerability Ranking:** Based on the cumulative ratings of frequency, magnitude, severity and duration, rank each hazard on a scale from 1-10 (1=lowest risk; 10=highest risk). Hazards can have the same ranking.

**Table 5.1: LEE COUNTY 2014 NATURAL HAZARDS PROFILE AND RISK INDEX RESULTS**

<b>Hazard</b>	<b>Frequency</b> <ul style="list-style-type: none"> <li>• Highly Likely</li> <li>• Likely</li> <li>• Possible</li> <li>• Unlikely</li> </ul>	<b>Magnitude</b> <ul style="list-style-type: none"> <li>• Large</li> <li>• Moderate</li> <li>• Small</li> <li>• Very Small</li> </ul>	<b>Severity</b> <ul style="list-style-type: none"> <li>• Catastrophic (C)</li> <li>• Critical (CR)</li> <li>• Limited (L)</li> <li>• Negligible (N)</li> </ul>			<b>Duration</b> <ul style="list-style-type: none"> <li>• Long</li> <li>• Med.</li> <li>• Short</li> </ul>	<b>Vulnerability Rank</b> From 1-10 10=High 1=Low (Median)	<b>Geographic Locations Vulnerable to This Threat</b>
			Health	Property	Function			
<b>Drought Heat Wave</b>	Highly Likely	Large	N	L	L	Long	7.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to drought/heat wave.
<b>Earthquake</b>	Unlikely	Very Small	N	N	N	Short	1	There are no records of past earthquakes affecting jurisdictions in Lee County. However, if an earthquake did occur all jurisdictions would be vulnerable.
<b>Flood</b>	Likely	Moderate	N	L	L	Medium	6	Auburn, Opelika, Smiths Station, Lee County are all vulnerable to flood. Loachapoka is not vulnerable to flood. Repetitive flooding occurs in Annaloe Drive / Burke Place (Auburn) Boykin Street (Auburn) Columbus Pkwy (Opelika) East Glenn (Auburn) East University (Auburn) Lee Road 298 (Lee County) Lee Road 325 (Lee County) Lee Road 500 (Lee County) Magazine Avenue (Opelika) Mallard Creek Subdivision (Lee County) Marion Circle (Auburn) North Uniroyal Rd (Opelika) Pepperall Pkwy & 20 <sup>th</sup> St. (Opelika) Samford Ave (Auburn) Sanders Street (Auburn) Saughatchee Lake Road (Opelika) White Street & Bragg (Auburn)
<b>Hail</b>	Highly Likely	Small	N	L	N	Short	6.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to hail.



<b>Hazard</b>	<b>Frequency</b> <ul style="list-style-type: none"> <li>• Highly Likely</li> <li>• Likely</li> <li>• Possible</li> <li>• Unlikely</li> </ul>	<b>Magnitude</b> <ul style="list-style-type: none"> <li>• Large</li> <li>• Moderate</li> <li>• Small</li> <li>• Very Small</li> </ul>	<b>Severity</b> <ul style="list-style-type: none"> <li>• Catastrophic (C)</li> <li>• Critical (CR)</li> <li>• Limited (L)</li> <li>• Negligible (N)</li> </ul>			<b>Duration</b> <ul style="list-style-type: none"> <li>• Long</li> <li>• Med.</li> <li>• Short</li> </ul>	<b>Vulnerability Rank</b> From 1-10 10=High 1=Low (Median)	<b>Geographic Locations Vulnerable to This Threat</b>
			Health	Property	Function			
<b>Lightning</b>	Highly Likely	Very Small	N	L/N	N	Short	6	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to lightning.
<b>Sinkhole</b>	Possible	Very Small	N	N	N	Long	1	Lee Road 166 (Opelika) Lee Road 148 (Opelika) Spring Villa Community (Lee County)
<b>Thunderstorm</b>	Highly Likely	Large	C	L	L	Medium	10	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to thunderstorms
<b>Tornado</b>	Highly Likely	Moderate	C	CR	CR	Short	9	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to tornadoes.
<b>Tropical Storm</b>	Likely	Large	N	N	N	Medium	4.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to the effects of tropical storms.
<b>Wildfire</b>	Highly Likely	Very Small	N	N	N	Medium	3	Heavily wooded and grassed areas of rural Lee County are vulnerable to this threat. Specifically the communities of Salem, Crawford and Smiths;
<b>Winter Storm</b>	Likely	Large	N	N	L	Long	5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to winter storms.

## LEE COUNTY ALABAMA HAZARD MITIGATION PLAN UPDATE 2014 PUBLIC SURVEY RESULTS

*The information from this survey will help Lee County EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property.*

### 1. Where in Lee County do you live?

Auburn= 12

Loachapoka= 1

Smiths Station= 1

Auburn University= 0

Opelika= 8

Other area of Lee County = 2

### 2. Do you live in a flood plain?

Yes = 0

No = 17

I don't know = 7

### Do you have National Flood Insurance?

Yes = 3

No = 16

I don't know = 5

### 3. How prepared do you feel for events such as tornadoes, floods or severe storms?

Not prepared = 2

Somewhat Prepared = 17

Prepared = 4

Very Prepared = 0

Did not answer = 1

### 4. What would help you feel more prepared? (Check all that apply to you/your household)

Educational brochures = 6

Community classes on natural hazards = 7

Safe Room = 12

Community shelters = 10

Relocate to a safer location = 1

Readiness kit = 13

Other: *Mobile home parks need safe shelter.*

5. Which information sources are the most effective at warning you of approaching storms or natural hazards in Lee County?  
(Check all that apply to you)

Cell phone = 16  
Facebook = 9  
Internet Web Site = 4  
IPad = 4  
Newspaper = 1  
Radio = 12  
Outdoor Sirens = 17  
Television = 14  
Telephone = 4  
Twitter = 1  
Weather Alert Radio = 13

6. Which information sources are the most effective at keeping you informed after a natural hazard has occurred?  
(Check all that apply to you)

Cell phone = 15  
Facebook = 10  
Internet Web Site = 7  
IPad = 3  
Newspaper = 1  
Radio = 15  
Outdoor Sirens = 7  
Television = 14  
Telephone = 3  
Twitter = 1  
Weather Alert Radio = 7

*Return to: Barbara Scott (Barbara.scott@adss.alabama.gov)  
Lee-Russell Council of Governments  
2207 Gateway Drive  
Opelika, AL 36801*

### 5.3 Profiling Hazard Events

The Lee County Stakeholder and Technical Advisory Committee was provided with the location, impact, and extent of all natural hazards that could affect each jurisdiction in Lee County. The profile included the following information:

- Description of previous occurrences of hazard events in terms of their severity and resulting impacts on the jurisdictions; and
- Description of the probability of future hazard events for each identified hazard to include the magnitude or severity of the hazard, geographical extent or areas in the community that would be affected, and the conditions that make it prone to the hazard.

When appropriate and possible, the hazard analysis identified on a map the area affected by each identified hazard. If a jurisdiction was impacted by a natural hazard differently than other jurisdictions, it was detailed under each hazard.

The data sources used to profile the natural hazards impacting the jurisdictions of Lee County were taken from various internet and local sources to include but not limited to the following: Alabama Department of Forestry, ADECA Office of Water Resources and Floodplain Management, Geological Survey of Alabama, National Climatic Data Center, NOAA Alabama Tornado Database, USDA Farm Service Agency, FEMA, Alabama EMA, and Lee County EMA.

The record of past occurrences varies by hazard according to the source of data. The level of detail is different according to the availability of data. Some natural hazards have reporting dates back to 1875 while others only go back as far as 2002. Additionally, the data that is available for some natural hazards, such as sinkholes, is very limited due to a lack of a centralized reporting system.

In some cases, there was little or no data on a specific hazard which makes it difficult to describe future occurrences and overall vulnerability to the hazard.

This plan will profile the following hazards: Drought/heat wave, earthquakes, floods, hail, lightning, sinkholes, thunderstorms (includes strong winds), tornado, tropical depression/tropical storms/hurricanes, wildfire, and winter storms.

Dam/levee failure was determined by the Committee to be a manmade rather than natural hazard. Volcanoes and tsunamis will not be profiled since they do not pose a significant threat to the jurisdictions in Lee County.

Please Note: The Auburn City Schools share the same risks and vulnerabilities as the City of Auburn. The Opelika City Schools share the same risks and vulnerabilities as the City of Opelika. The Lee County Schools share the same risks and vulnerabilities as Lee County. Loachapoka Water Works shares the same risks and vulnerabilities as the Town of Loachapoka. Smiths Water and Sewer Authority shares the same risks and vulnerabilities as the City of Smiths Station.

## DROUGHT/HEAT WAVE

### Overview

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts occur when a long period passes without any substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

The immediate threat from a heat wave is the following: 1) Strain – occurs when hot weather and/or exertion threaten to raise your body core temperature; 2) Impairment – occurs when your body temperature approaches 102 degrees Fahrenheit, creating an abnormal state that disrupts normal physical and mental functions; and 3) Emergencies – when the heat strain from overexposure last too long or become too severe, collapse from water depletion, heatstroke, or heart attack may occur.

The long-term dangers of a drought can have serious economic impact on a community. Agricultural production can be damaged or destroyed by loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these resources. When combined with extreme heat, droughts can make life very difficult especially if the situation lasts for a long time.

The Palmer Drought Severity Index (PDSI) is often used to monitor drought conditions. The PDSI is calculated based on temperature and precipitation data and the water content of the soil.

### Drought Severity Classifications

Category	Description	Impacts	Palmer Drought Index
<b>D0</b>	Abnormally Dry	Short-term dryness slows planting, growth; lingering water deficits;	-1.0 to -1.9
<b>D1</b>	Moderate Drought	Some damage to crops, low streams and reservoirs, voluntary water-use restrictions requested;	-2.0 to -2.9
<b>D2</b>	Severe Drought	Crop losses likely, water shortages common, water restrictions imposed;	-3.0 to -3.9
<b>D3</b>	Extreme Drought	Major crop losses, widespread water shortages or restrictions;	-4.0 to -4.9
<b>D4</b>	Exceptional Drought	Exceptional and widespread losses, shortages in reservoirs, streams and well create water emergencies;	-5.0

*Source: US Drought Mitigation Center 2014*

### Previous Occurrence of a Drought/Heat Wave

The reported data is limited concerning previous occurrences of droughts and heat waves for each jurisdiction. Most cases found to document these natural hazard events are part of a larger

event that happened in multiple counties around the state. The National Climatic Data Base has 59 incidences of drought and 3 incidences of excessive heat recorded for Lee County from 2006-2014. We were unable to obtain reliable estimates of property or crop damage in Lee County due to drought or heat wave, although we know they occurred based on USDA Secretarial Disaster Declarations (Appendix E; Tab 12).

From January 1, 2011 to December 1, 2012, each jurisdiction in Lee County experienced extreme drought conditions. In 2011, rainfall totals across the County were determined to be 8 to 15 inches below normal. Water restrictions were put in place by all water authorities in Lee County. The major impacts of the drought were to farm crops and cattle farmers. The United States Department of Agriculture issued a Secretarial Disaster Designation for crop disaster losses for crop years 2012 and 2013.

According to the National Climatic Database, there have been three previous occurrences of excessive heat in Lee County. August of 2007 was the hottest month on record across Central Alabama. A large ridge of high pressure settled across the area from August 4-15, with the hottest temperatures recorded on the 10<sup>th</sup> through the 15<sup>th</sup>. In Lee County, temperatures was 99F or above for 9 consecutive days. Sixty people required medical treatment due to the heat.

Tables 5.2 and 5.3 provide details of previous occurrences of drought and excessive heat in Lee County. Extent in Table 5.2 shows the Drought Severity Classification Rating for the month in question. Extent in Table 5.3 shows temperature extremes.

**Table 5.2: Overview of Drought Events in Lee County By Year**

Location	Date	Type	Ext	Deat h	Injur y	Property Damage	Crop Damage
LEE (ZONE)	07/11/2006	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	08/01/2006	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	09/01/2006	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	05/22/2007	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	06/01/2007	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	07/01/2007	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	08/01/2007	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	09/01/2007	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	10/01/2007	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	11/01/2007	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	12/01/2007	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	01/01/2008	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	02/01/2008	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	03/01/2008	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	04/01/2008	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	05/01/2008	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	06/01/2008	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	07/01/2008	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	08/01/2008	Drought	D2	0	0	0.00K	0.00K

Location	Date	Type	Ext	Death	Injury	Property Damage	Crop Damage
LEE (ZONE)	09/14/2010	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	09/21/2010	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	10/01/2010	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	11/01/2010	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	12/01/2010	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	12/01/2010	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	01/01/2011	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	01/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	02/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	02/04/2011	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	03/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	03/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	04/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	04/05/2011	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	05/01/2011	Drought	D2	0	0	0.00K	0.00K
LEE (ZONE)	06/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	07/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	08/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	09/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	10/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	11/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	12/01/2011	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	01/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	02/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	03/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	04/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	05/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	06/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	07/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	08/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	09/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	10/01/2012	Drought	D3	0	0	0.00K	0.00K
LEE (ZONE)	11/01/2012	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	12/01/2012	Drought	D4	0	0	0.00K	0.00K
LEE (ZONE)	02/01/2013	Drought	D1	0	0	0.00K	0.00K

Source: National Climatic Data Center 2014

**Table 5.3: Overview of Excessive Heat Events in Lee County By Year**

Location	Date	Type	Ext	Death	Inj	Property Damage	Crop Damage
LEE (ZONE)	08/08-16/2007	Heat	104F	0	60	0.00K	0.00K
LEE (ZONE)	07/26/2012	Heat	105F	0	0	0.00K	0.00K



LEE (ZONE)	07/01/2012	Heat	102F	0	0	0.00K	0.00K
		Total		0	60	0.00K	0.00K

Source: National Climatic Data Center 2014

### Future Probability of Drought/Heat Wave

The Lee County Stakeholder and Technical Advisory Committee determined that it was highly likely that drought and/or excessive heat would occur in each jurisdiction in Lee County in the future. They determined there was a near 100% chance of occurrence in the next year in each jurisdiction.

The Committee determined the magnitude of drought and heat would be large with more than 50% of each jurisdiction being affected. The threat of loss or damage to property ranked as limited with only 10% or more of the property affected being damaged or destroyed in each jurisdiction. The threat to safety and functions due to drought was ranked as negligible.

Overall, the vulnerability of each jurisdiction in Lee County to drought and excessive heat was rated 7.5, high, by the Committee. It was agreed that the effects of drought and heat would have a greater impact on agricultural concerns than residential or other business concerns.

# EARTHQUAKE

## Overview

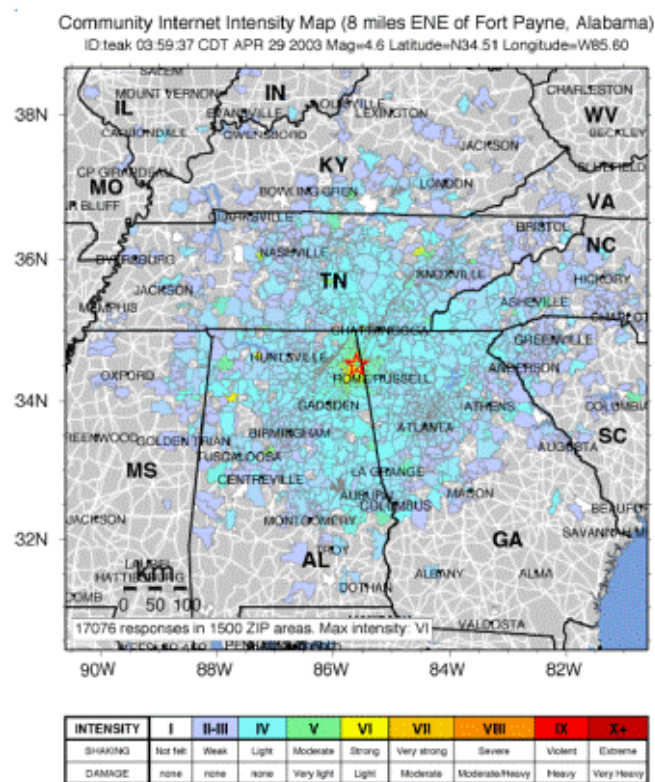
An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. This shaking can cause buildings and bridges to collapse; disrupt gas, electric, and phone service; and sometimes trigger landslides, avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis).

Earthquake strength is measured by magnitude and intensity. Magnitude refers to the energy released or the amount of slip occurring during the earthquake. The most commonly known measurement used for earthquake magnitude is the Richter Scale. The Richter Scale measures earthquake magnitude from <2(micro; not felt) to 10 (great; total destruction) with a seismograph.

The Modified Mercalli Intensity Scale is used to measure the intensity of the shaking caused by an earthquake not just at the center of the quake but at many locations. The Mercalli Scale measures intensity from I (not felt) to XII (extreme destruction) and is based on the reports and observations from people in affected areas. The United States Geological Service utilizes information from the Mercalli Scale to develop ShakeMaps and historic isoseismic maps.

## Previous Occurrence of Earthquakes

Earthquakes are not uncommon in Alabama. There are four seismic zones in or close to the state: the New Madrid Seismic Zone, the Southern Appalachian Seismic Zone, the South Carolina Seismic Zone and the Bahamas Fracture Seismic Zone.



Most of the earthquakes experienced in Alabama are associated with the Southern Appalachian Seismic Zone which extends into northern and north central Alabama. None of the seismic zones are located in Lee County. However there are deeply buried faults located across central portions of Lee County according to the Geological Survey of Alabama. These faults are depicted on the map on the following page.

While there are no reported instances of earthquakes located in Lee County, there are rare instances of tremors / quakes that happened hundreds of miles away that could be felt in Lee County.

The 4.9 magnitude Fort Payne Earthquake on April 29, 2003, was felt across Alabama and multiple southeastern states. As

depicted in the graphic on page 15 from the Geological Survey of Alabama, the earthquake was felt in Lee County. The Modified Mercalli Intensity Scale indicates the shaking was weak to light with no resulting damage in Lee County.

Table 5.4 details previous Earthquakes in Alabama or the Southeast which the Geological Survey of Alabama feels may have been felt in the jurisdictions of Lee County. Extent in table 5.4 is shown by the both the magnitude of the earthquake at its epicenter, as measured by the Richter Scale and the Modified Mercalli Intensity Scale rating for Lee County

**Table 5.4 Previous Earthquake Events Which Were Felt in Lee County.**

<b>Epicenter</b>	<b>Date</b>	<b>Magnitude at Epicenter</b>	<b>Mercalli Intensity In Lee Co</b>	<b>Shaking</b>	<b>Damage</b>	<b>Inj /Dth</b>
<b>1 Memphis, TN (New Madrid)</b>	02/07/1812	>7.0	IV	Light	None	None
<b>2 Charleston, SC</b>	08/13/1886	7.3	IV	Light	None	None
<b>3 Irondale, AL</b>	10/18/1916	5.1	III	Weak	None	None
<b>4 Fort Payne, AL</b>	04/29/2003	4.9	III/IV	Weak/Light	None	None

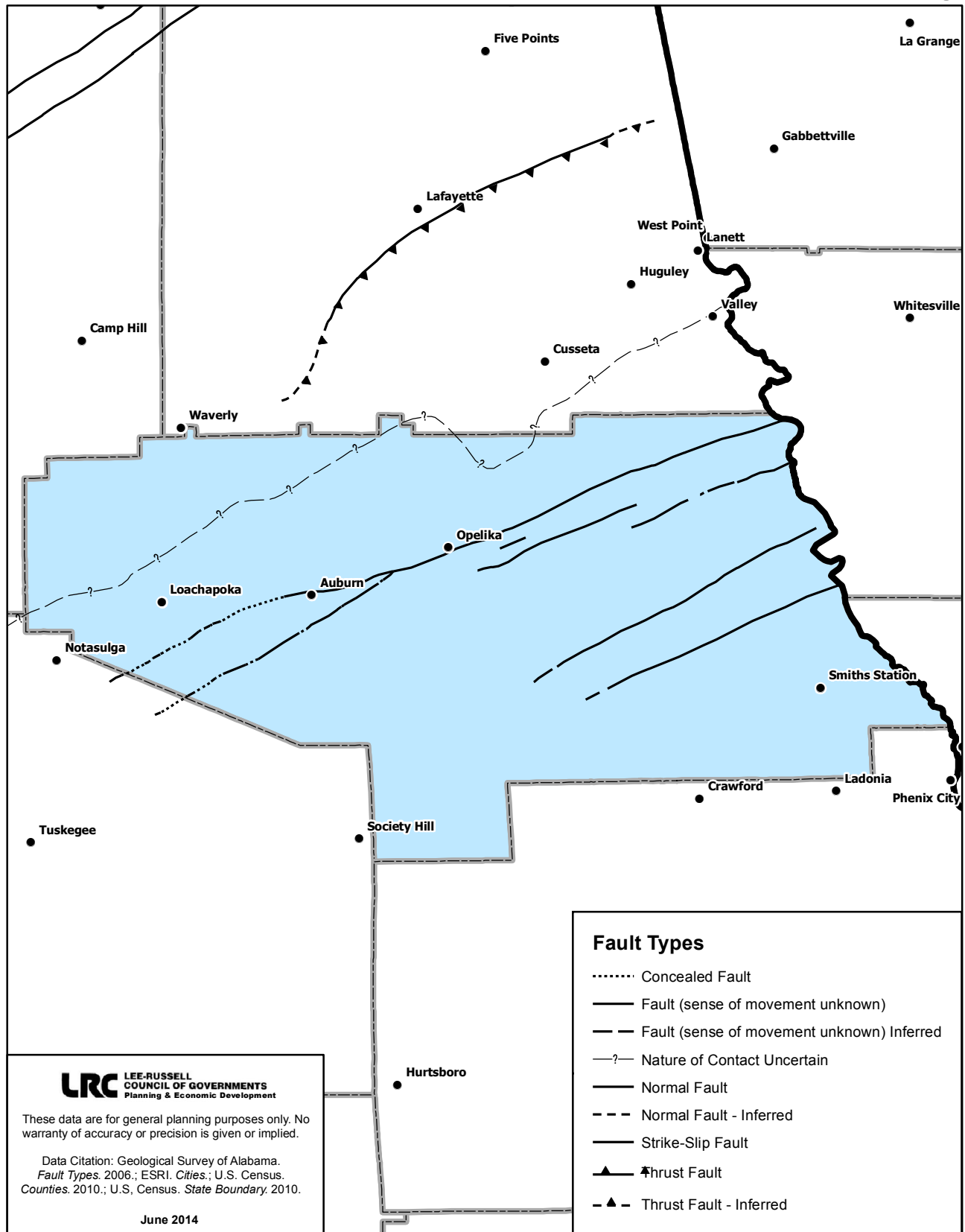
### **Future Probability of an Earthquake**

The probability that an earthquake will occur in any of the jurisdictions in Lee County was ranked unlikely, less than 1% probability in the next 100 years, by the Stakeholder and Technical Advisory Committee.

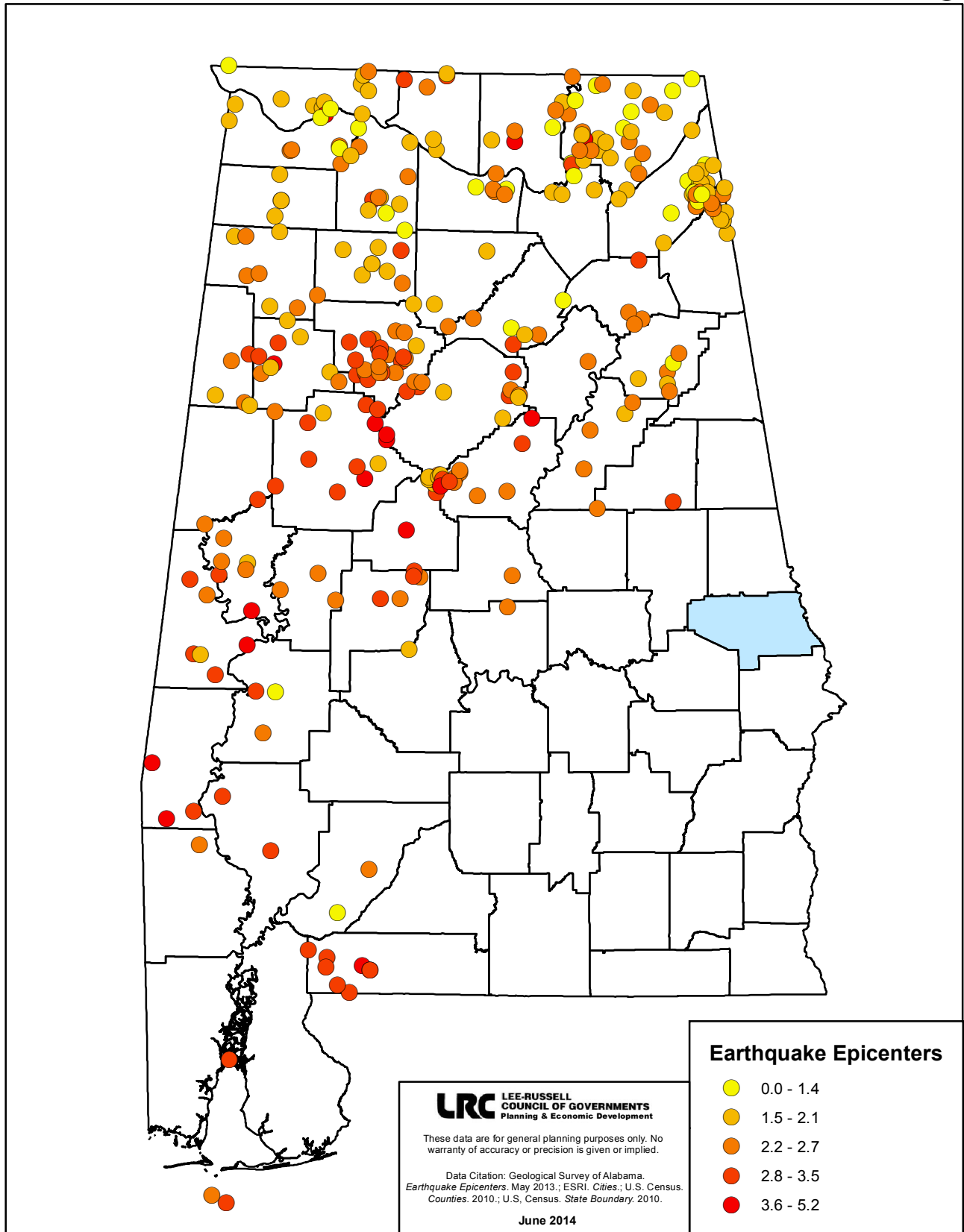
The threat of loss or damage to property and functions was ranked as negligible with less than 10% of property in any jurisdiction affected being damaged or destroyed and less than a 24 hour shutdown of facilities if this natural hazard occurred. The threat to safety was also ranked as negligible, with no serious injuries taking place.

Overall, the Committee rated the vulnerability of Auburn, Opelika, Smiths Station, Loachapoka and Lee County to earthquakes to be a 1, very low.

Map 5.1 - Geologic Fault Lines



Map 5.2 - Earthquake Epicenters (as of May 2013)



## **FLOOD**

### **Overview**

Floods are the most common and widespread of all natural disasters, except for fire. Most communities in the United States have experienced some kind of flooding, after spring rains, heavy thunderstorms, or winter snow thaws. Floods can be slow or fast rising.

A flood, as defined by the National Flood Insurance Program, is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from: overflow of inland or tidal waters, unusual and rapid accumulation or runoff of surface waters from any source, or a mudflow.

A flash flood is usually the result of extremely heavy rain or snow and is sudden. Raging torrents flow very fast through river bends after these heavy rains causing water to push forward well beyond banks and sweeping everything before them. Houses, bridges, and boulders can be tossed and rolled by a flash flood. No area in the United States is completely free from the threat of floods.

Mainstream flooding on Alabama Rivers occurs nearly every year. Flooding occurs most frequently between November and April, with a peak from February through April. However, flooding does occur at other times, when tropical storms or depressions track across the area in late summer and early fall.

The immediate threat from a flash flood/ flood is from the strength of the water, carrying debris and causing injuries and drowning. The long-term dangers are outbreak of disease, widespread animal deaths, broken sewer lines and widespread water supply decontamination, power outages, and fires. Additionally, large scale flooding can disrupt a community for a long time while the utilities are restored, debris cleaned, and property are repaired.

FEMA Floodway Maps are available digitally.

### **Previous Occurrence of Flood**

Brief occurrences of flash flooding are very common in Lee County. Most of these flash floods are localized, do not cause property damage and recede very quickly without causing disruption to the public. However there have been 14 incidences of flood or flash flood in Lee County since 1998 that were recorded on the National Climatic Data Center. Combined, these flood events caused \$3,845,000 in property damage and \$100,000 in crop damage.

All jurisdictions in Lee County participate in the National Flood Insurance Program with the exception of the Town of Loachapoka. Loachapoka has no flood risk and is not mapped. Statements of Participation in NFIP can be found in Appendix E, pages 14-19.

According to the National Flood Insurance Program data there are a total of 367 flood insurance policies in Lee County.

Jurisdiction	Auburn	Lee County	Loachapoka	Opelika	Smiths Station
# NFIP Policies	142	181	0	32	12

Repetitive flooding has occurred in the following areas:

In Auburn: Annalue Drive / Burke Place (residential), Boykin Street (residential), East Glenn (mix), East University (mix), Marion Circle (residential), Samford Ave (residential), Sanders Street (residential), White Street & Bragg (mix).

In Opelika: Columbus Pkwy & North Uniroyal Rd (commercial), Magazine Ave. (mix) Pepperall Pkwy & 20<sup>th</sup> St. (commercial), Saugahatchee Lake Road (residential).

In Lee County: Lee Road 325 (rural, residential), Lee Road 298 (mix), Lee Road 500 (residential) Mallard Creek Subdivision (residential).

A repetitive flood loss property is defined as is any insurable building for which two or more claims of more than \$1,000 were paid by the National Flood Insurance Program (NFIP) within any rolling ten-year period, since 1978. A RFL property may or may not be currently insured by the NFIP. Currently there are over 122,000 RL properties nationwide. There are 10 repetitive flood loss properties in Lee County according to data provided by the Alabama State NFIP Coordinator. All are residential.

On June 28, 1999, four to six inches of rainfall in a short period of time caused extensive flooding throughout Lee County. The hardest hit areas were Auburn and Opelika. Numerous roads and highways were closed in and around Auburn and Opelika. Numerous motorists drove into the water covered roads and were stranded. Bridges were washed away and destroyed. Several hundred homes received some sort of flood damage. Many businesses also received damage due to the high water. The flooding caused a reported \$1,500,000 in damage across the county.

On May 8, 2003, heavy rains forced the Chattahoochee River to flood eastern sections of Lee County including some back water sections along the river. Lee County Emergency Management Agency reported that the flooded area including the Tranquil Pines area in the southwest part of the county about 10 miles north of Smith's Station along the Chattahoochee River. Twenty homes sustained major damage and 25 homes were reported with minor damage. An additional 15 homes were affected by flood waters in other parts of the county.

Table 5.5 lists the flood and flash flood events that have impacted each jurisdiction in Lee County in the last 15 years. Extent in this table refers to the reported depth of flood waters. Unfortunately, this information was not available for all occurrences.

**Table 5.5: Overview of Flood Events In Lee County By Year**

Location	Date	Time	Type	Ext	Death	Injury	Property Damage	Crop Damage
<u>COUNTYWIDE</u>	01/07/1998	09:30	Flash Flood		0	0	25.00K	5.00K

Location	Date	Time	Type	Ext	Death	Injury	Property Damage	Crop Damage
<u>COUNTYWIDE</u>	06/28/1999	07:35	Flash Flood	2ft	0	0	1.500M	0.00K
<u>LEE (ZONE)</u>	05/08/2003	09:00	Flood		0	0	1.750M	100.00K
<u>COUNTYWIDE</u>	07/01/2003	08:30	Flash Flood		0	0	40.00K	0.00K
<u>AUBURN</u>	07/26/2004	14:45	Flash Flood	4ft	0	0	75.00K	0.00K
<u>COUNTYWIDE</u>	03/27/2005	16:00	Flash Flood		0	0	20.00K	0.00K
<u>COUNTYWIDE</u>	03/31/2005	01:08	Flash Flood		0	0	80.00K	0.00K
<u>COUNTYWIDE</u>	04/01/2005	07:00	Flash Flood		0	0	300.00K	0.00K
<u>AUBURN</u>	11/15/2006	13:15	Flash Flood		0	0	0.00K	0.00K
<u>SALEM</u>	09/19/2009	17:30	Flash Flood		0	0	0.00K	0.00K
<u>AUBURN</u>	11/10/2009	12:00	Flood		0	0	0.00K	0.00K
<u>STONEWALL</u>	12/14/2009	18:30	Flash Flood		0	0	5.00K	0.00K
<u>LEE CO.</u>	06/26/2011	17:45	Flash Flood	4ft	0	0	50.00K	0.00K
<u>AUBURN</u>	08/15/2013	04:15	Flash Flood	1ft	0	0	0.00K	0.00K
Total					0	0	3.845K	105K

Source: National Climatic Data Center 2014

### Future Probability of Flood

The Lee County Stakeholder and Technical Advisory Committee determined that it was likely that flood would occur in Auburn, Opelika, Smiths Station and Lee County in the future. They determined there was between a 10% and 100% chance of flooding occurring in each of these jurisdictions in the next year, or 1 chance in every 10 years of flood.

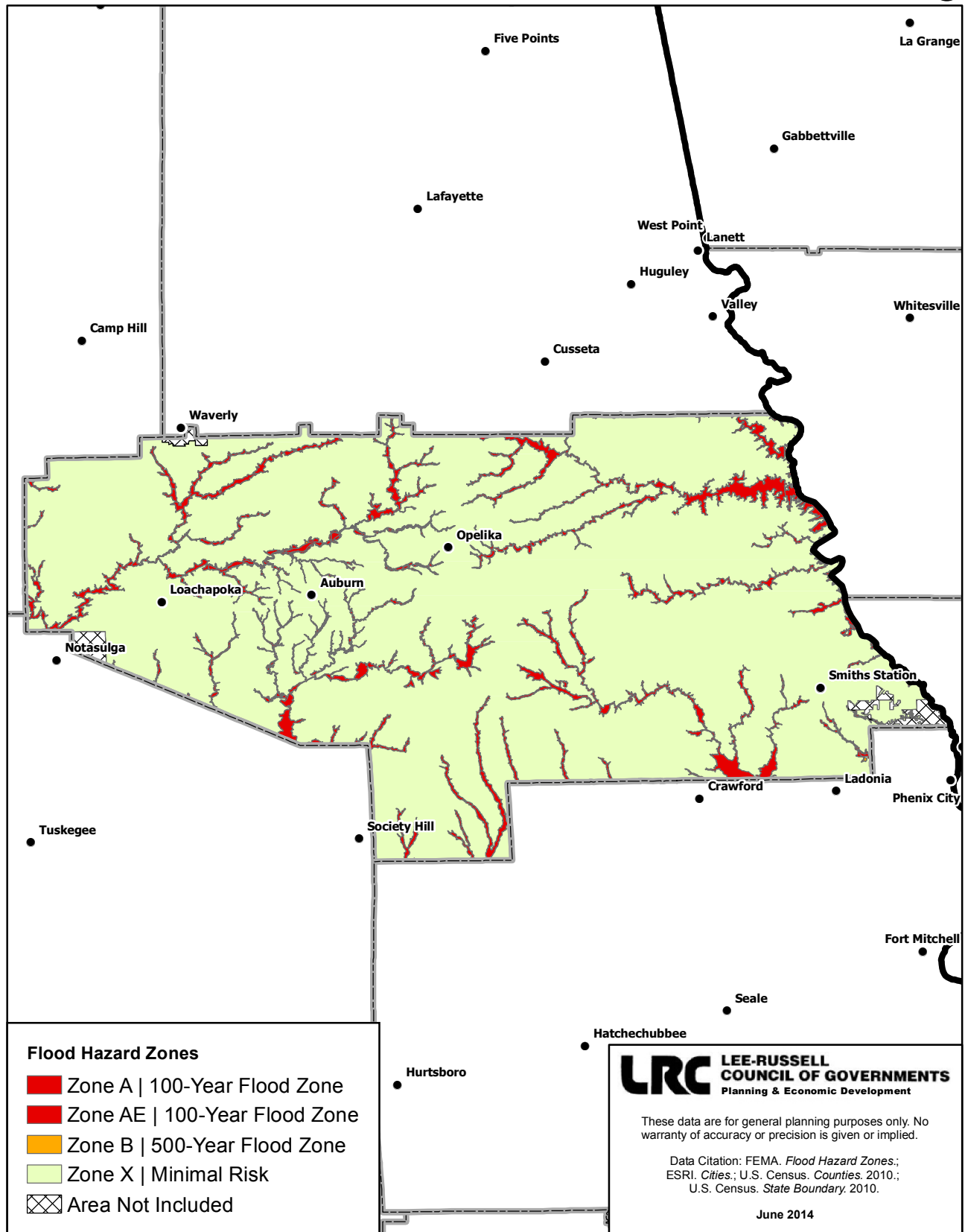
The Committee determined the magnitude of flood would be moderate with 25% to 50% of each jurisdiction being affected. The threat of loss or damage to property ranked as limited, with only 10% or more of the property in each jurisdiction being damaged or destroyed. The threat to safety and functions due to flood was ranked as negligible.

Overall, the vulnerability of Auburn, Opelika, Smiths Station and Lee County to flood was rated 6, medium, by the Committee. It was agreed that the effects of flood would have a greater impact on areas of the county that are designated as flood zones.

Loachapoka was not vulnerable to flood.



Map 5.3 - Flood Hazard Zones



## HAIL

### Overview

Hail occurs when updrafts in thunderstorms carry precipitation upward into extremely cold areas of the atmosphere where the precipitation freezes into ice. Both gravity and downdraft thunderstorm winds pull the ice crystals back down into warmer air. The ice crystal becomes larger as layers of moisture attach and freeze as the crystal is tossed between warmer and colder layers of atmosphere.

The average size of hailstone that falls to earth is ¼ inch. Large hailstones are an indication of powerful updraft and downdraft winds within a thunderstorm. Updraft winds in a thunderstorm of 20 miles per hour can create pea-size hail. Golf ball size hail requires winds of 55 miles per hour.

Annually, hail causes over 1 billion dollars in damage to crops and property in the United States.

### Previous Occurrence of Hail

Each jurisdiction in Lee County is vulnerable to hail events. Since 1950, there have been 71 reported incidents of hail. The largest hail reported was 3" in diameter and fell in Griffen Mill in March of 2013.

The most damaging hailstorm occurred on April 25, 2003. Several rotating thunderstorms, referred to as super cells, cut swaths of damage through Alabama. The first storm affected 12 counties dropping hail from penny to softball size. In Lee County a long track steady super cell moved from Loachapoka to Beauregard dropping hail as large as baseballs. Several automobiles and homes were damaged by the hail. Property damage along the storm path in Lee County was reported to total \$250,000.

On March 31, 2005, two severe storms formed very close together and produced large hail across Central Alabama. In Lee County, 1.75" hail fell in Loachapoka and Auburn. The hail from this storm caused \$23,000 in property damage.

Table 5.6 details previous occurrence of hail events in all jurisdictions on Lee County. Extent in this table refers to the recorded size of the hailstones.

**Table 5.6: Overview of Hail Events In Lee County By Year**

Location	Date	Time	Typ	Ext	Dth	Inj	Property Damage	Crop Damage
<b>Totals:</b>					0	0	360.00K	11.00K
<u>LEE CO.</u>	03/17/1965	15:30	Hail	2.00 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/03/1980	18:15	Hail	1.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	03/21/1982	15:50	Hail	1.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/23/1983	14:16	Hail	2.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/23/1983	14:56	Hail	1.50 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/19/1988	23:10	Hail	1.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/25/1988	17:41	Hail	1.75 in.	0	0	0.00K	0.00K

Location	Date	Time	Typ	Ext	Dth	Inj	Property Damage	Crop Damage
<u>LEE CO.</u>	11/04/1988	15:45	Hail	2.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/04/1989	14:20	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/04/1989	14:35	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/04/1989	15:35	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/04/1989	15:54	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	05/21/1990	13:35	Hail	1.75 in.	0	0	0.00K	0.00K
<u>Opelika</u>	03/18/1995	13:15	Hail	0.75 in.	0	0	0.00K	0.00K
<u>Gold Hill</u>	04/23/1995	17:15	Hail	1.75 in.	0	0	0.00K	0.00K
<u>Marvyn</u>	10/27/1995	15:53	Hail	0.88 in.	0	0	0.00K	0.00K
<u>Smiths</u>	12/18/1995	19:53	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SALEM</u>	03/16/1996	12:38	Hail	1.00 in.	0	0	12.00K	0.00K
<u>SMITH STATION</u>	03/18/1996	22:34	Hail	0.75 in.	0	0	8.00K	5.00K
<u>BEAUREGARD</u>	04/14/1996	20:05	Hail	0.75 in.	0	0	8.00K	2.00K
<u>SMITHS</u>	06/23/1996	11:38	Hail	0.75 in.	0	0	10.00K	0.00K
<u>AUBURN</u>	05/09/1997	15:00	Hail	0.75 in.	0	0	4.00K	0.00K
<u>SMITHS STATION</u>	05/09/1997	15:12	Hail	1.25 in.	0	0	6.00K	0.00K
<u>OPELIKA</u>	07/15/1997	16:02	Hail	0.75 in.	0	0	3.00K	0.00K
<u>SMITHS STATION</u>	11/01/1997	08:15	Hail	0.75 in.	0	0	2.00K	0.00K
<u>OPELIKA</u>	11/01/1997	15:40	Hail	1.75 in.	0	0	8.00K	0.00K
<u>MARVYN</u>	03/20/1998	02:59	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	04/08/1998	11:10	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	04/08/1998	14:30	Hail	1.00 in.	0	0	2.00K	2.00K
<u>AUBURN</u>	04/08/1998	14:33	Hail	1.00 in.	0	0	2.00K	2.00K
<u>OPELIKA</u>	04/08/1998	14:37	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/03/1998	16:30	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	06/05/1998	15:55	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	06/25/1998	12:48	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	10/07/1998	16:00	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	10/07/1998	16:10	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	02/27/1999	21:45	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	05/06/1999	09:30	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	05/13/1999	14:25	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/13/1999	14:40	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	06/04/1999	15:25	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	06/04/1999	15:40	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	02/13/2000	16:40	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	02/13/2000	16:44	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	02/13/2000	16:48	Hail	1.00 in.	0	0	0.00K	0.00K
<u>SALEM</u>	02/13/2000	16:56	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	03/10/2000	16:05	Hail	0.75 in.	0	0	0.00K	0.00K

Location	Date	Time	Typ	Ext	Dth	Inj	Property Damage	Crop Damage
<u>SMITHS</u>	08/10/2000	15:30	Hail	1.00 in.	0	0	1.00K	0.00K
<u>AUBURN</u>	08/10/2000	16:00	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	06/03/2001	12:38	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LOACHAPOKA</u>	07/10/2001	17:00	Hail	1.00 in.	0	0	0.00K	0.00K
<u>MARVYN</u>	05/30/2002	15:18	Hail	1.00 in.	0	0	2.00K	0.00K
<u>SALEM</u>	06/04/2002	15:25	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	08/20/2002	15:37	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	08/20/2002	16:10	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	01/22/2003	06:15	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	03/14/2003	18:30	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	03/19/2003	17:10	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LOACHAPOKA</u>	04/25/2003	15:56	Hail	2.75 in.	0	0	250.00K	0.00K
<u>OPELIKA</u>	10/19/2004	12:32	Hail	1.75 in.	0	0	2.00K	0.00K
<u>SMITHS</u>	03/22/2005	12:34	Hail	1.75 in.	0	0	16.00K	0.00K
<u>LOACHAPOKA</u>	03/27/2005	16:26	Hail	0.75 in.	0	0	0.00K	0.00K
<u>LOACHAPOKA</u>	03/31/2005	00:00	Hail	1.75 in.	0	0	23.00K	0.00K
<u>LOACHAPOKA</u>	04/22/2005	15:03	Hail	1.00 in.	0	0	1.00K	0.00K
<u>SMITHS</u>	05/20/2005	14:18	Hail	1.00 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	08/17/2005	15:05	Hail	0.75 in.	0	0	0.00K	0.00K
<u>BLEECKER</u>	12/28/2005	12:30	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	12/28/2005	12:43	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	03/20/2006	19:42	Hail	1.00 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	03/20/2006	20:10	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	04/08/2006	07:05	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/10/2006	15:08	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/13/2006	20:02	Hail	0.88 in.	0	0	0.00K	0.00K
<u>LOACHAPOKA</u>	10/11/2006	18:45	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	06/11/2007	21:00	Hail	0.88 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	04/04/2008	18:00	Hail	0.75 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	04/04/2008	18:10	Hail	1.00 in.	0	0	0.00K	0.00K
<u>ANDREWS</u>	04/04/2008	18:20	Hail	1.75 in.	0	0	0.00K	0.00K
<u>MOTTS</u>	03/28/2009	11:57	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SMITHS STATION</u>	03/28/2009	11:58	Hail	0.88 in.	0	0	0.00K	0.00K
<u>MOTTS</u>	03/28/2009	12:34	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SHOTWELL</u>	03/28/2009	12:55	Hail	0.75 in.	0	0	0.00K	0.00K
<u>ROXANA</u>	04/10/2009	18:22	Hail	1.00 in.	0	0	0.00K	0.00K
<u>SMITHS STATION</u>	04/10/2009	19:12	Hail	1.25 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	05/28/2009	14:10	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	05/28/2009	14:21	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	06/02/2009	16:30	Hail	0.88 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2009	12:20	Hail	0.75 in.	0	0	0.00K	0.00K

Location	Date	Time	Typ	Ext	Dth	Inj	Property Damage	Crop Damage
<u>CAWATCHEE</u>	04/24/2010	03:44	Hail	0.88 in.	0	0	0.00K	0.00K
<u>SMITHS STATION</u>	04/24/2010	19:24	Hail	0.75 in.	0	0	0.00K	0.00K
<u>SALEM</u>	08/02/2010	15:33	Hail	1.00 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	04/04/2011	21:30	Hail	0.75 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	04/15/2011	16:54	Hail	1.75 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	06/16/2011	10:29	Hail	1.00 in.	0	0	0.00K	0.00K
<u>LEE CO.</u>	06/17/2011	13:55	Hail	1.00 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/21/2012	13:21	Hail	0.88 in.	0	0	0.00K	0.00K
<u>OPELIKA</u>	05/21/2012	13:30	Hail	1.00 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2012	16:52	Hail	1.00 in.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2012	17:18	Hail	0.88 in.	0	0	0.00K	0.00K
<u>WHATLEY XRD</u>	03/18/2013	16:25	Hail	1.00 in.	0	0	0.00K	0.00K
<u>GRIFFEN MILL</u>	03/18/2013	16:40	Hail	3.00 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	03/18/2013	17:08	Hail	1.75 in.	0	0	0.00K	0.00K
<u>SMITHS</u>	03/18/2013	17:17	Hail	1.50 in.	0	0	0.00K	0.00K
Total							\$360 K	\$11 K

Source: National Climatic Data Center 2014

### Future Probability of Hail Events

The Lee County Stakeholder and Technical Advisory Committee determined that it was highly likely that hail storms would occur in each jurisdiction in Lee County in the future. They determined there was a near 100% probability of a hail event occurring in Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County in the next year.

The Committee determined the magnitude of hail events would be small, with 10%-25% of each jurisdiction being affected. The threat of loss or damage to property ranked as limited with only 10% or more of the property affected being damaged or destroyed in each jurisdiction. The threat to safety and loss of function due to hail was ranked as negligible.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to hail was rated 6.5, medium, by the Committee.

## LIGHTNING

### Overview

Lightning, that is sometimes unseen, is an electrical discharge that results from the buildup of positive and negative charges within a thunderstorm. When the buildup becomes strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between the clouds and the ground.

In the atmospheric electrical discharge, a leader of a bolt of lightning can travel at speeds of 60,000 m/s (130,000 mph), and can reach temperatures approaching 30,000 °C (54,000 °F), hot enough to fuse silica sand into glass channels known as fulgurites which are normally hollow and can extend some distance into the ground.

There are some 16 million lightning storms in the world every year. The rapid heating and cooling of air near the lightning causes thunder. Lightning is a major threat during a thunderstorm.

In the United States, 75 to 100 Americans are hit and killed each year by lightning, making it a major killer amongst all natural hazards, second only to flooding. However, of the population struck by lightning, only 10% are killed while the other 90% are left with various disabilities such as irreversible brain damage. While thunderstorms and lightning can be found throughout the United States, they are most likely to occur in the central and southern states.

### Previous Occurrence

Each jurisdiction in Lee County is vulnerable to the effects of lightning. Lightning occurs frequently throughout Lee County every year. Since 1950, there have been 12 reported incidences where lightning caused significant property damage. Combined, these lightning events have caused a reported \$335,500 in property damage.

On July 22, 2008 a bolt of lightning from a thunderstorm struck a house in Beehive, causing it to catch fire. The roof was completely burned. One occupant fortunately escaped without injury. Damage from the lightning was reported to be \$100,000.

A lightning strike caused significant damage to an Opelika Power substation on July 23, 2001. The lightning set fire to the substation. Flames reached 50 feet in the air. Damage was reported to be \$75,000.

**Table 5.7: Overview of Lightning Events In Lee County By Year**

Location	Date	Time	Type	Death	Injury	Property Damage	Crop Damage
<u>AUBURN</u>	06/23/1996	13:18	Lightning	0	0	15.00K	0.00K
<u>AUBURN</u>	06/23/1996	13:48	Lightning	0	0	15.00K	0.00K
<u>AUBURN</u>	09/09/1996	20:00	Lightning	0	0	20.00K	0.00K
<u>AUBURN</u>	04/27/1997	12:30	Lightning	0	0	10.00K	0.00K
<u>AUBURN</u>	07/11/1998	14:50	Lightning	0	0	10.00K	0.00K
<u>OPELIKA</u>	05/30/2002	16:32	Lightning	0	0	3.00K	0.00K

<u>OPELIKA</u>	07/23/2002	20:45	Lightning	0	0	75.00K	0.00K
<u>OPELIKA</u>	12/24/2002	04:15	Lightning	0	0	7.00K	0.00K
<u>MC CULLOH</u>	08/15/2003	14:56	Lightning	0	0	1.50K	0.00K
<u>AUBURN</u>	04/14/2007	14:45	Lightning	0	0	2.00K	0.00K
<u>BEEHIVE</u>	07/22/2008	13:15	Lightning	0	0	100.00K	0.00K
<u>PINE GROVE</u>	05/10/2009	14:35	Lightning	0	0	75.00K	0.00K
<b>Totals:</b>				0	0	333.50K	0.00K

Source: National Climatic Data Center 2014  
No events found between 5/11/2009 and 8/31/2014.

### Future Probability of Lightning

Although there have been no lightening events causing significant losses to health or property in Lee County since 2009, the Lee County Stakeholder and Technical Advisory Committee determined that it was highly likely that lightning would occur in each jurisdiction of Lee County in the future. They determined there was a near 100% chance of a lightning event in the next year in Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County.

The Committee determined the magnitude of lightning would be very small with less than 10% of each jurisdiction being affected. The threat of loss or damage to property ranked as limited in each jurisdiction, with only 10% or more of the property being damaged or destroyed. The threat to safety and loss of function due to lightning was ranked as negligible.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to lightning was rated 6, medium, by the Committee.

## **SINKHOLES**

### **Overview**

Sinkholes are a common, naturally occurring geologic feature and pose hazards to property and the environment. Areas that have sinkholes are known as karst terrain or karst topography. The bedrock under areas where sinkholes are prevalent is usually made of limestone. Over time, the acid content in rainwater dissolves the limestone bedrock forming cracks, crevices and caves. When the roof of the cave can no longer support the weight of the ground above, it collapses forming the sinkhole. (Geological Survey of Alabama). Sinkholes can also be caused by a drop in the water table due to drought, excessive rainfall/flood, drainage problems or heavy construction.

Sinkholes can sometimes cause substantial damage, threaten water and environmental resources by draining streams, lakes, and wetlands, and creating pathways for transmitting surface waters directly into underlying aquifers. Where these pathways are developed, movement of surface contaminants into the underlying aquifer systems can persistently degrade ground-water resources. In some areas, sinkholes are used as storm drains, and because they are a direct link with the underlying aquifer systems it is important that their drainage areas be kept free of contaminants. Conversely, when sinkholes become plugged, they can cause flooding by capturing surface-water flow and can create new wetlands, ponds, and lakes. The largest sinkhole in Alabama had a 300' diameter and was 100' deep.

### **Previous Occurrence of Sinkholes**

Lee County has experienced some sinkhole incidents since 2002 on Lee Road 166 and Lee Road 148 in the Spring Villa area of Lee County, where a mining operation was taking place. The majority of the incidents occurred on private property. One section of the county road required extensive structural work, costing the County Highway Department \$1,000,000, to prevent further deterioration.

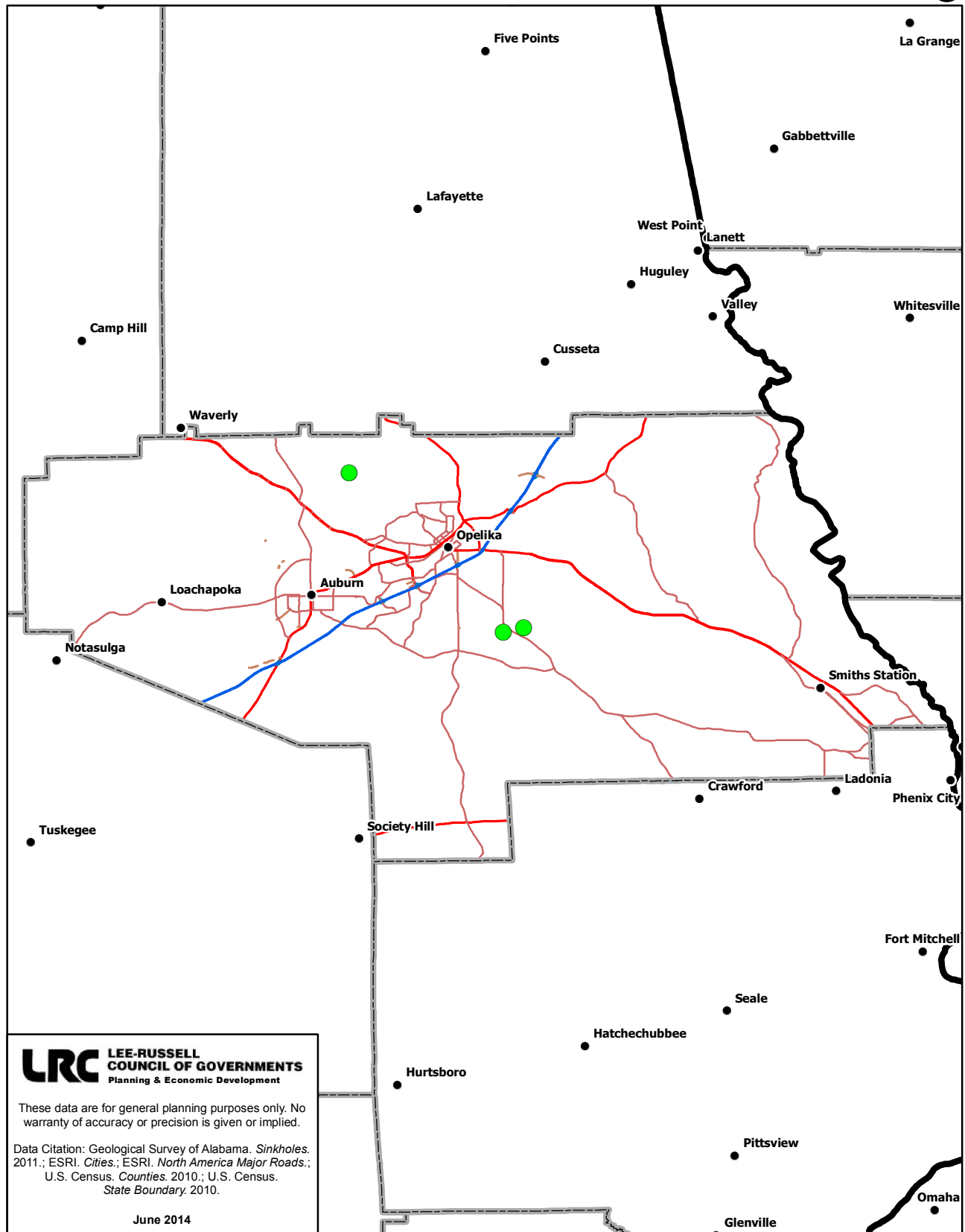
Since this area began experiencing instances of sinkholes, landowners have had to make arrangements for garbage pickup, school bus routes and other issues that require anything other than a standard size car, van or SUV as the county has closed these roads to all but standard neighborhood traffic. Residents have had vehicles fall into sinkholes, have had to shore up houses because of rock cracking, have had injury to person or animals and have had septic tanks condemned, alarm service disconnected or disruption in water service.

In late spring and early July, 2014, two sinkholes occurred in Lee County and received media coverage. The first on Lee Road 704 in Opelika was 35 feet deep and occurred in a resident's back yard. This location is near the Spring Villa sinkholes. The second occurred in the backyard of an unoccupied house the Lake Subdivision which is on the border of Lee and Russell County. This sinkhole is believed to be caused by drainage issues on adjacent private property. It was reported to be approximately 30 feet long, 12 feet deep and 12 feet wide.

The map on the following page shows sinkhole locations in Lee County through 2011.



Map 5.4 - Sinkholes (as of November 2011)



### **Future Probability of Sinkholes**

The probability that a sinkhole will occur in each jurisdiction in Lee County was rated as possible by the Stakeholder and Technical Advisory Committee. The Committee believed there was between 1% and 10% chance of a sinkhole occurring in the next year, especially in the Spring Villa community of Lee County.

The Committee believed the magnitude of a sinkhole occurrence would be very small with less than 10% of each jurisdiction being affected. The threat of loss or damage to property and functions were found to be negligible, with less than 10% of property severely damaged and only very temporary shutdowns. The threat to safety was also ranked as negligible, with very few injuries. Overall, the Committee ranked the vulnerability of each jurisdiction in Lee County to sinkholes to be a 1, very low.

## THUNDERSTORMS /HIGH WIND

### Overview

A thunderstorm is the result of a combination of moisture, rapidly rising warm air and a force capable of lifting air such as a warm and cold front, a sea breeze or a mountain. All thunderstorms are accompanied by winds that can become destructive at 58 miles per hour. Heavy rains can also occur during a thunderstorm.

Thunderstorms may occur singly, in clusters, or in lines – sometime with very little warning. Thus, it is possible for several thunderstorms to affect one location in the course of a few hours. Some of the most severe weather occurs when a single thunderstorm affects one location for an extended time.

### Previous Occurrence of Thunderstorm, High Wind Events

Each jurisdiction in Lee County is vulnerable to the effects of thunderstorms and experiences multiple occurrences of this hazard every year. Generally, thunderstorms are a part of life in Lee County and do not cause disruption, threat to safety or significant property damage. But thunderstorms can be deadly.

On the evening of March 6, 1996, a downburst produced a damage path 2 miles long through the Smiths Community of southeast Lee County. Winds were clocked at 70 knots. The storm caused one death, destroyed 2 mobile homes, downed trees and power line, and tore shingles off of roofs. Property damage was estimated at \$130,000.

On the afternoon of June 5, 1998, a thunderstorm with 55 knot winds blew an Auburn University student under a car, killing him.

On September 16, 2004, high winds, with gusts up to 70 miles per hour, blew down hundreds of trees and power lines across Lee County. At least 8,000 customers were without power during the height of the storm and power was not restored in all locations for three days. Reportedly, 25 homes suffered major damage and another 100 or more homes reported moderate damage. Many more homes and structures received minor damage. Damage estimates were over \$1,000,000.

Table 5.8 below shows 87 thunderstorms with winds measuring 30 knots or more, which have impacted jurisdictions in Lee County since 1981. Combined, these storms caused 2 deaths and \$736,000 in property/crop damage.

**Table 5.8: Overview of Thunderstorm Wind Events In Lee County By Year**

Location	Date	Time	Type	Ext	Dth	Inj	Property Damage	Crop Damage
<u>LEE CO.</u>	03/18/1981	10:25	Thunderstorm Wind	55 kts.	0	0	0.00K	0.00K
<u>LEE CO.</u>	04/05/1985	19:10	Thunderstorm Wind	53 kts.	0	0	0.00K	0.00K
<u>LEE CO.</u>	07/31/1986	16:00	Thunderstorm Wind	55 kts.	0	0	0.00K	0.00K
<u>LEE CO.</u>	07/23/1990	16:28	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
<u>Auburn</u>	06/26/1994	17:40	Thunderstorm Wind	50 kts.	0	0	50.00K	0.00K

Location	Date	Time	Type	Ext	Dth	Inj	Property Damage	Crop Damage
<u>Opelika</u>	05/15/1995	15:22	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>OPELIKA</u>	01/26/1996	22:20	Thunderstorm Wind	50 kts.	0	0	15.00K	0.00K
<u>OPELIKA</u>	03/06/1996	06:00	Thunderstorm Wind	50 kts.	0	0	80.00K	10.00K
<u>OPELIKA</u>	03/06/1996	23:50	Thunderstorm Wind	70 kts.	1	0	50.00K	0.00K
<u>PHENIX CITY</u>	06/20/1996	16:00	Thunderstorm Wind	50 kts.	0	0	25.00K	0.00K
<u>AUBURN</u>	07/05/1996	18:20	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
<u>OPELIKA</u>	09/21/1996	14:00	Thunderstorm Wind	50 kts.	0	0	8.00K	1.00K
<u>AUBURN</u>	01/24/1997	09:00	Thunderstorm Wind	50 kts.	0	0	7.00K	1.00K
<u>AUBURN</u>	06/05/1998	15:50	Thunderstorm Wind	55 kts.	1	0	10.00K	0.00K
<u>AUBURN</u>	06/19/1998	13:35	Thunderstorm Wind	50 kts.	0	0	15.00K	0.00K
<u>AUBURN</u>	07/11/1998	14:50	Thunderstorm Wind	55 kts.	0	0	20.00K	0.00K
<u>HOPEWELL</u>	05/07/1999	18:25	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>LOACHAPOKA</u>	09/08/1999	17:55	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K
<u>COUNTYWIDE</u>	07/20/2000	18:55	Thunderstorm Wind	55 kts.	0	0	30.00K	0.00K
<u>AUBURN</u>	07/23/2000	13:00	Thunderstorm Wind	55 kts.	0	0	2.00K	0.00K
<u>OPELIKA</u>	01/19/2001	10:40	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>LOACHAPOKA</u>	03/15/2001	02:10	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>AUBURN</u>	03/15/2001	02:15	Thunderstorm Wind	52 kts.	0	0	2.00K	0.00K
<u>COUNTYWIDE</u>	07/05/2001	16:25	Thunderstorm Wind	55 kts.	0	0	2.00K	0.00K
<u>OPELIKA</u>	01/22/2003	05:45	Thunderstorm Wind	65 kts.	0	0	35.00K	0.00K
<u>OPELIKA</u>	05/18/2003	11:23	Thunderstorm Wind	50 kts.	0	0	8.00K	0.00K
<u>LOACHAPOKA</u>	06/13/2003	13:00	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
<u>AUBURN</u>	05/31/2004	06:00	Thunderstorm Wind	50 kts.	0	0	16.00K	0.00K
<u>OPELIKA</u>	10/19/2004	12:17	Thunderstorm Wind	50 kts.	0	0	8.00K	0.00K
<u>LOACHAPOKA</u>	10/19/2004	12:27	Thunderstorm Wind	50 kts.	0	0	17.00K	0.00K
<u>SALEM</u>	10/19/2004	12:56	Thunderstorm Wind	50 kts.	0	0	3.00K	0.00K
<u>COUNTYWIDE</u>	01/13/2005	14:55	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
<u>CENTRAL PORTION</u>	04/22/2005	15:22	Thunderstorm Wind	52 kts.	0	0	2.00K	0.00K
<u>COUNTYWIDE</u>	04/30/2005	05:57	Thunderstorm Wind	52 kts.	0	0	4.00K	0.00K
<u>AUBURN</u>	04/30/2005	07:23	Thunderstorm Wind	52 kts.	0	0	2.00K	0.00K
<u>SMITHS</u>	05/20/2005	14:18	Thunderstorm Wind	52 kts.	0	0	7.00K	0.00K
<u>AUBURN</u>	03/20/2006	19:05	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
<u>OPELIKA</u>	03/20/2006	19:30	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
<u>OPELIKA</u>	05/10/2006	15:08	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>SMITHS</u>	05/10/2006	15:09	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>SMITHS STATION</u>	07/28/2006	22:01	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
<u>PINE GROVE</u>	10/11/2006	17:40	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K
<u>PEPPERELL</u>	06/11/2007	21:08	Thunderstorm Wind	55 kts.	0	0	20.00K	0.00K
<u>CHEWACLA</u>	07/20/2007	13:30	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>SMITHS</u>	07/20/2007	13:50	Thunderstorm Wind	50 kts.	0	0	50.00K	0.00K
<u>(AUO)AUBURN</u>	01/31/2008	21:10	Thunderstorm Wind	51 kts.	0	0	5.00K	0.00K
<u>OPELIKA</u>								
<u>PINE GROVE</u>	04/04/2008	18:30	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>BEULAH</u>	06/11/2008	14:35	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K
<u>SHOTWELL</u>	07/22/2008	13:12	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K

Location	Date	Time	Type	Ext	Dth	Inj	Property Damage	Crop Damage
<u>AUBURN</u>	08/07/2008	16:07	Thunderstorm Wind	45 kts.	0	0	10.00K	0.00K
<u>AUBURN</u>	08/07/2008	16:20	Thunderstorm Wind	45 kts.	0	0	0.50K	0.00K
<u>MITCHELL XRD</u>	08/07/2008	16:20	Thunderstorm Wind	45 kts.	0	0	0.50K	0.00K
<u>MOTTS</u>	08/07/2008	16:57	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>AUBURN</u>	05/03/2009	15:15	Thunderstorm Wind	50 kts.	0	0	50.00K	0.00K
<u>OPELIKA</u>	05/03/2009	15:21	Thunderstorm Wind	53 kts.	0	0	0.00K	0.00K
<u>PINE GROVE</u>	05/10/2009	14:35	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>AUBURN</u>	06/14/2009	12:55	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
<u>BEEHIVE</u>	06/14/2009	12:55	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>BEEHIVE</u>	06/15/2009	23:36	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K
<u>OPELIKA</u>	06/15/2009	23:48	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>OPELIKA</u>	06/28/2009	16:07	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>ROXANA</u>	06/28/2009	16:18	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>MITCHELL XRD</u>	07/28/2009	14:24	Thunderstorm Wind	43 kts.	0	0	2.00K	0.00K
<u>SMITHS STATION</u>	08/05/2009	14:59	Thunderstorm Wind	35 kts.	0	0	1.00K	0.00K
<u>PEPPERELL</u>	05/29/2010	12:00	Thunderstorm Wind	45 kts.	0	0	25.00K	0.00K
<u>AUBURN</u>	04/04/2011	21:31	Thunderstorm Wind	50 kts.	0	0	50.00K	0.00K
<u>SMITHS STATION</u>	04/04/2011	21:55	Thunderstorm Wind	61 kts.	0	0	2.00K	0.00K
<u>AUBURN</u>	04/15/2011	17:25	Thunderstorm Wind	50 kts.	0	0	15.00K	0.00K
<u>MOTTS</u>	05/13/2011	16:30	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>BEEHIVE</u>	05/26/2011	14:20	Thunderstorm Wind	35 kts.	0	0	5.00K	0.00K
<u>LEE CO.</u>	06/26/2011	17:34	Thunderstorm Wind	50 kts.	0	0	3.00K	0.00K
<u>RIDGE GROVE</u>	07/01/2011	14:52	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>MOTTS</u>	07/01/2011	21:26	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>SALEM</u>	10/13/2011	11:29	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
<u>MITCHELL XRD</u>	06/10/2012	14:03	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
<u>WHATLEY XRD</u>	07/03/2012	13:33	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>BEULAH</u>	07/03/2012	13:36	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>PRINCE XRD</u>	07/05/2012	16:22	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2012	16:47	Thunderstorm Wind	51 kts.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2012	16:47	Thunderstorm Wind	51 kts.	0	0	0.00K	0.00K
<u>AUBURN</u>	07/05/2012	17:03	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>BOTTLE</u>	07/10/2012	16:55	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>PEPPERELL</u>	01/30/2013	13:10	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>MOTTS</u>	03/05/2013	15:50	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<u>AUBURN</u>	06/28/2013	12:53	Thunderstorm Wind	55 kts.	0	0	0.00K	0.00K
<u>OPELIKA</u>	07/24/2013	12:45	Thunderstorm Wind	55 kts.	0	0	0.00K	0.00K
<u>PINE GROVE</u>	07/24/2013	12:46	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
<b>Totals:</b>					2	0	724.00K	12.00K

Source: National Climatic Data Center 2014

**Table 5.9: Overview of High Wind Events In Lee County By Year**

Location	Date	Time	Type	Ext	Dth	Inj	Prop Damage	Crop Damage
<u>LEE (ZONE)</u>	09/16/2004	05:30	High Wind	60 kts. EG	0	0	1.000M	0.00K
<b>Totals:</b>					0	0	1.000M	0.00K

**Future Probability of Thunderstorms and High Wind Events**

Each jurisdiction in Lee County is very susceptible to thunderstorms and high wind events. The Stakeholder and Technical Advisory Committee determined the frequency of these hazards to be highly likely, with a near 100% probability of each jurisdiction experiencing them in the next year. The Committee also felt that the magnitude of these events would be large with over 50% of each jurisdiction being affected.

Threat to safety was found to be catastrophic, with death and injury possible, because deaths had occurred during past thunderstorm and high wind events. Damage to property and function were determined to be limited, with more than 10% of property in each jurisdiction severely damaged and shutdown of facilities lasting more than a day.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to thunderstorms and high wind was ranked a 10, very high.

## TORNADOES

### Overview

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is a result of a thunderstorm (or sometimes as a result of a hurricane) and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornado season is generally March-August and again in November-December, although tornadoes can occur at any time of year. Over 80 percent of all tornadoes strike between noon and midnight.

The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. The damage from a tornado is a result of the high wind velocity and wind-blown debris. Damage paths can be in excess of 1 mile wide and 50 miles long. Tornadoes are the most unpredictable of storms.

Tornadoes are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks fourth in the nation in the number of killer tornadoes and fifth in the number of fatalities. The entire state is vulnerable to the threat of tornadoes.

Dr. T. Theodore Fujita developed the Fujita Tornado Damage Scale (F-Scale) to provide estimates of tornado strength based on damage surveys. Since it's practically impossible to make direct measurements of tornado winds, an estimate of the winds based on damage is the best way to classify a tornado.

The new Enhanced Fujita Scale (EF-Scale) addresses limitations identified by meteorologists and engineers since the introduction of the Fujita Scale in 1971. The new scale identifies 28 different free standing structures most affected by tornadoes taking into account construction quality and maintenance.

Tornadoes are classified by the damaging pattern which is categorized by EF0 through EF5. Table 5.10 below describes the Fujita Tornado Measurement Scale which details each tornado category and the expected damages and corresponding wind speed that results from this type of tornado.

**Table 5.10: Fujita Tornado Measurement Scales**

EF Scale	Old F Scale	Typical Damage
<b>EF-0 (65-85 mph)</b>	F0 (40-72 mph)	<b>Light Damage:</b> Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over.
<b>EF-1 (86-110 mph)</b>	F1 (73-112 mph)	<b>Moderate Damage:</b> Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
<b>EF-2 (111-135 mph)</b>	F2 (113-157 mph)	<b>Considerable Damage:</b> Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
<b>EF-3 (136-165 mph)</b>	F3 (158-207 mph)	<b>Severe Damage:</b> Entire stories of well-constructed houses destroyed; severe damage to large buildings such

		as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
<b>EF-4 (166-200 mph)</b>	F4 (208-260 mph)	<b>Devastating Damage:</b> Whole frame houses Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated.
<b>EF-5 (&gt;200 mph)</b>	F5 (261-318 mph)	<b>Incredible Damage:</b> Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 m (109 yd); high-rise buildings have significant structural deformation; incredible phenomena will occur.

Source: Storm Prediction Center, 2014

### Previous Occurrence of Tornado Events

There have been 24 tornado occurrences in Lee County since 1953. Combined, tornadoes have caused 6 deaths, injured 231 people and caused 13.7 million in property damage.

The most destructive tornado in the history of Lee County occurred on April 18, 1953. The F3 storm caused 6 deaths, 195 injuries and 2.5 million dollars in damage. The tornado was 200 yards wide and traveled 34 miles. At least 50 homes were destroyed.

On November 16, 2011, several waves of thunderstorms swept through Central Alabama. Just before midday, a tornado touched down in western Lee County and traveled northeastward through Loachapoka, Auburn and Opelika. The EF-1 tornado traveled 31 miles leaving a path 700 yards wide through some of the most heavily populated areas of the County. Mobile homes were destroyed, and houses were heavily damaged by falling trees. Auburn University and Auburn High School were both in the tornado's path and sustained minor damage. The storm caused 4 million dollars in property damage and injured 3 people.

In the predawn hours of April 29, 2014, an EF-3 tornado tore through southeastern Lee County. The tornado path was 11.5 miles long and 1,200 yards wide. Wind speeds were estimated to be 140 mph. Six mobile homes were rolled and completely destroyed. Three wood frame homes were lifted off their foundations and destroyed. A split level home lost its roof and upper level. Many more homes sustained roof and shingle damages. Hundreds of trees were snapped off and uprooted. Thirteen people were injured.

Table 5.11 provides details of each tornado that has struck Lee County since 1953. Extent is measured by the Fujita Scale.

**Table 5.11: Overview of Tornado Events In Lee County By Year**

Location	Date	Time	Type	Ext	Death	Injury	Property Damage	Crop Damage
<u>LEE CO.</u>	04/18/1953	17:00	Tornado	F3	6	195	2.500M	0.00K
<u>LEE CO.</u>	12/05/1954	12:00	Tornado	F3	0	4	250.00K	0.00K
<u>LEE CO.</u>	08/15/1957	17:30	Tornado	F1	0	0	2.50K	0.00K
<u>LEE CO.</u>	01/10/1975	18:30	Tornado	F2	0	0	2.500M	0.00K
<u>LEE CO.</u>	06/08/1978	13:00	Tornado	F1	0	0	25.00K	0.00K
<u>LEE CO.</u>	04/13/1980	14:30	Tornado	F2	0	13	2.500M	0.00K



Location	Date	Time	Type	Ext	Death	Injury	Property Damage	Crop Damage
<u>LEE CO.</u>	05/03/1984	13:30	Tornado	F2	0	1	250.00K	0.00K
<u>Opelika</u>	08/02/1994	17:25	Tornado	F0	0	0	50.00K	0.00K
<u>OPELIKA</u>	07/22/1997	13:48	Tornado	F0	0	0	12.00K	0.00K
<u>J C MEADOWS XRDS</u>	09/28/1998	16:28	Tornado	F0	0	0	0.00K	0.00K
<u>OPELIKA</u>	11/24/2004	08:09	Tornado	F0	0	0	28.00K	0.00K
<u>OPELIKA</u>	07/06/2005	14:40	Tornado	F0	0	0	34.00K	0.00K
<u>SMITHS</u>	03/01/2007	17:27	Tornado	EF1	0	0	100.00K	0.00K
<u>RIDGE GROVE</u>	02/28/2009	07:56	Tornado	EF1	0	0	65.00K	0.00K
<u>SALEM</u>	02/28/2009	08:25	Tornado	EF2	0	3	1.100M	0.00K
<u>ROXANA</u>	04/10/2009	18:24	Tornado	EF0	0	0	2.00K	0.00K
<u>LOACHAPOKA</u>	04/10/2009	18:30	Tornado	EF1	0	0	150.00K	0.00K
<u>MITCHELL XRD</u>	04/10/2009	18:51	Tornado	EF1	0	0	30.00K	0.00K
<u>BUPREE</u>	04/10/2009	19:57	Tornado	EF1	0	0	5.00K	0.00K
<u>CAWATCHEE</u>	05/23/2009	15:59	Tornado	EF0	0	0	100.00K	0.00K
<u>LOACHAPOKA</u>	11/16/2011	11:57	Tornado	EF1	0	2	4.000M	0.00K
<u>ROXANA</u>	05/13/2012	13:02	Tornado	EF0	0	0	0.00K	0.00K
<u>ROXANA</u>	04/11/2013	19:43	Tornado	EF0	0	0	0.00K	0.00K
<u>SALEM/SMITHS</u>	04/29/2014	03:56	Tornado	EF3	0	13	TBD	TBD
<b>Totals:</b>					6	231	13.704M	0.00K

Source: National Climatic Data Center 2014

### Future Probability of Tornado Events

Each jurisdiction in Lee County is very susceptible to tornadoes. The Stakeholder and Technical Advisory Committee determined the frequency of this hazard to be highly likely, with a near 100% probability of each jurisdiction experiencing them in the next year. The Committee felt that the magnitude of tornado events would be moderate with between 25% and 50% of each jurisdiction being affected.

Threat to safety from tornadoes was found to be catastrophic, with multiple deaths and injuries possible. Damage to property and function were determined to be critical with more than 25% of property in each jurisdiction severely damaged and shutdown of critical facilities lasting more than a week.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to tornadoes was ranked a 9, very high.

## Tropical Depression / Tropical Storm / Hurricane

### Overview

A tropical cyclone is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere. They are classified as follows:

- **Tropical Depression:** A tropical cyclone with maximum sustained winds of 38 mph (33 knots) or less.
- **Tropical Storm:** A tropical cyclone with maximum sustained winds of 39 to 73 mph (34 to 63 knots).
- **Hurricane:** A tropical cyclone with maximum sustained winds of 74 mph (64 knots) or higher.
- **Major Hurricane:** A tropical cyclone with maximum sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale.

Tropical storms develop when ocean water is warmer than 80°F, there is low vertical wind shear and an area of low pressure. The storms bring damaging rotating winds up to 70 mph., torrential rain, and flooding.

A hurricane is a tropical storm with winds that have reached a constant speed of 74 miles per hour or more. Hurricane winds blow in a large spiral around a relatively calm center known as the "eye." The "eye" is generally 20 to 30 miles wide, and the storm may extend outward 400 miles. As a hurricane approaches, the skies will begin to darken and winds will grow in strength. As a hurricane approaches land, it can bring torrential rains, high winds, and storm surges.

**Table 5.12: Saffir-Simpson Hurricane Wind Scale**

Category	Sustained Winds	Types of Damage
1	74-95 mph 64-82 kt 119-153 km/h	<b>Very dangerous winds will produce some damage:</b> Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	<b>Extremely dangerous winds will cause extensive damage:</b> Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3	111-129 mph 96-112 kt 178-208 km/h	<b>Devastating damage will occur:</b> Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking

Category	Sustained Winds	Types of Damage
4	130-156 mph 113-136 kt 209-251 km/h	<p>numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.</p> <p><b>Catastrophic damage will occur:</b> Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.</p>
5	157 mph or higher 137 kt or higher 252 km/h or higher	<p><b>Catastrophic damage will occur:</b> A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.</p>

August and September are the peak months during the hurricane season that lasts from June 1 through November 30. On average, five hurricanes strike the United States every year. In a two year period, an average of three significant (category 3 or higher) hurricanes will strike the United States.

The 74 to 160 mile per hour winds of a hurricane can extend inland for hundreds of miles. Hurricanes can spawn tornadoes, which add to the destructiveness of the storm. Floods and flash floods generated by torrential rains also cause damage and loss of life. High winds can demolish houses, uproot trees, and cause flying debris. The long-term dangers are the possibility of interruptions in utilities, fires and explosions from gas leaks, fallen power lines, and contaminated food and water. Following a hurricane, inland streams and rivers can flood and trigger landslides.

As hurricanes move inland, their wind speeds decline and the hurricane is generally downgraded to a tropical storm or tropical depression. Communities in the path of hurricanes as they move inland can experience torrential rains, flooding, tornadoes, wind damage and power outages.

### **Previous Occurrence of Tropical Depressions, Tropical Storms, and Hurricanes**

According to the National Climatic Database there have been two tropical storms and 2 tropical depressions that have affected the jurisdictions of Lee County in the last 20 years.

In July and August of 2005 the remnants of Hurricane Dennis and Hurricane Katrina crossed through all jurisdictions in Lee County with tropical storm force winds and torrential rain. Trees and power lines were knocked down across the county. The storms caused \$55,000 in property damage.

Table 5.13 provides details of each tropical storm and depression that has affected Lee County since 2000. Extent in this table reflects wind speeds.

**Table 5.13: Overview of Hurricane/Tropical Storm Events In Lee County By Year**

Location	Date	Time	Type	Ext	Dth	Inj	Property Damage	Crop Damage
<u>LEE (ZONE)</u>	07/10/2005	15:00	Tropical Storm	<39	0	0	35.00K	0.00K
<u>LEE (ZONE)</u>	08/29/2005	23:30	Tropical Storm	<39	0	0	20.00K	0.00K
<u>LEE (ZONE)</u>	08/23/2008	12:00	Tropical Depression	>39	0	0	5.00K	0.00K
<u>LEE (ZONE)</u>	11/09/2009	14:00	Tropical Depression	>39	0	0	2.00K	0.00K
<b>Totals:</b>					0	0	62.00K	0.00K

Source: National Climatic Data Center 2014

No events listed between 11/10/2009 and 8/31/2014.

### **Future Probability of Tropical Depressions, Tropical Storm and Hurricane Events**

Although there have been no tropical depressions, storms or hurricane events to impact Lee County since 2009, each jurisdiction in Lee County is susceptible to tropical depressions and tropical storm force winds and rains as hurricanes move inland from the gulf coast. The Stakeholder and Technical Advisory Committee determined the frequency of tropical hazards to be likely, with a 10% to 100% probability of each jurisdiction experiencing them in the next year, or 1 chance in every 10 years. The Committee felt that the magnitude of tropical events would be large with more than 50% of each jurisdiction being affected.

Threat to safety from tropical events was found to be negligible, with very few injuries occurring. Damage to property and function were also determined to be negligible with less than 10% of property in each jurisdiction severely damaged and shutdown of critical facilities lasting less than 24 hours.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to tropical depressions, tropical storms and hurricanes was ranked a 4.5, moderate.

## **WILDFIRE**

### **Overview**

A wild land fire is a wildfire in an area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities. An Urban-Wild land Interface fire is a wildfire in a geographical area where structures and other human development meet or intermingle with wild land or vegetative fuels.

People start more than four out of every five wildfires, usually as debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. Wildfire behavior is based on three primary factors: fuel, topography, and weather. The type, and amount of fuel, as well as its burning qualities and level of moisture affect wildfire potential and behavior.

The immediate threat from a wildfire is destruction of timber, property, wildlife, and injury or loss of human life. The long-term impact of wildfires is scorched and barren land. This land may take years or decades to return to its pre-fire state.

### **Previous Occurrence of Wildfires**

Rural Lee County is vulnerable to wildfires and urban-interface fires. Statistics from the Alabama Forestry Commission indicate there are 20 wildfires in Lee County every year. They also estimate that an average of 138 acres burns per fire occurrence. Annual crop damage is estimated to be \$40,900.

Map 5.5 illustrates the occurrence of fires per 100 acres in Lee County. The map was provided by the Alabama Forestry Commission. It is important to note the Forestry Commission only documents the wildfires to which they respond.

### **Future Probability of Wildfires**

Unincorporated Lee County is susceptible to the occurrence of wildfires. Auburn, Opelika, Loachapoka and Smiths Station were determined not to be vulnerable to this hazard.

The Stakeholder and Technical Advisory Committee determined the frequency of wildfire in unincorporated Lee County to be highly likely, with a near 100% probability of this jurisdiction experiencing this hazard in the next year.. The Committee felt that the magnitude of wildfire events would be very small with less than 10% of unincorporated Lee County being affected.

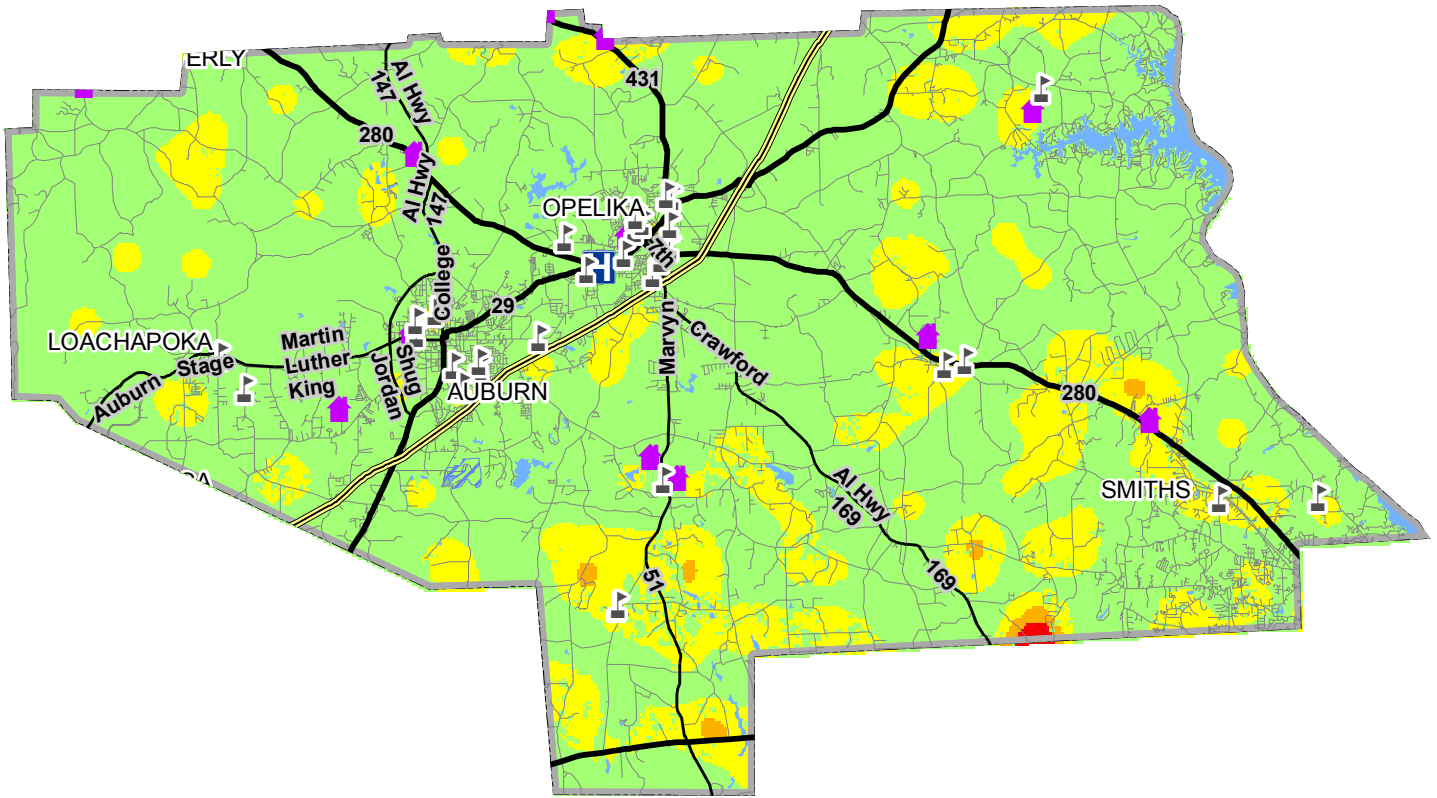
The threat to safety, property, and function from wildfire was thought to be negligible, with very few injuries, less than 10% of property in Lee County affected, and shutdown of critical facilities lasting less than 24 hours.

Overall, the vulnerability of unincorporated Lee County to wildfire was ranked a 3, low.



# 'Fires per 1,000-Acres' County Map

Lee County



Schools



Location of Fire Fighting Resources\*



Hospitals



Public Lands



County Boundary

1 inch = 5.5 miles

[www.forestry.alabama.gov](http://www.forestry.alabama.gov)  
AFC GIS (09/11/08)

Fire Occurrence:

Low

Medium

High

Extreme

Sources: Sanborn (2006); AFC (2008)

(\*) includes federal, state, local and volunteer entities

## **WINTER STORMS (Includes Ice Storms and Heavy Snow)**

### **Overview**

Winter storms vary in size and strength. A storm may be large enough to affect many states or only a portion of a single state. It can range from moderate snow or ice over a few hours to blizzard conditions. Winter storms are accompanied by low temperatures and blowing snow, which can reduce visibility.

The definition of a Heavy Snow event is when 4 or more inches of snow during a 12-hour period, or 6 or more inches during a 24 hours span.

An ice storm occurs when frozen rain blankets a region with accumulations of 1/4" or more. Not only do roads freeze, but ice also coats trees, bushes and power lines. Because of the weight of the ice, this type of storm can cause tremendous damage to an area, pulling down trees and power lines.

The immediate threat from a winter storm, heavy snow or ice storm is traffic accidents, people trapped in their homes without supplies or heat, power outages, frozen water lines, and physical overexertion. The long-term dangers of a multiple day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages.

### **Previous Occurrence of a Winter Storm/Ice Storm/Heavy Snow**

Based on the information provided by the National Climatic Data Center, there have been 3 winter storms, 4 occurrences of heavy snow and 2 ice storms affecting each jurisdiction in Lee County since 1996.

The most snow to fall in Lee County was 8.5 inches in February 9, 1973. Snow began to fall mid morning and continued until after dark.

On December 18, 1996, a snow storm dumped 1 to 3 inches of snow across Central Alabama. Schools and businesses closed early, roads became slick. There were no lasting travel problems although snow remained on the ground for 2 days.

On January 27, 2014 a very strong arctic front swept across Alabama. On January 28, moisture spread northward ahead of an upper level disturbance. A mix of winter precipitation resulted in ice and snow accumulations across Lee County, causing hazardous travel conditions. Freezing rain resulted in ice accumulations on area roadways and Interstate 85 early Tuesday morning, before precipitation transitioned to all snow. Ice accumulations of one quarter inch were reported county wide. Snow accumulations up to 2.5 inches were also reported. One fatality (Indirect, Female, 24) occurred on February 2nd as a result of injuries sustained in a multiple vehicle accident on Interstate 85, Tuesday, January 28th. Icy road conditions contributed to the accident. Schools, non essential government offices and businesses were closed for 1.5 days due to the storm.

Table 5.14 provides details of each winter storm event in Lee County since 1996. Extent in this table reflects the reported amount of snowfall or ice accumulations.

**Table 5.14: Overview of Winter Storms, Ice Storms and Heavy Snow Events In Lee County By Year**

Location	Date	Time	Type	Ext	Dth	Inj	Property Damage	Crop Damage
LEE (ZONE)	12/18/1996	14:00	Winter Storm	2 in	0	0	15.00K	20.00K
LEE (ZONE)	12/29/1997	01:00	Winter Storm	2 in	0	0	0.00K	0.00K
LEE (ZONE)	01/02/2002	08:45	Heavy Snow	4 in	0	0	0.00K	0.00K
LEE (ZONE)	01/03/2002	05:00	Heavy Snow	3 in	0	0	0.00K	0.00K
LEE (ZONE)	1/29/2005	02:00	Ice Storm	1 in	0	0	25.00K	0.00K
LEE (ZONE)	03/01/2009	06:00	Heavy Snow	5 in	0	0	0.00K	0.00K
LEE (ZONE)	02/12/2010	12:00	Heavy Snow	4 in	0	0	0.00K	0.00K
LEE (ZONE)	01/09/2011	14:30	Ice Storm	.25in	0	0	0.00K	0.00K
LEE (ZONE)	01/28/2014	07:30	Winter Storm	2.5 in	1	0	0.00K	0.00K
<b>Totals:</b>					1	0	15.00K	20.00K

### Future Probability of Winter Storm Events

Each jurisdiction in Lee County is susceptible to the occurrence of winter storms, ice storms and heavy snow events. The Stakeholder and Technical Advisory Committee determined the frequency of these hazards to be likely, with a 10% to 100% probability of each jurisdiction experiencing them in the next year or 1 chance in every 10 years. The Committee felt that the magnitude of winter storm events would be large with more than 50% of each jurisdiction being affected.

The threat to safety and property from winter storm events was thought to be negligible, with very few injuries and less than 10% of property in each jurisdiction affected. Damage to function was determined to be limited with complete shutdown of critical facilities lasting more than one day.

Overall, the vulnerability of Auburn, Loachapoka, Opelika, Smiths Station and unincorporated Lee County to winter storms, ice storms and heavy snow was ranked a 5, moderate.



## 5.4 Assessing Vulnerability: Overview

In terms of the each jurisdiction's vulnerability to include the impact of the natural hazards listed above, a description is provided under future probability for each jurisdiction in the previous subsection. Additionally, the next section on identifying assets and estimating potential losses also provides insight to the vulnerability of each jurisdiction in terms of their assets and potential dollar losses. Further, the following chart lists the vulnerability of the jurisdictions to specific natural hazards.

**Table 5.15 Vulnerability By Jurisdiction**

<b>Risk Ranking</b>	<b>Natural Hazard</b>	<b>Jurisdictions Affected</b>
<b>High</b>	Thunderstorm	All
	Tornado	All
	Drought/Heat Wave	All
<b>Moderate</b>	Flood	Auburn, Lee County, Opelika, Smiths Station Auburn City Schools, Opelika City Schools, Lee County Schools, Smiths Water and Sewer Authority
	Hail	All
	Lightning	All
	Tropical Storms	All
	Winter Storms	All
<b>Low</b>	Wildfire	Lee County, Lee County Schools, Loachapoka Water Authority
<b>Very Low</b>	Earthquake	All
	Sinkhole	All
<b>Not Vulnerable</b>	Landslides	All
	Tsunami	All
	Volcano	All

## Identifying Populations, Assets and Estimating Potential Dollar Losses

This subsection describes each jurisdiction's vulnerability to hazards by identifying their population, structural assets and estimating their potential dollar losses.

The methodology used to prepare an inventory of jurisdiction structural holdings and estimated losses was to first identify the jurisdictions that this plan would cover and then the major entities within these jurisdictions that would be able to provide us with information in reference to large structural holdings.

After determining what hazard impacted each jurisdiction, contact was made with different agencies to gather information on the number and type of assets and potential dollars losses for structures and property located in a hazard area.

The major jurisdictions included in the plan were the cities of Auburn, Opelika and Smiths Station; the Town of Loachapoka and Lee County. Within each jurisdiction entities such as Councils, Commissions, planning boards, revenue departments, tax assessors, school systems,

post secondary education, utility companies, water boards, state agencies and volunteer fire departments were contacted to gather asset information and potential dollar loss estimates.

Once all of the data was received it was then broken down by jurisdiction and compiled in spreadsheet fashion to determine the number of structures, their value and their vulnerability to specific natural hazards.

The 2010 Census was also looked at to determine total population as well as school-age population, senior population and the number of people in group quarters for each jurisdiction.

In terms of determining the number of critical facilities that were impacted by a particular hazard, the HAZUS definition critical buildings and facilities was used as a guide. For the purpose of this plan, all of the following elements were considered in defining the critical facilities. A complete list of critical facilities can be found in Appendix C:

**A. Essential Facilities** are essential to the health and welfare of the whole population and are especially important following hazard events. The potential consequences of losing them are so great that they should be carefully inventoried. Be sure to consider not only their structural integrity and content value, but also the effects on the interruption of their functions because the vulnerability is based on the service they provide rather than simply their physical aspects. Essential facilities include hospitals and other medical facilities, police and fire stations, emergency operations centers and evacuation shelters and schools.

**B. Transportation Systems** include airways – airports, heliports; highways – bridges, tunnels, roadbeds, overpasses, transfer centers; railways – track, rail yards, depots; and waterways – canals, locks, seaports, ferries, harbors, dry docks, piers.

**C. Lifeline Utility Systems** such as potable water, wastewater, oil, natural gas, electric power, propane and communication systems.

**D. High Potential Loss Facilities** are facilities that would have a high loss associated with them, such as nuclear power plants, dams, and military installations.

**E. Hazardous Material Facilities** include facilities housing industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials and toxins.

Once data was collected, it was then sorted by jurisdiction.

Table 5.15 on page 47 shows the completed asset inventory and estimated values for residential, commercial, government, utilities, education and agricultural assets for each jurisdiction in Lee County. An asterisk (\*) symbol was used on the table to show information was either not available or not applicable for that jurisdiction.

**TABLE 5.16: POPULATIONS, ASSET INVENTORY AND ESTIMATED VALUES**

A. Populations	Auburn		Lee County		Loachapoka		Opelika		Smiths Station	
Total People	53,380		55,284		180		26,477		4,926	
School-Age Children	11,942		12,252		23		5,362		1,049	
Senior Citizens	3,658		5,144		22		3,249		643	
Group Quarters	3,825		13		0		572		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	11,473	\$2,487,696,360	14,475	\$1,968,342,411	*	*	7,654	\$966,069,524	1,495	\$199,757,163
C. Commercial	6,497	\$1,869,177,845	640	\$185,667,040	*	*	1,332	\$745,056,453	86	\$20,171,341
D. Government	39	\$108,497,903	19	\$54,536,272	2	\$274,052	46	\$110,244,726	7	\$3,084,959
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	*	*	*	*	*	*
TELC			5	\$10,000,000						
Opelika Light and Power							16	\$48,957,610		
Auburn Sewer/Solid Waste	17	\$76,733,354								
Auburn Water Works	17	\$53,062,168								
Opelika Water							16	\$30,901,897		
Loachapoka Water					12	\$3,551,000				
Smiths Water Authority									24	\$14,004,700
F. Education	52	\$96,110,000	60	\$106,185,113	*	*	31	\$99,032,000	*	*
G. Agricultural	1	*	31	\$32,400,000	0	0	7	0	0	0
H. Religion	60	*	228	*	2	*	102	*	8	*
I. Critical Facilities	125	\$334,403,425	84	\$170,721,464	14	\$3,825,052	109	\$289,136,342	33	\$17,089,659
Total Structures	18,156		15,458		14		9,204		1,622	
Total Value	\$4,691,277,630		\$2,357,130,836		\$3,825,052		\$2,000,262,210		\$237,018,163	

**Data Sources for the Table:**

**A. Populations:** 2010 Census Data was used to complete the population portion of the table for all jurisdictions.

**B. Residential:** The Lee County Tax Assessor was able to give the number and current dollar values of residential structures for the cities of Auburn, Opelika, Smiths Station, and the balance of Lee County. The Town of Loachapoka's residential and commercial property number and values are included in the Lee County figures.

**C. Commercial/Industrial:** The Lee County Tax Assessor was able to give number and dollar valuations for commercial/industrial structures in each jurisdiction, except Loachapoka. Loachapoka's commercial properties are included in the Lee County figures.

**D. Government:** Each jurisdiction provided current numbers and valuation of their assets.

**E. Infrastructure/Utilities:** While response was given by all of the surveyed water works boards and systems and Tallapoosa Electric Cooperative, Alagasco and Alabama Power did not submit any statistics for this mitigation plan. The water works inventories do include water treatment plants, lift stations, lines, and office buildings. TELC valuations include offices and power distribution plants.

**F. Education:** 2013 Audited financial statements of the Lee County Board of Education and the Auburn Board of Education and Opelika Board of Education valuations of fixed assets were utilized. Because Auburn University is submitting their own Hazard Mitigation Plan, their assets are not included in these figures.

**G. Agricultural/Crops at Market Value:** The Lee County Extension Coordinator was contacted to obtain statistics regarding the number and market value of agricultural structures, crops and livestock in Lee County. While there are agricultural interests in Auburn and Opelika, the valuations are all included under Lee County.

**H. Religious:** Religion statistics were determined by a count of churches, synagogues, parishes and other religious structures utilizing on line data. The Lee County Tax Assessor does not list religious affiliated entities separately so there was not a way to break out the value of religious structures. The numbers show a total count of structures in each jurisdiction with no monetary figures attached.

**I. Critical Facilities:** The government, utility, and education assets were combined to determine the number and value of critical facilities in each jurisdiction.

**Table 5.17 Auburn Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 1**

<b>A. Populations</b>	<b>Auburn</b>		<b>Drought/Heat</b>		<b>Earthquake</b>		<b>Flood</b>		<b>Hail</b>	
Total People	53,380		53,380		0		53,380		53,380	
School-Age Children	11,942		11,942		0		11,942		11,942	
Senior Citizens	3,658		3,658		0		3,658		3,658	
Group Quarters	3,825		3,825		0		3,825		3,825	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	11,473	\$2,487,696,360	0	0	0	0	11,473	\$2,487,696,360	11,473	\$2,487,696,360
C. Commercial	6,497	\$1,869,177,845	0	0	0	0	6,497	\$1,869,177,845	6,497	\$1,869,177,845
D. Government	39	\$108,497,903	0	0	0	0	39	\$108,497,903	39	\$108,497,903
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	0	0	0	0	*	*	*	*
TELC										
Opelika Light and Power										
Auburn Sewer/Solid Waste	17	\$76,733,354	0	0	0	0	17	\$76,733,354	17	\$76,733,354
Auburn Water Works	17	\$53,062,168	0	0	0	0	17	\$53,062,168	17	\$53,062,168
Opelika Water										
Loachapoka Water										
Smiths Water Authority										
F. Education	52	\$96,110,000					52	\$96,110,000	52	\$96,110,000
G. Agricultural	1	*	0	0	0	0	1	*	1	*
H. Religion	60	*	0	0	0	0	60	*	60	*
I. Critical Facilities	125	\$334,403,425	0	0	0	0	125	\$334,403,425	125	\$334,403,425
<b>Total Structures</b>	<b>18,156</b>		<b>0</b>		<b>0</b>		<b>18,156</b>		<b>18,156</b>	
<b>Total Estimated Value</b>	<b>\$4,691,277,630</b>		<b>0</b>		<b>0</b>		<b>\$4,691,277,630</b>		<b>\$4,691,277,630</b>	

## Auburn Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

<b>A. Populations</b>	<b>Auburn</b>		<b>Lightning</b>		<b>Sinkholes</b>		<b>Thunderstorms</b>		<b>Tornado</b>	
Total People	53,380		53,380		0		53,380		53,380	
School-Age Children	11,942		11,942		0		11,942		11,942	
Senior Citizens	3,658		3,658		0		3,658		3,658	
Group Quarters	3,825		3,825		0		3,825		3,825	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	11,473	\$2,487,696,360	11,473	\$2,487,696,360	0	0	11,473	\$2,487,696,360	11,473	\$2,487,696,360
C. Commercial	6,497	\$1,869,177,845	6,497	\$1,869,177,845	0	0	6,497	\$1,869,177,845	6,497	\$1,869,177,845
D. Government	39	\$108,497,903	39	\$108,497,903	0	0	39	\$108,497,903	39	\$108,497,903
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*	*	*
TELC										
Opelika Light and Power										
Auburn Sewer/Solid Waste	17	\$76,733,354	17	\$76,733,354	0	0	17	\$76,733,354	17	\$76,733,354
Auburn Water Works	17	\$53,062,168	17	\$53,062,168	0	0	17	\$53,062,168	17	\$53,062,168
Opelika Water										
Loachapoka Water										
Smiths Water Authority										
F. Education	52	\$96,110,000	52	\$96,110,000			52	\$96,110,000	52	\$96,110,000
G. Agricultural	1	*	1	*	0	0	1	*	1	*
H. Religion	60	*	60	*	0	0	60	*	60	*
I. Critical Facilities	125	\$334,403,425	125	\$334,403,425	0	0	125	\$334,403,425	125	\$334,403,425
<b>Total Structures</b>	<b>18,156</b>		<b>18,156</b>		<b>0</b>		<b>18,156</b>		<b>18,156</b>	
<b>Total Estimated Value</b>	<b>\$4,691,277,630</b>		<b>\$4,691,277,630</b>		<b>0</b>		<b>\$4,691,277,630</b>		<b>\$4,691,277,630</b>	

### Auburn Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

<b>A. Populations</b>	<b>Auburn</b>		<b>All Tropical Storms</b>		<b>Wildfire</b>		<b>All Winter Storms</b>	
Total People	53,380		53,380		0		53,380	
School-Age Children	11,942		11,942		0		11,942	
Senior Citizens	3,658		3,658		0		3,658	
Group Quarters	3,825		3,825		0		3,825	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	11,473	\$2,487,696,360	11,473	\$2,487,696,360	0	0	11,473	\$2,487,696,360
C. Commercial	6,497	\$1,869,177,845	6,497	\$1,869,177,845	0	0	6,497	\$1,869,177,845
D. Government	39	\$108,497,903	39	\$108,497,903	0	0	39	\$108,497,903
E. Utilities								
APCO	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*
TELC								
Opelika Light and Power								
Auburn Sewer/Solid Waste	17	\$76,733,354	17	\$76,733,354	0	0	17	\$76,733,354
Auburn Water Works	17	\$53,062,168	17	\$53,062,168	0	0	17	\$53,062,168
Opelika Water								
Loachapoka Water								
Smiths Water Authority								
F. Education	52	\$96,110,000	52	\$96,110,000	0	0	52	\$96,110,000
G. Agricultural	1	*	1	*	0	0	1	*
H. Religion	60	*	60	*	0	0	60	*
I. Critical Facilities	125	\$334,403,425	125	\$334,403,425	0	0	125	\$334,403,425
<b>Total Structures</b>	<b>18,156</b>		<b>18,156</b>		<b>0</b>		<b>18,156</b>	
<b>Total Estimated Value</b>	<b>\$4,691,277,630</b>		<b>\$4,691,277,630</b>		<b>0</b>		<b>\$4,691,277,630</b>	

**Table 5.18: Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 1**

<b>A. Populations</b>	<b>Lee County</b>		<b>Drought/Heat</b>		<b>Earthquake</b>		<b>Flood</b>		<b>Hail</b>	
Total People	55,284		55,284		0		55,284		55,284	
School-Age Children	12,252		12,252		0		12,252		12,252	
Senior Citizens	5,144		5,144		0		5,144		5,144	
Group Quarters	13		13		0		13		13	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	14,475	\$1,968,342,411	0	0	0	0	14,475	\$1,968,342,411	14,475	\$1,968,342,411
C. Commercial	640	\$185,667,040	0	0	0	0	640	\$185,667,040	640	\$185,667,040
D. Government	19	\$54,536,272	0	0	0	0	19	\$54,536,272	19	\$54,536,272
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	0	0	0	0	*	*	*	*
TELC	5	\$10,000,000	0	0	0	0	5	\$10,000,000	5	\$10,000,000
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water										
Smiths Water Authority			0	0	0	0				
F. Education	60	\$106,185,113					60	\$106,185,113	60	\$106,185,113
G. Agricultural	31	\$32,400,000	0	0	0	0	31	\$32,400,000	31	\$32,400,000
H. Religion	228	*	0	0	0	0	228	*	228	*
I. Critical Facilities	84	\$170,721,464	0	0	0	0	84	\$170,721,464	84	\$170,721,464
<b>Total Structures</b>	<b>15,458</b>		<b>0</b>		<b>0</b>		<b>15,458</b>		<b>15,458</b>	
<b>Total Estimated Value</b>	<b>\$2,357,130,836</b>		<b>0</b>		<b>0</b>		<b>\$2,357,130,836</b>		<b>\$2,357,130,836</b>	



## Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

<b>A. Populations</b>	<b>Lee County</b>		<b>Lightning</b>		<b>Sinkholes</b>		<b>Thunderstorms</b>		<b>Tornado</b>	
Total People	55,284		55,284		0		55,284		55,284	
School-Age Children	12,252		12,252		0		12,252		12,252	
Senior Citizens	5,144		5,144		0		5,144		5,144	
Group Quarters	13		13		0		13		13	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	14,475	\$1,968,342,411	14,475	\$1,968,342,411	0	0	14,475	\$1,968,342,411	14,475	\$1,968,342,411
C. Commercial	640	\$185,667,040	640	\$185,667,040	0	0	640	\$185,667,040	640	\$185,667,040
D. Government	19	\$54,536,272	19	\$54,536,272	0	0	19	\$54,536,272	19	\$54,536,272
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*			*	*	*	*
TELC	5	\$10,000,000	5	\$10,000,000			5	\$10,000,000	5	\$10,000,000
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water										
Smiths Water Authority										
F. Education	60	\$106,185,113	60	\$106,185,113			60	\$106,185,113	60	\$106,185,113
G. Agricultural	31	\$32,400,000	31	\$32,400,000	0	0	31	\$32,400,000	31	\$32,400,000
H. Religion	228	*	228	*	0	0	228	*	228	*
I. Critical Facilities	84	\$170,721,464	84	\$170,721,464	0	0	84	\$170,721,464	84	\$170,721,464
<b>Total Structures</b>	<b>15,458</b>		<b>15,458</b>		<b>0</b>		<b>15,458</b>		<b>15,458</b>	
<b>Total Estimated Value</b>	<b>\$2,357,130,836</b>		<b>\$2,357,130,836</b>		<b>0</b>		<b>\$2,357,130,836</b>		<b>\$2,357,130,836</b>	

### Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

<b>A. Populations</b>	<b>Lee County</b>		<b>All Tropical Storms</b>		<b>Wildfire</b>		<b>All Winter Storms</b>	
Total People	55,284		55,284		0		55,284	
School-Age Children	12,252		12,252		0		12,252	
Senior Citizens	5,144		5,144		0		5,144	
Group Quarters	13		13		0		13	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	14,475	\$1,968,342,411	14,475	\$1,968,342,411	0	0	14,475	\$1,968,342,411
C. Commercial	640	\$185,667,040	640	\$185,667,040	0	0	640	\$185,667,040
D. Government	19	\$54,536,272	19	\$54,536,272	0	0	19	\$54,536,272
E. Utilities								
APCO	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*
TELC	5	\$10,000,000	5	\$10,000,000			5	\$10,000,000
Opelika Light and Power								
Auburn Sewer/Solid Waste								
Auburn Water Works								
Opelika Water								
Loachapoka Water								
Smiths Water Authority								
F. Education	60	\$106,185,113	60	\$106,185,113			60	\$106,185,113
G. Agricultural	31	\$32,400,000	31	\$32,400,000	0	0	31	\$32,400,000
H. Religion	228	*	228	*	0	0	228	*
I. Critical Facilities	84	\$170,721,464	84	\$170,721,464	0	0	84	\$170,721,464
<b>Total Structures</b>	<b>15,458</b>		<b>15,458</b>		<b>0</b>		<b>15,458</b>	
<b>Total Estimated Value</b>	<b>\$2,357,130,836</b>		<b>\$2,357,130,836</b>		<b>0</b>		<b>\$2,357,130,836</b>	

**Table 5.19: Loachapoka Inventory and Potential Dollar Loss Estimate by Hazard; Page 1**

<b>A. Populations</b>	<b>Loachapoka</b>		<b>Drought/Heat</b>		<b>Earthquake</b>		<b>Flood</b>		<b>Hail</b>	
Total People	180		180		0		0		180	
School-Age Children	23		23		0		0		23	
Senior Citizens	22		22		0		0		22	
Group Quarters	0		0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	*	*	0	0	0	0	0	0	*	*
C. Commercial	*	*	0	0	0	0	0	0	*	*
D. Government	2	\$274,052	0	0	0	0	0	0	2	\$274,052
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	0	0	0	0			*	*
TELC			0	0	0	0				
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water	12	\$3,551,000	0	0	0	0	0	0	12	\$3,551,000
Smiths Water Authority										
F. Education	*	*							*	*
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religion	2	*	0	0	0	0	0	0	2	*
I. Critical Facilities	14	\$3,825,052	0	0	0	0	0	0	14	\$3,825,052
<b>Total Structures</b>	<b>14</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>14</b>	
<b>Total Estimated Value</b>	<b>\$3,825,052</b>		<b>0</b>		<b>0</b>		<b>0</b>		<b>\$3,825,052</b>	

## Loachapoka Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

<b>A. Populations</b>	<b>Loachapoka</b>		<b>Lightning</b>		<b>Sinkholes</b>		<b>Thunderstorms</b>		<b>Tornado</b>	
Total People	180		180		0		180		180	
School-Age Children	23		23		0		23		23	
Senior Citizens	22		22		0		22		22	
Group Quarters	0		0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	*	*	*	*	0	0	*	*	*	*
C. Commercial	*	*	*	*	0	0	*	*	*	*
D. Government	2	\$274,052	2	\$274,052	0	0	2	\$274,052	2	\$274,052
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*			*	*	*	*
TELC										
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water	12	\$3,551,000	12	\$3,551,000	0	0	12	\$3,551,000	12	\$3,551,000
Smiths Water Authority										
F. Education	*	*	*	*			*	*	*	*
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religion	2	*	2	*	0	0	2	*	2	*
I. Critical Facilities	14	\$3,825,052	14	\$3,825,052	0	0	14	\$3,825,052	14	\$3,825,052
<b>Total Structures</b>	<b>14</b>		<b>14</b>		<b>0</b>		<b>14</b>		<b>14</b>	
<b>Total Estimated Value</b>	<b>\$3,825,052</b>		<b>\$3,825,052</b>		<b>0</b>		<b>\$3,825,052</b>		<b>\$3,825,052</b>	

### Loachapoka Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

<b>A. Populations</b>	<b>Loachapoka</b>		<b>All Tropical Storms</b>		<b>Wildfire</b>		<b>All Winter Storms</b>	
Total People	180		180		0		180	
School-Age Children	23		23		0		23	
Senior Citizens	22		22		0		22	
Group Quarters	0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	*	*	*	*	0	0	*	*
C. Commercial	*	*	*	*	0	0	*	*
D. Government	2	\$274,052	2	\$274,052	0	0	2	\$274,052
E. Utilities								
APCO	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*
TELC								
Opelika Light and Power								
Auburn Sewer/Solid Waste								
Auburn Water Works								
Opelika Water								
Loachapoka Water	12	\$3,551,000	12	\$3,551,000	0	0	12	\$3,551,000
Smiths Water Authority								
F. Education	*	*	*	*			*	*
G. Agricultural	0	0	0	0	0	0	0	0
H. Religion	2	*	2	*	0	0	2	*
I. Critical Facilities	14	\$3,825,052	14	\$3,825,052	0	0	14	\$3,825,052
<b>Total Structures</b>	<b>14</b>		<b>14</b>		<b>0</b>		<b>14</b>	
<b>Total Estimated Value</b>	<b>\$3,825,052</b>		<b>\$3,825,052</b>		<b>0</b>		<b>\$3,825,052</b>	

**Table 5.20: Opelika Inventory and Potential Dollar Loss Estimate by Hazard; Page 1**

<b>A. Populations</b>	<b>Opelika</b>		<b>Drought/Heat</b>		<b>Earthquake</b>		<b>Flood</b>		<b>Hail</b>	
Total People	26,477		26,477		0		26,477		26,477	
School-Age Children	5,362		5,362		0		5,362		5,362	
Senior Citizens	3,249		3,249		0		3,249		3,249	
Group Quarters	572		572		0		572		572	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	7,654	\$966,069,524	0	0	0	0	7,654	\$966,069,524	7,654	\$966,069,524
C. Commercial	1,332	\$745,056,453	0	0	0	0	1,332	\$745,056,453	1,332	\$745,056,453
D. Government	46	\$110,244,726	0	0	0	0	46	\$110,244,726	46	\$110,244,726
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	0	0	0	0	*	*	*	*
TELC										
Opelika Light and Power	16	\$48,957,610	0	0	0	0	16	\$48,957,610	16	\$48,957,610
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water	16	\$30,901,897	0	0	0	0	16	\$30,901,897	16	\$30,901,897
Loachapoka Water										
Smiths Water Authority										
F. Education										
G. Agricultural	31	\$99,032,000	0	0	0	0	31	\$99,032,000	31	\$99,032,000
H. Religion	7	0	0	0	0	0	7	0	7	0
I. Critical Facilities	102	*	0	0	0	0	102	*	102	*
<b>Total Structures</b>	<b>9,204</b>		<b>0</b>		<b>0</b>		<b>9,204</b>		<b>9,204</b>	
<b>Total Estimated Value</b>	<b>\$2,000,262,210</b>		<b>0</b>		<b>0</b>		<b>\$2,000,262,210</b>		<b>\$2,000,262,210</b>	

## Opelika Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

<b>A. Populations</b>	<b>Opelika</b>		<b>Lightning</b>		<b>Sinkholes</b>		<b>Thunderstorms</b>		<b>Tornado</b>	
Total People	26,477		26,477		0		26,477		26,477	
School-Age Children	5,362		5,362		0		5,362		5,362	
Senior Citizens	3,249		3,249		0		3,249		3,249	
Group Quarters	572		572		0		572		572	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	7,654	\$966,069,524	7,654	\$966,069,524	0	0	7,654	\$966,069,524	7,654	\$966,069,524
C. Commercial	1,332	\$745,056,453	1,332	\$745,056,453	0	0	1,332	\$745,056,453	1,332	\$745,056,453
D. Government	46	\$110,244,726	46	\$110,244,726	0	0	46	\$110,244,726	46	\$110,244,726
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*			*	*	*	*
TELC										
Opelika Light and Power	16	\$48,957,610	16	\$48,957,610	0	0	16	\$48,957,610	16	\$48,957,610
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water	16	\$30,901,897	16	\$30,901,897	0	0	16	\$30,901,897	16	\$30,901,897
Loachapoka Water					0	0				
Smiths Water Authority										
F. Education										
G. Agricultural	31	\$99,032,000	31	\$99,032,000	0	0	31	\$99,032,000	31	\$99,032,000
H. Religion	7	0	7	0	0	0	7	0	7	0
I. Critical Facilities	102	*	102	*	0	0	102	*	102	*
<b>Total Structures</b>	<b>9,204</b>		<b>9,204</b>		<b>0</b>		<b>9,204</b>		<b>9,204</b>	
<b>Total Estimated Value</b>	<b>\$2,000,262,210</b>		<b>\$2,000,262,210</b>		<b>0</b>		<b>\$2,000,262,210</b>		<b>\$2,000,262,210</b>	

### Opelika Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

<b>A. Populations</b>	<b>Opelika</b>		<b>All Tropical Storms</b>		<b>Wildfire</b>		<b>All Winter Storms</b>	
Total People	26,477		26,477		0		26,477	
School-Age Children	5,362		5,362		0		5,362	
Senior Citizens	3,249		3,249		0		3,249	
Group Quarters	572		572		0		572	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	7,654	\$966,069,524	7,654	\$966,069,524	0	0	7,654	\$966,069,524
C. Commercial	1,332	\$745,056,453	1,332	\$745,056,453	0	0	1,332	\$745,056,453
D. Government	46	\$110,244,726	46	\$110,244,726	0	0	46	\$110,244,726
E. Utilities								
APCO	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*
TELC								
Opelika Light and Power	16	\$48,957,610	16	\$48,957,610	0	0	16	\$48,957,610
Auburn Sewer/Solid Waste								
Auburn Water Works								
Opelika Water	16	\$30,901,897	16	\$30,901,897	0	0	16	\$30,901,897
Loachapoka Water								
Smiths Water Authority								
F. Education								
G. Agricultural	31	\$99,032,000	31	\$99,032,000	0	0	31	\$99,032,000
H. Religion	7	0	7	0	0	0	7	0
I. Critical Facilities	102	*	102	*	0	0	102	*
<b>Total Structures</b>	<b>9,204</b>		<b>9,204</b>		<b>0</b>		<b>9,204</b>	
<b>Total Estimated Value</b>	<b>\$2,000,262,210</b>		<b>\$2,000,262,210</b>		<b>0</b>		<b>\$2,000,262,210</b>	



**Table 5.2I: Smiths Station Inventory and Potential Dollar Loss Estimate by Hazard; Page I**

<b>A. Populations</b>	<b>Smiths Station</b>		<b>Drought/Heat</b>		<b>Earthquake</b>		<b>Flood</b>		<b>Hail</b>	
Total People	4,926		4,926		0		4,926		4,926	
School-Age Children	1,049		1,049		0		1,049		1,049	
Senior Citizens	643		643		0		643		643	
Group Quarters	0		0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	1,495	\$199,757,163	0	0	0	0	1,495	\$199,757,163	1,495	\$199,757,163
C. Commercial	86	\$20,171,341	0	0	0	0	86	\$20,171,341	86	\$20,171,341
D. Government	7	\$3,084,959	0	0	0	0	7	\$3,084,959	7	\$3,084,959
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	0	0	0	0	*	*	*	*
TELC			0	0	0	0				
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water										
Smiths Water Authority	24	\$14,004,700	0	0	0	0	24	\$14,004,700	24	\$14,004,700
F. Education	*	*	0	0	0	0	*	*	*	*
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religion	8	*	0	0	0	0	8	*	8	*
I. Critical Facilities	33	\$17,089,659	0	0	0	0	33	\$17,089,659	33	\$17,089,659
<b>Total Structures</b>	<b>1,622</b>		<b>0</b>		<b>0</b>		<b>1,622</b>		<b>1,622</b>	
<b>Total Estimated Value</b>	<b>\$237,018,163</b>		<b>0</b>		<b>0</b>		<b>\$237,018,163</b>		<b>\$237,018,163</b>	

### Smiths Station Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

<b>A. Populations</b>	<b>Smiths Station</b>		<b>Lightning</b>		<b>Sinkholes</b>		<b>Thunderstorms</b>		<b>Tornado</b>	
Total People	4,926		4,926		0		4,926		4,926	
School-Age Children	1,049		1,049		0		1,049		1,049	
Senior Citizens	643		643		0		643		643	
Group Quarters	0		0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	1,495	\$199,757,163	1,495	\$199,757,163	0	0	1,495	\$199,757,163	1,495	\$199,757,163
C. Commercial	86	\$20,171,341	86	\$20,171,341	0	0	86	\$20,171,341	86	\$20,171,341
D. Government	7	\$3,084,959	7	\$3,084,959	0	0	7	\$3,084,959	7	\$3,084,959
E. Utilities										
APCO	*	*	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*			*	*	*	*
TELC					0	0				
Opelika Light and Power										
Auburn Sewer/Solid Waste										
Auburn Water Works										
Opelika Water										
Loachapoka Water										
Smiths Water Authority	24	\$14,004,700	24	\$14,004,700	0	0	24	\$14,004,700	24	\$14,004,700
F. Education	*	*	*	*			*	*	*	*
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religion	8	*	8	*	0	0	8	*	8	*
I. Critical Facilities	33	\$17,089,659	33	\$17,089,659	0	0	33	\$17,089,659	33	\$17,089,659
<b>Total Structures</b>	<b>1,622</b>		<b>1,622</b>		<b>0</b>		<b>1,622</b>		<b>1,622</b>	
<b>Total Estimated Value</b>	<b>\$237,018,163</b>		<b>\$237,018,163</b>		<b>0</b>		<b>\$237,018,163</b>		<b>\$237,018,163</b>	

### Smiths Station Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

<b>A. Populations</b>	<b>Smiths Station</b>		<b>All Tropical Storms</b>		<b>Wildfire</b>		<b>All Winter Storms</b>	
Total People	4,926		4,926		0		4,926	
School-Age Children	1,049		1,049		0		1,049	
Senior Citizens	643		643		0		643	
Group Quarters	0		0		0		0	
<b>Structural Assets</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>	<b>Number</b>	<b>Value</b>
B. Residential	1,495	\$199,757,163	1,495	\$199,757,163	0	0	1,495	\$199,757,163
C. Commercial	86	\$20,171,341	86	\$20,171,341	0	0	86	\$20,171,341
D. Government	7	\$3,084,959	7	\$3,084,959	0	0	7	\$3,084,959
E. Utilities								
APCO	*	*	*	*	*	*	*	*
Alagasco	*	*	*	*	0	0	*	*
TELC					0	0		
Opelika Light and Power								
Auburn Sewer/Solid Waste								
Auburn Water Works								
Opelika Water								
Loachapoka Water								
Smiths Water Authority	24	\$14,004,700	24	\$14,004,700	0	0	24	\$14,004,700
F. Education	*	*	*	*	0	0	*	*
G. Agricultural	0	0	0	0	0	0	0	0
H. Religion	8	*	8	*	0	0	8	*
I. Critical Facilities	33	\$17,089,659	33	\$17,089,659	0	0	33	\$17,089,659
<b>Total Structures</b>	<b>1,622</b>		<b>1,622</b>		<b>0</b>		<b>1,622</b>	
<b>Total Estimated Value</b>	<b>\$237,018,163</b>		<b>\$237,018,163</b>		<b>0</b>		<b>\$237,018,163</b>	

## 5.5 Analyzing Development Trends

### Overview

Lee County's vulnerability in terms of land uses and development trends was reviewed so that mitigation options could be considered in future land use decisions.

Information from the Comprehensive Plans of Lee County, the City of Auburn, City of Opelika and City of Smiths Station, Center for Business and Economic Research, Alabama Center for Real Estate and Bureau of Economic Analysis was used to assess trends in population growth, personal income, land use, housing, and community amenities.

This information provides a basis for making decisions on the type of mitigation approaches to consider, and the locations in which these approaches should be applied. If a jurisdiction's development trends are impacted by a natural hazard differently than other jurisdictions, it will be detailed under this subsection.

### Population Growth

The population in Lee County is expected to continue to increase nearly 46% over the next three decades. Growth projections for Lee County from the Center for Economic and Business affairs at the University of Alabama are in Table 5.22. According to the Lee County Comprehensive Plan, the growth is expected to be concentrated in the incorporated areas of County, especially the cities of Auburn and Opelika. Growth is also expected in the southeastern area of County near Smiths Station and Phenix City.

**Table 5.22: County Population Projections 2015-2040**

County	Census 2000	Census 2010	Est. 2015	Est. 2020	Est. 2025	Est. 2030	Est. 2035	Est. 2040	Change	% Change
Lee	115,092	140,247	152,419	164,387	175,727	186,221	195,700	204,204	63,957	45.6

*Source: Center for Economic and Business Research, 2014*

### Per Capita Income

Per capita personal income is the total personal income of an area divided by the population of the area. It is an indicator of the economic well being of residents and the character of consumer markets. In 2012, Lee County had a per capita personal income of \$30,236. This was an increase of 2 percent of the per capita personal income in 2011, 84% of the state average. Lee County's PCPI is ranked 40<sup>th</sup> in the state. It should be noted that the presence of Auburn University, with an enrollment of 25,000 students can skew financial statistics.

### Land Use Trends

Lee County has a mix of compact walkable town centers, strip retail and business development, historic villages, suburban neighborhoods and attractive rural areas. The comprehensive plans of Auburn, Opelika and Lee County all stress the need to preserve historic neighborhoods and downtown areas and employ smart growth strategies that enhance the charm and character of local communities.

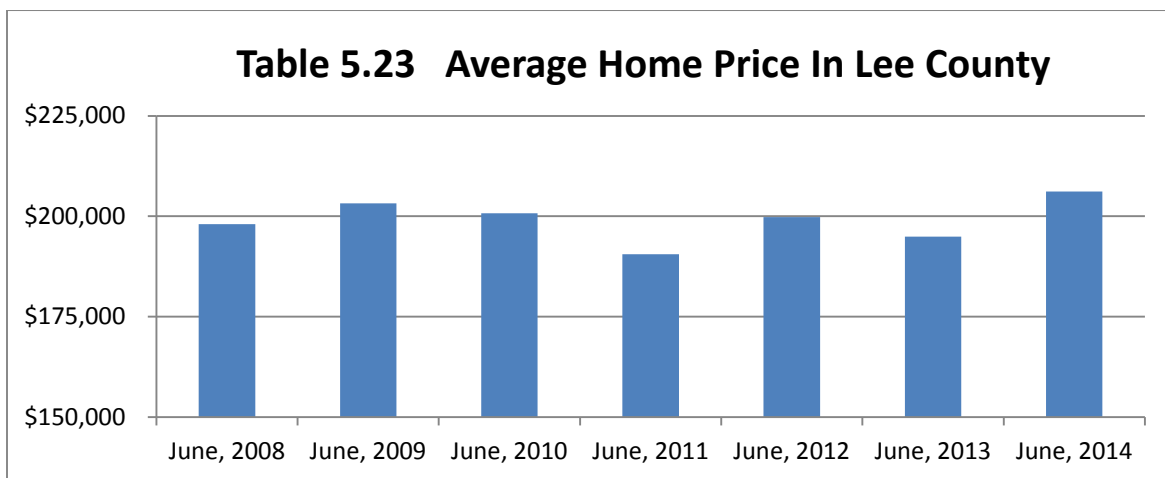
Residential growth is occurring predominately in the incorporated areas of Auburn, Opelika and Smiths Station. Both Auburn and Opelika have some deteriorated residential areas with

older homes in need of repair. Approximately one third of the housing stock in Lee County was constructed prior to 1980. However 16,988 new units were constructed between 1990 and 1999, and another 16,185 were constructed between 2000 and 2012, which indicates that a substantial number of new homes have been built in Lee County in recent years. The ACS indicates that there are 13,425 mobile homes in Lee County.

Commercial and retail development is occurring along the major transportation corridors of the County, particularly along Interstate 85, South College Street, Highway 280 in Opelika and Highway 280/431 in the southeastern portion of the County. Opelika wishes to continue to expand retail along the I-85 corridor between exits 64 and 66. Auburn foresees the development of mixed use centers, or nodes that locate limited commercial/retail within walking distance of neighborhoods, thereby relieving some of the traffic congestion experienced along College Street and downtown areas. Both Auburn and Opelika are interested in developing or redeveloping close in areas and expanding their downtown areas.

### Housing Market

In 2007 just prior to the recession, the average price for a home in Lee County was \$212,162. In 2008, the average price had dropped to \$198,014. In June, 2014, the average price for a home had reached \$206,131. There were 186 sales during the month.



Source: ACRE, 2014

The Alabama Center for Real Estate characterizes the current housing market in Lee County as a seller's market.

### Post Secondary Education

Auburn University is a comprehensive land grant institution located on 1,800 acres adjacent to Auburn's historic downtown. Auburn has 14 schools and colleges and offers more than 140 majors. Auburn has an enrollment of 25,000 students and employs 5,500.

Southern Union State Community College is located in Opelika and serves more than 5,000 students. Southern Union offers core academic programs, health sciences specialized training and technical programs.

### **Parks, Recreation, Cultural Amenities**

Residents in the City of Auburn are served by numerous parks, the Jan Dempsey Community Arts Center, Jule Collins Smith Museum of Fine Art, city pools, as well as youth programs for baseball/softball, football, soccer, and basketball. The Auburn Softball Complex features five fields and the Yarbrough Tennis center has 34 total courts.

The City of Opelika has four park facilities, one of which is the Calhoun Tennis Center which has four clay and eight hard courts. The City also manages the Opelika Sportsplex and Aquatics Center that contains indoor and outdoor tracks, a weight room, a pool, and splash pad among other attractions. The Museum of East Alabama exhibits historical memorabilia and artifacts. The Opelika Center for the Performing Arts hosts theatre and musical productions.

Lee County Park at Smiths Station has multiple softball and baseball fields as well as a soccer/football field. There is also a well-used walking trail at the park.

Numerous golf courses are located throughout Lee County including the Grand National, which is part of the Robert Trent Jones Golf Trail. Lee County Lake and Chewacla State Park provide boating, fishing, and camping opportunities.

## SECTION 6: MITIGATION STRATEGY

### Section Revisions:

The following revisions were made to Section 6, Mitigation Strategy:

**General:** Section 6 was re-formatted

**6.1 Overview of Section 6-** No changes

**6.2 Overview of Mitigation Strategy Methodology-** No changes

**6.3 Natural Hazard Mitigation Plan Mission Statement**

- The mission statement was revised by the Stakeholder and Technical Advisory Committee.

**6.4 Natural Hazard Mitigation Plan Goals**

- Goals 1 and 8 were not changed by the Committee;
- Goal 2 was were deemed to be the same as Goal 1 and was deleted;
- Goals 3, 5, and 7 were reworded;
- Goals 4 and 6 were combined.

**6.5 Natural Hazards Mitigation Plan Objectives and Actions**

- The advisory and stakeholder committee updated the plan's objectives and actions based on the risk assessment, hazard profiling and vulnerability assessment;
- Objective 1 was reworded;
- Mitigation actions were numbered;
- Actions were updated to reflect progress;
- Two new actions (6.5 and 7.3) were added to the mitigation strategy.

### 6.1 Overview of Section 6

The section describes the natural hazards mitigation strategy that provides the jurisdiction's blueprint for reducing potential losses identified in the risk assessment in Section 5 of the plan. The strategy is based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools.

The methodology followed for updating the mitigation strategy did not change from the previous plan. The Stakeholder and Technical Advisory Committee utilized the updated risk assessment, citizen input, the expertise of key stakeholders and their own experiences to assess the existing mission statement and goals and review, update, and prioritize mitigation strategies.

## **6.2 Overview of the Mitigation Strategy Methodology**

The risk assessment in Section 5 was compiled by the Stakeholder and Technical Advisory Committee following meetings, personal and telephone interviews with key stakeholders in the county, and input from the general public.

The Natural Hazard Plan's vision, goals, objectives, and mitigation actions were updated by the committee based on the completed risk assessment. The goals, objectives, and mitigation actions that are listed in this update were determined to be of the greatest benefit in hazard reduction for the jurisdictions in Lee County.

All elements of the Mitigation Strategy were identified and developed by examining existing programs, plans, and personnel with the Lee County EMA Director and staff. The Natural Hazards Mitigation Plan Objectives and Actions Table in this section lists objectives, and actions along with the impacted hazard, jurisdiction(s), timeline, responsible agency(ies), funding sources, and priority.

The Advisory Committee's knowledge and expertise in dealing with natural hazards was invaluable in updating the strategy. The primary considerations used by the committee to update and prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, development trends, and economic, as well as environmental issues.

The actions will be implemented in the order that meets the majority of these considerations or as needed due to emergency or safety concerns. For example, utilizing technology and social media for communications and information exchange, offering storm shelters to individuals, and installing sirens was given priority over other actions due to the availability of funding, staffing capabilities, urgency, and benefit to the public.

In terms of the cost-benefit review of the mitigation strategy, the mitigation actions with the highest priority were considered the most cost effective and achievable for each jurisdiction in the county. Each action that rated highly was considered cost effective based on the following rating criteria:

- The action could be completed by existing staff;
- The cost to implement the actions could be provided by the existing resources of the local agencies or possible funding by the state or federal government agency;
- The action could be accomplished in a short time-frame;



- The action will have immediate and lasting benefits on reducing the impact of the natural hazards on Lee County.

Before projects derived from the Mitigation Strategy are submitted for possible funding and implementation, it will be reviewed by LCEMA staff and the jurisdictions to determine if the benefit outweighs its cost. If costs exceed benefit, an alternative project will be selected and pursued.

The updated mitigation strategy is multi-jurisdictional. Each jurisdiction was represented on the Stakeholder and Technical Committee and agreed the mitigation goals, objectives and actions applied to their area. The jurisdictions did not designate specific mitigation actions for their area but designated all actions as needed for their citizens.

The jurisdictions will equally participate in ensuring the implementation and monitoring of each mitigation action. However, if a participating jurisdiction does not have a department to take responsibility for the mitigation action, the Lee County Emergency Management Agency will coordinate with the governing body of the jurisdiction to ensure involvement and completion of the action.

### **6.3 Natural Hazards Mitigation Plan Mission Statement**

The Hazard Mitigation Stakeholder and Technical Advisory Committee reviewed the existing Mission Statement in their 2/26/14 meeting.

#### **2010 Lee County HMGP Plan Mission Statement:**

*“To ensure that the communities of Lee County are less vulnerable to the effects of natural hazards through the effective administration of hazard mitigation grant programs, implementation of hazard risk assessments, promotion of wise floodplain management, and facilitation of a coordinated approach to mitigation policy through state, regional, and local planning activities.”*

Many suggestions were made to revise the 2010 mission statement. The suggestions were compiled and at their April meeting the Committee was presented with three options for revising the mission statement. The Committee overwhelmingly selected one of the options. The new mission statement is below:

#### **Revised 2015 Lee County HMGP Plan Mission Statement:**

*“To protect life and property and ensure that the communities of Lee County are more prepared for the effects of natural hazards by:*

- *administering effective hazard mitigation programs;*
- *implementing hazard risk assessments;*
- *inviting public and private support and participation; and*
- *coordinating mitigation policy by utilizing federal, state, regional, and local planning activities with proven results.”*

## 6.4 Natural Hazards Mitigation Plan Goals

The Lee County Stakeholder and Technical Advisory Committee reviewed the existing goals at their April 26, 2014 meeting. The committee evaluated existing mitigation goals effectiveness in reducing or avoiding long-term vulnerabilities to the natural hazards that impact each jurisdiction.

After careful review and debate several changes were made to the goals.

- Goal 1 was not changed;
- Goal 2 was deleted because it was determined to be the same as Goal 1;
- Goal 3 was re-worded;
- Goals 4 and 6 were combined;
- Goal 7 was re-worded;
- Goal 8 was not changed;

The updated goals will guide the assessment, development, and implementation of the mitigation actions. Table 6.1 outlines each goal from the 2010 plan and the changes that were made for this update.

**Table: 6.1 LEE COUNTY HAZARD MITIGATION GOAL REVISIONS**

2010 LEE COUNTY GOALS	2015 LEE COUNTY GOALS
1. Minimize future losses of property and lives by making current and future residential, commercial structures and critical facilities less vulnerable to natural hazards through protection strategies.	1. Minimize future losses of property and lives by making current and future residential, commercial structures and critical facilities less vulnerable to natural hazards through protection strategies. (No Change)
2. Implement structural projects to protect people and property at risk and control the impacts of natural hazards.	Deleted; same as Goal 1.
3. Improve efforts to compile hazard and asset information.	3. Identify and improve efforts to compile hazard and asset information. (Revised wording)
4. Increase efforts to inform and educate citizens, elected officials, emergency personnel and property owners about natural hazards and the potential ways to mitigate them.	Combined with goal 6.
5. Promote efforts for the conservation, protection, and restoration of natural resources.	5. Promote efforts for the conservation and protection of natural resources. (Revised wording)
6. Increase the coordination and participation of citizens, public agencies, non-profit agencies, and individuals in mitigation projects.	6. Increase the coordination, education, and participation of citizens, emergency personnel, local government, public agencies, non-profit agencies educational institutions and neighboring communities in mitigation efforts.

2010 LEE COUNTY GOALS	2015 LEE COUNTY GOALS
7. Strengthen the preparedness and response of emergency services before, during, and immediately after a disaster or hazard event.	(Combined with goal 4) 7. Strengthen the preparedness of emergency services for response before, during and immediately after a disaster or hazard event.
8. Identify and maintain a working list of county projects in an effort to keep member governments aware of possible grant funding.	(Revised wording) 8. Identify and maintain a working list of county projects in an effort to keep member governments aware of possible grant funding.
	(No Change)

## 6.5 Natural Hazards Mitigation Plan Objectives and Actions

### Mitigation Plan Objectives

The committee reviewed and analyzed the existing Mitigation Plan objectives. No existing objectives were deleted. Only Objective 1 was reworded. The thirteen objectives are listed below and are also in Table 6.2 with their relevant Mitigation Actions:

1. Develop and maintain geographic information system that indicates the structures, critical facilities, infrastructure, and specific areas in each jurisdiction that are vulnerable to natural disasters.
2. Implement programs to protect the structure and access to current and planned commercial buildings, residential structures, critical facilities and infrastructure during and after a natural hazard.
3. Enhance damage assessment reporting to increase accuracy of natural hazard information related to the type and degree of damage that occurs.
4. Identify and implement relocation projects for residence and businesses impacted by possible natural hazards.
5. Encourage and promote effective land management practices to reduce/ lessen wildfire impacts.
6. Implement, improve and increase the natural hazard warning systems especially in areas with high numbers of vulnerable populations.
7. Ensure that current emergency services are sufficient to protect the safety and health of all residents in Lee County during a natural hazard.
8. Enhance mass care and shelters that are available during and after a natural hazard.

9. Enhance recovery efforts of Lee County citizens during a natural hazard.
10. Educate agency personnel, provide technical assistance on what grants are available to secure funds for equipment and training.
11. Enhance and develop educational programs aimed at Lee County citizens on how they can prevent and protect their home, businesses, lives, and property from natural hazards.
12. Continue to promote, educate and provide assistance to citizens and local governments concerning the national flood insurance program.
13. Develop a plan and seek funding for generators to be placed in area of need to guarantee an adequate potable water source

**Identification and Analysis of Mitigation Measures:**

The committee identified, evaluated, and analyzed a comprehensive range of specific mitigation actions to reduce the effects of each natural hazard identified in Section 5: Risk Assessment. This update contains 42 mitigation actions that were considered by the Committee. The actions are numbered to coincide with the relevant mitigation objective. Please see Table 6.2 for all Mitigation Actions.

**Implementation of Mitigation Measures:**

The committees outlined a plan for how the actions will be prioritized, implemented and administered by the jurisdictions. The action plan includes the implementation timeline, responsible agency, funding sources, and priority for each action. Please note, Loachapoka and Smiths Station do not have engineering, police, or public works departments. Lee County Engineering/Public Works and Sheriff's Office will assist these jurisdictions where applicable.

Where progress on a specific action was made, it is noted on the table. Please see table 6.2.

**Table 6.2: Hazard Mitigation Plan Objectives and Actions**

(Hazard Key: D=Drought/Heat; E=Earthquake; F=Flood; H=Hail; L= Lightning; S=Sinkhole; T=Thunderstorms; TO=Tornado; TS=All Tropical Storms; WI=Wildfire; WS=All Winter Storms)

Hazard												Action	Juris-diction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS								
<b>Objective 1: Develop and maintain a geographic information system that indicates the structures, critical facilities, infrastructure and specific areas in each jurisdiction that are vulnerable to natural disasters.</b>																		
		X				X		X				<b>Action 1.1</b> Develop an up to date map of current and future public and private dams/levees in all jurisdictions <b>Benefit Analysis:</b> Improved risk information vs. future loss of property, function	All	Deferred	LCEMA, Engineering Departments of Lee County, Auburn and Opelika	Local	Low	No progress; Dams/levees were determined to be manmade hazards
		X										<b>Action 1.2</b> Develop up-to-date flood maps for Lee County in digital format by participating in FEMA's Floodplain Map Modernization Program <b>Benefit Analysis:</b> Improved risk information vs. future loss of life, property, function	Auburn, Opelika, Smiths Station, Lee County	1-2 Years	Local Floodplain Managers for Lee County, Auburn, Opelika	Local ADECA AEMA	High	Complete
					X							<b>Action 1.3</b> Identify and map areas that are vulnerable to sinkholes by conducting asphalt and geotechnical soil testing <b>Benefit Analysis:</b> Improved risk information, better land use decisions vs. future loss of property, function	City of Opelika Lee County	Deferred	Engineering Departments of Lee County, and Opelika	Local	Low	No progress; Action requires additional staff, time, resources, funding

Hazard											Action	Juris- diction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
X	X	X	X	X	X	X	X	X	X	X	<b>Action 1.4</b> Combine existing GIS data from all jurisdictions in Lee County to identify and map current and future critical facilities in each jurisdiction (Revised) <b>Benefit Analysis:</b> Improved asset information for planning, mitigation, recovery vs. less informed decisions to protect communities	All	2-4 Years	GIS Departments Auburn, Opelika, Lee County, LCEMA, LRCOG	Local	Medium	Water infrastructure mapping is complete;
<b>Objective 2: Implement programs to protect the structure and access to current and planned commercial buildings, residential dwellings, critical facilities and infrastructure during and after a natural hazard.</b>																	
			X	X		X	X	X		X	<b>Action 2.1</b> Implement a tree maintenance program to prevent loss and protect lives, property, and infrastructure during a natural hazard <b>Benefit Analysis:</b> Preventative maintenance vs. loss of life, property, function	All	Continuing all 5 years	Public Works Departments in Auburn, Opelika and Lee County	Local	Medium	Complete
		X	X	X	X	X	X	X	X	X	<b>Action 2.2</b> Develop a debris management program before and after a natural hazard occurrence for residence, business, critical facilities and public roads <b>Benefit Analysis:</b>	All	Continuing all 5 years	Public Works & Engineering Departments in Auburn, Opelika and Lee County; LCEMA	Local FEMA	Medium	Complete

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											Preventative planning vs. delayed response, recovery						
					X						<b>Action 2.3</b> Implement mitigation projects to correct current problems and prevent future sinkholes from occurring in areas prone to this natural hazard <b>Benefit Analysis:</b> Corrective maintenance vs. future loss to property and function	Opelika Lee County	Continuing all 5 years	Public Works & Engineering Departments in Opelika and Lee County; LCEMA	Local AEMA	Medium	Complete; Lee County has spent \$1,000,000 repairing sinkhole damage to roads
			X	X		X					<b>Action 2.4</b> Update the public utility subsystems <b>Benefit Analysis:</b> Coordination of resources vs. less informed decisions to protect communities	All	Deferred;	APCO; TELC; Alagasco	Local	Low	No progress; Too costly and outside the scope of EMA influence
X											<b>Action 2.5</b> Promote the interconnection of the public water systems <b>Benefit Analysis:</b> Coordination of data, resources vs. less informed decisions to protect communities	All	Deferred;	Municipal Water Systems; Loachapoka Water Authority; Smiths Station Water and Sewer Authority	Local	Low	No progress; Progress depends on goals of water boards and authorities
		X									<b>Action 2.6</b> Implement recommended projects from the Storm Water Drainage Plans of	Auburn Lee County Opelika	1-3 Years	LCEMA; Public Works & Engineering Departments	Local State Federal	High	Complete

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											the City of Auburn, City of Opelika and Lee County into the Lee County Hazard Mitigation Plan <b>Benefit Analysis:</b> Integration of planning efforts and resources vs. duplication of effort	Smiths Station		in Opelika and Lee County;			
		X				X		X			<b>Action 2.7</b> Develop a dredging program where lakes streams, creeks, and rivers can be dredged on an as-needed basis in an effort to keep them from overflowing and flooding <b>Benefit Analysis:</b> Preventative maintenance vs. loss of property, function from repetitive flooding	All	Continuing all 5 years	Public Works & Engineering Departments in Opelika and Lee County;	Local	Medium	Complete
		X									<b>Action 2.8</b> Develop and coordinate a list of possible areas to build and or repair retention ponds in an effort to keep repetitive flooding from damaging commercial and residential structures <b>Benefit Analysis:</b> Preventative maintenance vs. loss of property, function from repetitive flooding	All	Deferred;	Public Works & Engineering Departments in Opelika and Lee County;	Local	Low	No progress; Staff & local funding resources not available



Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
		X									<b>Action 2.9</b> Develop and coordinate a list of roads and bridges that need to be mitigated, replaced, repaired in an effort to keep repetitive flooding from being an issue in terms of egress and entrance <b>Benefit Analysis:</b> Preventative planning, maintenance vs. loss of property, function from repetitive flooding	All	Continuing all 5 years	Engineering Departments in Auburn, Opelika and Lee County; AOMPO; LCEMA	Local State Federal	High	Donahue Bridge is Complete; Sagauhatchee Lake Road Bridge is closed with alternate routes now available
<b>Objective 3: Enhance damage assessment reporting to increase accuracy of natural hazard information related to the type and degree of damage that occurs</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 3.1</b> Implement a reporting system to obtain detailed damage reports from agencies of law enforcement, emergency management services, fire rescue, and other governmental entities when natural hazards occur in the jurisdictions. <b>Benefit Analysis:</b> Coordination of data, resources vs. less effective response and recovery ability	All	Continuing all 5 years	LCEMA: Auburn and Opelika PD and FD; Lee County Sheriff; Volunteer FD	Local	Medium	Complete
<b>Objective 4: Identify and implement relocation projects for residence and businesses impacted by possible natural hazards.</b>																	
		X									<b>Action 4.1</b> Identify and implement relocation projects for residence and businesses impacted by flooding.	All	Continuing all 5 years	LCEMA; Local Governments	Local FEMA	High	No new relocations have occurred in past 5 years;

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											<b>Benefit Analysis:</b> Relocation vs. future loss to life and property						
		X									<b>Action 4.2</b> Continue to acquire and preserve land that is subject to repetitive flooding from landowners who are willing to participate in the program. <b>Benefit Analysis:</b> Acquisition vs. future property losses from repetitive flooding	Auburn Lee County Opelika Smiths Station	Continuing all 5 years	LCEMA; Local Governments	Local FEMA	High	No new acquisitions have occurred in past 5 years;
						X	X	X			<b>Action 4.3</b> Identify and implement wind retrofit options/procedures for homes that are subject to repetitive wind damage for landowners who are willing to participate in the program. <b>Benefit Analysis:</b> Retrofit vs. future losses to life and property	All	Continuing all 5 years	LCEMA	Local FEMA	Low	No wind retrofits have occurred in the past 5 years;
<b>Objective 5: Encourage and promote effective land management practices to reduce/lessen wildfire impacts.</b>																	
									X		<b>Action 5.1</b> Implement an educational program with State Forestry Office to promote effective land management practices and regulations with county landowners. <b>Benefit Analysis:</b>	Lee County	Continuing all 5 years	Alabama Forestry Commission; Volunteer Fire Departments; LCEMA	Local State	Medium	2 Workshops were conducted locally by Alabama Forestry Commission

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											Better land management vs. loss of life, property, function						
<b>Objective 6: Implement, improve and increase the natural hazard warning systems especially in areas with high numbers of vulnerable populations.</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 6.1</b> Maintain, test and replace weather sirens (as needed) in the county. (Revised) <b>Benefit Analysis:</b> Improved early warning systems vs. loss of life	All	Continuing all 5 years	LCEMA: All jurisdictions	Local FEMA	High	There are 67 outdoor sirens operating in Lee County; testing occurs weekly
X	X	X	X	X	X	X	X	X	X	X	<b>Action 6.2</b> Seek funding for NOAA Weather Radios to be placed in area of high citizen traffic and areas of high population of at risk populations, etc. <b>Benefit Analysis:</b> Improved early warning systems vs. loss of life	All	1-5 years	Lee County EMA; Lee County 911	FEMA Foundation Grants	Medium	No progress; Safe rooms were higher priority during the last 5 years
X	X	X	X	X	X	X	X	X	X	X	<b>Action 6.3</b> Seek funding for portable HAM Radio stations to be placed in shelters, hospital/medical clinics, etc. during times of natural disaster to enable better communication abilities with service agencies. <b>Benefit Analysis:</b> Improved early warning systems vs. loss of life	All	N/A	LCEMA; Lee County 911; Red Cross; RACES HAM Radio Club	Local State Federal	High	Complete
X	X	X	X	X	X	X	X	X	X	X	<b>Action 6.4</b>	All	Deferred	LCEMA;	Local	Low	No progress;

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											Purchase, maintain, or work with existing electronic billboards on interstate off ramps and high traffic roadways/highways in Lee County that can be updated as needed to inform citizens of impending weather conditions or needed evacuation procedures. <b>Benefit Analysis:</b> Improved early warning systems vs. loss of life			Public Works & Engineering Departments in Auburn, Opelika and Lee County;	State Federal		Local and federal funding not available.
X	X	X	X	X	X	X	X	X	X	X	<b>Action 6.5</b> Utilize technology, social media and internet options as part of the warning system. <b>Benefit Analysis:</b> Improved early warning systems vs. loss of life	All	1-2 Years	LCEMA	Local	High	New
<b>Objective 7: Ensure that current emergency services are sufficient to protect the safety and health of all residents of Lee County during a natural hazard.</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 7.1</b> Conduct a survey for the county's emergency response agencies to identify any existing needs & possible funding sources in terms of safety equipment, personnel, & other needed resources. <b>Benefit Analysis:</b> Well equipped first responders vs. loss of life, property and function	All	Continuing all 5 years	LCEMA	Local	Medium	Complete; \$12,444 in Hazmat equipment has been purchased

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
X	X	X	X	X	X	X	X	X	X	X	<b>Action 7.2</b> Continue to offer annual training courses on the occurrence of natural hazards and the recovery efforts associated with the natural hazard. <b>Benefit Analysis:</b> Well informed public vs. loss of life, property and function	All	Continuing all 5 years	LCEMA	Local	Medium	Training classes are offered quarterly by LCEMA
X	X	X	X	X	X	X	X	X	X	X	<b>Action 7.3</b> Explore funding options to renovate/expand the Lee County Emergency Operations Center. <b>Benefit Analysis:</b> Better space for prevention, response and recovery efforts vs. loss of life, property and function	All	5 years	LCEMA	Local State Federal Foundation	Medium	New
<b>Objective 8: Enhance mass care and shelters that are available during and after a natural hazard.</b>																	
		X				X	X	X	X	X	<b>Action 8.1</b> Maintain a media, website, and public information packet with available shelter information in the event of a disaster. <b>Benefit Analysis:</b> Well informed public vs. loss of life, property and function	All	Continuing all 5 years	LCEMA; VOAD; Red Cross; Municipal and County Law Enforcement	Local	Medium	Complete
						X	X	X			<b>Action 8.2</b> Develop and coordinate a list of independent homeowners, schools,	All	Continuing all 5 years	LCEMA; VOAD; Red Cross;	Local State Federal	High	Complete; 82 homeowners are on the list as of

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											and/or agencies who wish to have safe room shelters as part of their residence, school and/or agency. Implement a grant writing program in an effort to obtain funds. <b>Benefit Analysis:</b> Safe rooms vs. injuries or loss of life			Auburn City Schools; Opelika City Schools; Lee County School District			September 2014.
		X					X	X	X	X	<b>Action 8.3</b> Develop and coordinate a list of sites that might be available to host a community shelter in areas of high risk populations. <b>Benefit Analysis:</b> Safe shelter vs. injuries or loss of life	All	Deferred	LCEMA; Local Government; Auburn City Schools; Opelika City Schools; Lee County School District	Local State Federal	Low	No progress Local resources not available at this time
X	X	X	X	X	X	X	X	X	X	X	<b>Action 8.4</b> Increase the emergency water supply that is available to ensure sufficient supply during a natural disaster. <b>Benefit Analysis:</b> Emergency water availability vs. shortages, rationing	All	Continuing all 5 Years	Municipal Water Systems; Loachapoka Water Authority; Smiths Water and Sewer Authority	Local CDBG USDA	Medium	Local funds have been used to add some additional water storage capacity in Loachapoka and Opelika
	X	X	X	X	X	X	X	X	X	X	<b>Action 8.5</b> Acquire portable and fixed generators that will be available for mass care community shelters during times of natural disasters.	All	1-3 years	LCEMA; Local Governments	Local State Federal	High	2 generators are in place to be used at temporary community shelters; at least 2 more

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											<b>Benefit Analysis:</b> Coordination of resources vs. less effective response and recovery ability						are needed at this time
<b>Objective 9: Enhance recovery efforts of Lee County citizens following a natural hazard event.</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 9.1</b> Establish a recovery response team to initiate recovery efforts and to provide damage reports to the Lee County EMA. <b>Benefit Analysis:</b> Coordination of data and resources vs. less informed response and recovery ability	All	Continuing all 5 Years	LCEMA	Local	High	Complete
<b>Objective 10: Educate agency personnel, provide technical assistance on what grants are available to secure funds for equipment and training.</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 10.1</b> Develop a database of contact personnel to send grant alerts to concerning the availability of funds for equipment and training. <b>Benefit Analysis:</b> Expanded funding possibilities vs. reliance on federal funds	All	Continuing all 5 years	LCEMA; LRCOG	Local	Medium	Complete; LRCOG has acquired grant alert software
<b>Objective 11: Enhance and develop educational programs aimed at Lee County citizens on how they can prevent and protect their home, businesses, lives, and property from natural hazards.</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 11.1</b> Distribute natural hazard information at public buildings, such as the library, and on the internet to promote and	All	Continuing all 5 years	LCEMA	Local AEMA	High	Complete

Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											assist residential and commercial owners in constructing storm shelters. (Revised) <b>Benefit Analysis:</b> Well informed public vs. loss of life, property and function						
X	X	X	X	X	X	X	X	X	X	X	<b>Action 11.2</b> Continue to hold Community Emergency Response Team (CERT) Training for citizens of Lee County to increase their knowledge and ability to respond to natural hazard events. <b>Benefit Analysis:</b> Well informed/trained public vs. loss of life, property and function	All	Continuing all 5 years	LCEMA	Local AEMA	High	Complete
<b>Objective 12: Continue to promote, educate and provide assistance to citizens and local governments concerning the national flood insurance program.</b>																	
		X									<b>Action 12.1</b> Offer assistance to citizens by providing access to current maps and information on the National Flood Insurance Program. <b>Benefit Analysis:</b> Well informed public vs. loss of life, property and function	All	Continuing all 5 years	LCEMA; Floodplain Managers at Auburn, Lee County and Opelika	Local State	High	Complete; Flood Plain Maps are now available on line via ADECA
		X									<b>Action 12.2</b> Continue to participate in NFIP by the following activities: 1) participate	Auburn, Lee County,	Continuing all 5 years	LCEMA; Floodplain Managers at Auburn, Lee	Local	High	Complete



Hazard											Action	Jurisdiction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											in floodplain identification and mapping, including any local requests for map updates; 2) offer community assistance to encourage property owners to participate in NFIP to encourage purchase of insurance as a protection against flood losses and 3) develop monitoring activities. <b>Benefit Analysis:</b> Improved risk information vs. loss of life, property, function	Opelika, Smiths Station  (Loachapoka does not have a flood risk)		County and Opelika			
		X									<b>Action 12.3</b> Promote the National Flood Insurance Program to the jurisdictions in Lee County that are not currently enrolled in the program. <b>Benefit Analysis:</b> Improved risk information vs. loss of life, property, function	Auburn, Lee County, Opelika, Smiths Station	N/A Loachapoka does not have a flood threat	LCEMA	Local	High	Complete
<b>Objective 13: Develop a plan and seek funding for generators to be placed in area of need to guarantee an adequate potable water source</b>																	
X	X	X	X	X	X	X	X	X	X	X	<b>Action 13.1</b> Purchase generators to keep pumps/lift stations and other critical water facilities working in the event of power outages, ensuring that communities have access to potable water.	All	1-3 years	LCEMA; Municipal Water Systems; Loachapoka Water Authority; Smiths Station	Local State Federal	High	8 generators are in place at critical facilities. At least 3 more are needed at this time.

Hazard											Action	Juris- diction	Timeline	Responsible Agency	Funding	Priority	Progress
D	E	F	H	L	S	T	TO	TS	WI	WS							
											<b>Benefit Analysis:</b> Emergency water availability vs. shortages, rationing			Water and Sewer Authority			

## **SECTION 7: PLAN MAINTENANCE PROCEDURES**

### **Section Revisions:**

The following revisions were made to Section 7, Plan Maintenance Procedures:

**General:** Section 7 was re-formatted;

#### **7.1 Overview of Section 7- No changes**

#### **7.2 Monitoring, Evaluating and Updating the Plan**

- The Advisory Committee was limited to a maximum of 2 official members from each jurisdiction.
- The Lee County EMA Director shall chair the Advisory Committee.
- The description of the Five Year Update has been expanded.
- A process for reviewing the plan after disaster was added.

#### **7.3: Incorporation and Integration of Mitigation Strategies Through Existing Programs and Planning Mechanisms**

- The title of Section 7.3 has been changed.
- The list of existing planning documents and mechanisms has been updated.
- The process for incorporation and integration of data, hazard mitigation goals and actions into planning mechanisms has been described.

#### **7.4 Continued Public Participation**

- Public outreach strategies have been updated and expanded.

#### **7.1 Overview of Section 7**

This section documents the formal maintenance process that will take place to ensure that the Lee County Natural Hazards Mitigation Plan remains an active and pertinent document. The plan maintenance procedure includes a schedule for monitoring and evaluating the plan at least every five years and details how continued public participation will occur throughout the plan maintenance process. This section will include an explanation of how local governments intend to incorporate their mitigation strategies into any existing planning mechanisms such as comprehensive or capital improvement plans.

#### **7.2 Monitoring, Evaluating, and Updating the Plan**

The Cities of Auburn, Opelika, Smiths Station, Town of Loachapoka and Lee County Commission are the governing bodies that will formally adopt the Lee County Natural Hazards Mitigation Plan. The plan will also be adopted by the Auburn City Schools, Opelika City Schools, Lee County Schools, Loachapoka Water Authority, and Smiths Water and Sewer Authority.

Once the plan has been adopted by these jurisdictions, the Hazards Mitigation Technical Advisory Committee will be formed as the permanent planning group to monitor, evaluate, and update the plan. The Advisory Committee will be chaired by the Lee County EMA Director. Committee membership will be limited to two official representatives from each jurisdiction. Members will serve 2 year terms but may be appointed to successive terms. Each jurisdiction will appoint their representatives based on the recommendation of the Lee County Emergency Management Agency.

The Advisory Committee will meet on an annual or as needed basis to review and monitor the implementation of the plan. In the event that a disaster impacts the jurisdictions of Lee County, The Advisory Committee will meet to review the plan. The Lee County Emergency Management Agency is responsible for contacting committee members and organizing the yearly meeting, which will be held in the spring. The public will be welcome at all meetings of the Advisory Committee and meeting notices will be posted in public buildings, on community calendars, websites and social media.

In addition to implementing the plan in conjunction with the Lee County Emergency Management Agency, the Advisory Committee will be responsible for interim, yearly, and five year updates and evaluations of the Lee County Natural Hazards Mitigation Plan.

### **Interim Update Process**

The interim update process will be used on a quarterly or as-needed basis. During this process, each jurisdiction will keep records on the status of the jurisdiction's risk assessment, mitigation objectives, mitigation actions, and mitigation projects.

Each jurisdiction will update information they deem relevant to hazard mitigation planning to the Lee County Emergency Management Agency (EMA) Director and/or Lee County EMA Designee. The individual or department who will share the relevant information with the Lee County EMA will be determined by each jurisdiction. The information can be mailed or e-mailed to the EMA or provided at a scheduled meeting of the Technical Advisory Committee.

As updated information is provided, the EMA staff will determine if the information should be added to the Lee County Natural Hazards Mitigation Plan. If it is determined an interim update is needed, the Lee County EMA will schedule a meeting with the Advisory Committee to review the submitted jurisdiction's information and recommend additions or revisions to the mitigation plan. The Advisory Committee meeting will be open to the public and meeting notices will be posted in public buildings, on community calendars, websites and social media.

During interim updates, changes to assessments, objectives, and/or actions may be adjusted as needed to accommodate zoning and land incorporation. Additionally, information may be added or deleted in an effort to keep up with changing standards for grant requirements per Alabama Emergency Management Agency, Federal Emergency Management Agency, local, state and federal rules and regulations.

The Advisory Committee will facilitate public participation of any interim updates through meeting notices in adherence with the State of Alabama Sunshine Laws by newspaper ads,

postings of meeting notices in public buildings, on community calendars, in neighboring communities, on websites and via social media.

Interim updates will not require formal approval by the governing body of each jurisdiction. Changes to the plan will be sent to each jurisdiction and the AEMA for inclusion in the mitigation plan.

### **Annual Update Process**

On an annual basis, the Lee County EMA and Advisory Committee will review and evaluate the Lee County Natural Hazards Mitigation Plan.

During the annual update, the committee will review the plan to determine the following:

- Has the nature, magnitude, and/or type of risks changed;
- Do the goals and objectives address current and expected conditions;
- Are the current resources appropriate for implementing the plan;
- What is the status of implementing the mitigation strategies;
- Are there implementation problems associated with the mitigation strategies;
- Have the outcomes occurred as expected; and
- How are coordination efforts with the public and other community agencies proceeding?

The Lee County EMA and Advisory Committee will encourage attendance and participation during the annual update process from the public, regulatory agencies and neighboring communities. Meeting notices will be posted in public buildings, on community calendars, websites and social media. Public comments will be included in the yearly report.

Based on this evaluation, a yearly report will be submitted to each jurisdiction to summarize the current status of the plan and any changes that are needed. The report will include the following information:

- A review of the original plan;
- A review of any disasters or emergencies that occurred during the previous calendar year;
- A review of any mitigation actions taken and progress on goals and objectives achieved during the previous year;
- A discussion of any implementation problems;
- The type and degree of public input; and
- Recommendations for new projects, revised action items, or other needed changes, if applicable.

Governing bodies directly affected by recommended changes to the mitigation plan, must approve the changes before they can be included in the hazard mitigation plan.

The Lee County Emergency Management Agency, or its designee, will update the plan within 4 months of the approval of the first governing body affected by the change. The updated plan will be sent to AEMA for review and comment. After AEMA approval is received, the updated

plan will be provided to each jurisdiction, appropriate agencies, and committee members and posted on the Lee County EMA website.

### **Plan Review Following Disaster**

In the event that a disaster impacts the jurisdictions of Lee County, the Lee County EMA and Advisory Committee will meet to review the Hazard Mitigation Plan. First responders, citizens and businesses directly affected by the disaster, regulatory agencies and neighboring jurisdictions will be invited to share their experiences and expertise.

The Advisory Committee will consider the following questions as they conduct a plan review following disaster:

- What have we learned from this disaster?
- Does the risk assessment in the plan remain valid for all jurisdictions?
- Does the mitigation strategy remain valid for all jurisdictions?
- What opportunities are available to enhance recovery and reduce future vulnerability?

The Lee County EMA and Advisory Committee will encourage public attendance and participation during the plan review. Meeting notices will be posted in public buildings, on community calendars, websites and social media.

The plan review will be completed within three months of the disaster event and the Lee County Emergency Management Agency will provide each jurisdiction with a written report detailing the scope of the disaster, lessons learned, opportunities available to enhance recovery and reduce future vulnerabilities, and any recommended changes to the risk assessment and mitigation strategy in the current plan.

Governing bodies directly affected by recommended changes must approve those changes before they can be included in the plan.

If the plan is to be changed following a disaster, the Lee County Emergency Management Agency, or its designee, will update the plan within 4 months of the approval of the first governing body affected by the change. The updated plan will be sent to AEMA for review and comment. After AEMA approval is received, the updated plan will be provided to each jurisdiction, appropriate agencies, and committee members and posted on the Lee County EMA website.

### **Five Year Update**

Every five years the Lee County Hazard Mitigation Plan will undergo a thorough evaluation involving elected officials from each jurisdiction, city and county administrators, local schools, post-secondary education, public safety and emergency service representatives, public works and utility personnel, medical professionals, non-profits, corporations, citizens and neighboring communities.

The Lee County EMA, or their designee, will initiate the five year update process at least 15 months prior to the expiration of the current plan to allow sufficient time to complete the update process.

Initial steps will include:

- Attending Council, Town and Commission meetings to inform the jurisdictions of the five year update and formally request their participation in the update process; Care should be taken to encourage all public school systems and not-for-profit water boards to participate in the update process.
- Contacting key personnel to serve on the Stakeholder and Technical Advisory Committee, including neighboring communities and regulatory agencies who did not participate in the previous update.
- Identifying effective public involvement strategies;
- Scheduling committee and public meetings;

The five year update will include:

- Documentation of the planning process including how the plan was prepared, who was involved and how the public was included in each phase of the update;
- A review of the current hazard mitigation plan and federal regulations;
- A review of existing community plans, studies, zoning ordinances, and development trends;
- Detailed descriptions of all natural hazards that could affect the jurisdictions of Auburn, Opelika, Smiths Station, Loachapoka and Lee County;
- An assessment of the vulnerability of each jurisdiction to each hazard;
- Examination of assets and critical facilities and potential loss in each jurisdiction;
- A natural hazard mitigation strategy with goals, objectives and specific actions that reduce the risk of each hazard;
- A review of each jurisdiction's participation in the National Flood Insurance Program;
- A formal maintenance process to ensure the Lee County Hazard Mitigation Plan remains an active and pertinent document;

The plan update draft must be completed at least 6 months prior to the expiration of the current plan to allow sufficient time for review and comment by AEMA and FEMA, revisions as needed, and formal adoption of the approved plan update by each jurisdiction.

Once the governing bodies of each jurisdiction adopt the updated plan, a copy of the final plan will be placed at key locations in the community and available on the Lee County EMA website.

### **7.3 Incorporation and Integration of Mitigation Strategies Through Existing Programs and Planning Mechanisms**

In order for mitigation goals to be achieved and vulnerability to natural disasters be reduced, it is important to ensure that mitigation planning is incorporated into local government operations and the planning mechanisms of each jurisdiction in Lee County.

The jurisdictions of Lee County currently have the following planning documents and/or regulations in place:

- City of Auburn Comp Plan 2030
- City of Auburn Zoning Ordinances

- City of Opelika Comprehensive Plan 2020
- City of Opelika Code of Ordinances
- City of Smiths Station Subdivision Plan
- City of Smiths Station Comprehensive Plan
- Lee County Comprehensive Plan
- Lee County Subdivision Regulations

As each jurisdiction's planning documents are amended, updated or otherwise revised, the Lee County EMA and the Technical Advisory Committee will determine which data, strategies and goals from the Lee County Hazard Mitigation Plan are most appropriate for incorporation into each document. Additionally, each jurisdiction will be reporting to the Lee County EMA and Technical Advisory Committee on an interim and annual basis changes in planning, zoning, code enforcement and boundaries which may require updates to the Lee County Hazard Mitigation Plan.

Strategies being employed to assure incorporation and integration of mitigation strategies in local planning mechanisms include:

- Assuring representation from each jurisdiction on the Technical Advisory Committee.
- Jurisdiction notification of relevant changes in planning, zoning, ordinances, code enforcement and/or annexations to Lee County EMA as part of the interim update process.
- Reviewing changes to zoning, ordinances, and code enforcement and/or annexations, as well as new planning initiatives, studies and economic development as part of the annual update process.
- Evaluating progress on mitigation efforts during annual updates.
- Providing each jurisdiction with an annual report on mitigation efforts.
- Amending the Lee County Hazard Mitigation Plan as necessary.
- Conducting a thorough review of all existing community plans, studies, ordinances and development trends during the five year update.
- LCEMA attendance at relevant public hearings, commission meetings, council meetings, planning meetings and planning task force endeavors.

#### **7.4 Continued Public Participation**

The Lee County EMA will invite and encourage public participation during the monitoring, evaluating and updating of the Lee County Natural Hazards Mitigation Plan.

The Lee County EMA and Advisory Committee will encourage public attendance and participation during the interim and annual update processes, as well as a plan review following a disaster event. All meeting notices will be posted in public buildings, on community calendars, websites and social media. Public comments will be included in the yearly report.

During the five year update, first steps will include an evaluation of the success of public involvement strategy options used previously and research into new options which may increase citizen participation into all aspects of the planning process. Strategies will include



public notice of all committee meetings, media coverage of events, meetings or open houses geared toward the general public, surveys, and the use of social media.

The Lee County Natural Hazards Mitigation Plan and all interim, yearly and five year updates will be made available to the public through public ad in the paper and flyers at key locations. The ad and flyer will detail the availability of the plan for public review and its locations in each jurisdiction.

## Appendix A

# Stakeholder and Technical Advisory Committee



**Lee County Hazard Mitigation Plan Update  
Stakeholder and Technical Advisory Committee**

<b>Title</b>	<b>First</b>	<b>Last</b>	<b>Stakeholder or Advisor</b>	<b>Position</b>	<b>Organization</b>	<b>E-mail</b>
Mr.	Jaime	Baer	Advisor	Captain	Opelika Fire Department	
Mr.	Jerry	Bentley	Advisor	City Clerk	City of Smiths Station	<a href="mailto:ssfirstclerk@ctvea.com">ssfirstclerk@ctvea.com</a>
Ms.	Suzanne	Burnette	Stakeholder	Director	Lee-Russell Council of Governments	<a href="mailto:suzanne.burnette@adss.alabama.gov">suzanne.burnette@adss.alabama.gov</a>
Mr.	David	Cannon	Stakeholder	Council Member	City of Opelika	<a href="mailto:dcannon2@gmail.com">dcannon2@gmail.com</a>
Mr.	Jerry	Carroll	Advisor	Superintendent	Energen/Alagasco	<a href="mailto:jerry.carroll@energen.com">jerry.carroll@energen.com</a>
Mr.	Eric	Carson	Advisor	Director	Auburn Water Works	<a href="mailto:ecarson@auburnalabama.org">ecarson@auburnalabama.org</a>
Ms.	Kathy	Carson	Advisor	Director	Lee County EMA	<a href="mailto:kcarson@leecoema.com">kcarson@leecoema.com</a>
Dr.	Phillip	Chaney	Advisor	Professor	Auburn University	<a href="mailto:chanepl@auburn.edu">chanepl@auburn.edu</a>
Mr.	Steve	Cox	Advisor	Planner	Columbus EMA	<a href="mailto:scox@columbusga.org">scox@columbusga.org</a>
Dr.	Karen	Delano	Stakeholder	Superintendent	Auburn City Schools	
Ms.	Lafaye	Dellinger	Stakeholder	Mayor	City of Smiths Station	<a href="mailto:ssfirstmayor@ctvea.com">ssfirstmayor@ctvea.com</a>
Mr.	Trent	Dykes	Advisor	Assistant Engineer	Lee County	<a href="mailto:tdykes@leeco.us">tdykes@leeco.us</a>
Mr.	Bob	Franklin	Advisor	Director	Russell County EMA	<a href="mailto:bfranklin@rcema.us">bfranklin@rcema.us</a>
Mr.	Yuill	Graham	Advisor	Director	East Alabama Medical Center	
Mr.	Dan	Hilyer	Advisor	Director	Opelika Utilities	<a href="mailto:dhilyer@owwb.com">dhilyer@owwb.com</a>
Mr.	Mike	Hilyer	Advisor	Director	Opelika Department of Public Works	<a href="mailto:mike.hilyer@opelikapower.com">mike.hilyer@opelikapower.com</a>
Mr.	Doug	Hubbard	Advisor	Trainer	Lee County EMA	<a href="mailto:dhubbard@leecoema.com">dhubbard@leecoema.com</a>
Mr.	Bill	James	Stakeholder	Director	Auburn Department of Public Safety	<a href="mailto:bjames@auburnalabama.org">bjames@auburnalabama.org</a>
Mr.	Tim	Johnson	Advisor	Engineer	City of Auburn	<a href="mailto:tjohnson@auburnalabama.org">tjohnson@auburnalabama.org</a>

**Lee County Hazard Mitigation Plan Update  
Stakeholder and Technical Advisory Committee**

<b>Title</b>	<b>First</b>	<b>Last</b>	<b>Stakeholder or Advisor</b>	<b>Position</b>	<b>Organization</b>	<b>E-mail</b>
Ms.	Patsy	Jones	Stakeholder	Council Member	City of Opelika	<a href="mailto:patjones2@charter.net">patjones2@charter.net</a>
Sheriff	Jay	Jones	Stakeholder	Sherriff	Lee County	<a href="mailto:jjones@leecountysherriff.org">jjones@leecountysherriff.org</a>
Mr.	Jeff	Kappelman	Advisor	Chief Building Inspector	City of Opelika	<a href="mailto:jkappelman@ci.opelika.org">jkappelman@ci.opelika.org</a>
Ms.	Cathy	Kee	Advisor	Planner	Columbus EMA	<a href="mailto:ckee@columbusga.org">ckee@columbusga.org</a>
Ms	Jan	Kennedy	Advisor	Captain	Opelika Fire Department	
Chief	Lee	Lamar	Advisor	Chief	Auburn Fire Department	<a href="mailto:llamar@auburnalabama.org">llamar@auburnalabama.org</a>
Mr.	Johnny	Langley	Advisor	Assistant Director	Lee County EMA	<a href="mailto:jlangle@leecoema.com">jlangle@leecoema.com</a>
Ms.	DeeDee	Matthews	Advisor	Planner	Lee County E-911	<a href="mailto:dmatthewslee911@mindspring.com">dmatthewslee911@mindspring.com</a>
Ms.	Susan	McCallister	Advisor	Associate Director	Auburn University	<a href="mailto:mccalsm@auburn.edu">mccalsm@auburn.edu</a>
Chief	John	McEachern	Stakeholder	Chief	City of Opelika Police Department	<a href="mailto:jmceachern@ci.opelika.al.us">jmceachern@ci.opelika.al.us</a>
Mr.	Andy	Morris	Stakeholder	Utility Director	Smiths Water and Sewer Authority	<a href="mailto:amorris@smithswater.com">amorris@smithswater.com</a>
Dr.	Mark	Neighbors	Stakeholder	Superintendent	Lee County Schools	
Mr.	Marty	Nelson	Advisor	Director	Red Cross	<a href="mailto:marty.nelson@redcross.org">marty.nelson@redcross.org</a>
Dr.	Linda	North	Stakeholder	Dean	Southern Union Community College	<a href="mailto:lnorth@suscc.edu">lnorth@suscc.edu</a>
Ms.	Jeanne	O'Donnell	Stakeholder	Council Member	Town Of Loachapoka	<a href="mailto:odonnellj@lakeodessa.net">odonnellj@lakeodessa.net</a>
Mr.	Scott	Parker	Advisor	Engineer	City of Opelika	<a href="mailto:sparker@ci.opelika.al.us">sparker@ci.opelika.al.us</a>
Mr.	Micah	Peckham	Advisor	Director	Opelika Power and Light	<a href="mailto:mpeckham@opelikapower.com">mpeckham@opelikapower.com</a>
Ms.	Oline	Price	Advisor	Commissioner	Lee County Revenue Department	<a href="mailto:oprice@leeco.us">oprice@leeco.us</a>

**Lee County Hazard Mitigation Plan Update  
Stakeholder and Technical Advisory Committee**

<b>Title</b>	<b>First</b>	<b>Last</b>	<b>Stakeholder or Advisor</b>	<b>Position</b>	<b>Organization</b>	<b>E-mail</b>
Mr.	Larry	Prince	Advisor	GIS Manager	Opelika Power and Light	<a href="mailto:larry.prince@opelikapower.com">larry.prince@opelikapower.com</a>
Mr.	Eric	Pritchard	Advisor	Director	City of Opelika	<a href="mailto:epritchard@ci.opelika.al.us">epritchard@ci.opelika.al.us</a>
Mr.	Jeff	Ramsey	Advisor	Director	City of Auburn	<a href="mailto:jramsey@auburnalabama.org">jramsey@auburnalabama.org</a>
Chief	Paul	Register	Stakeholder	Chief	City of Auburn Police Department	<a href="mailto:pregister@auburnalabam.org">pregister@auburnalabam.org</a>
Mr.	David	Roberts	Advisor	Manager	Alabama Power Company	<a href="mailto:drobert@southernco.com">drobert@southernco.com</a>
Ms.	Lisa	Sandt	Advisor	PED Director	Lee-Russell Council of Governments	<a href="mailto:lisa.sandt@adss.alabama.gov">lisa.sandt@adss.alabama.gov</a>
Ms.	Barbara	Scott	Advisor	Planner	Lee-Russell Council of Governments	<a href="mailto:barbara.scott@adss.alabama.gov">barbara.scott@adss.alabama.gov</a>
Ms.	Rita	Smith	Advisor	Planner	Lee County EMA	<a href="mailto:rsmith@leecoema.com">rsmith@leecoema.com</a>
Ms.	Wendy	Swann	Stakeholder	Coordinator	Lee County Commission	<a href="mailto:wswann@leeco.us">wswann@leeco.us</a>
Mr.	Chris	Tate	Advisor	Planner	Lee County EMA	<a href="mailto:ctate@leecoema.com">ctate@leecoema.com</a>
Mr.	Jay	Uphold	Advisor	Manager	City of Auburn Department of Public Works	<a href="mailto:juphold@auburnalabama.org">juphold@auburnalabama.org</a>
Mr.	David	Veal	Advisor	Inspector	Lee County	<a href="mailto:dveal@leeco.us">dveal@leeco.us</a>
Mr.	Steve	Williams	Advisor	Director	Tallapoosa River Electric Cooperative	<a href="mailto:swilliams@trec.coop">swilliams@trec.coop</a>
Mr.	Terry	Woodall	Stakeholder	Council Member	Town Of Loachapoka	<a href="mailto:twoodall@lcydc.org">twoodall@lcydc.org</a>
Mr.	Tom	Wordon	Stakeholder	Council Member	City of Auburn	<a href="mailto:twordon@charter.net">twordon@charter.net</a>
Dr.	Jason	Wright	Advisor	Administrator	Lee County Schools	<a href="mailto:wright.jason@lee.k12.al.us">wright.jason@lee.k12.al.us</a>

February 3, 2014

Mr. John Seymour  
City of Opelika  
P.O. Box 390  
Opelika, AL 36803

Dear Mr. Seymour,

Lee-Russell Council of Governments, in collaboration with the Lee County Emergency Management Agency, has been awarded a grant to update the existing Lee County Hazard Mitigation Plan. Mitigation plans identify policies and actions that can be implemented over the long term to reduce risk and loss from hazards such as tornadoes, floods and severe weather events.

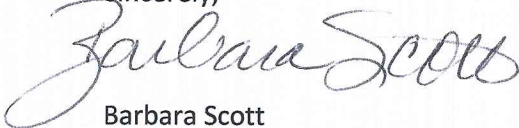
Updating the plan will allow all communities in Lee County to remain in compliance with 44 CFR 201.6 and FEMA Local Planning Guidance and Policies. An updated plan also ensures eligibility for future hazard mitigation grant funding to implement the plan's goals and strategies.

Your participation as a Stakeholder and/or member of the Technical Advisory Committee was an essential ingredient in the success of previous hazard mitigation planning efforts in Lee County. We need your expertise again in 2014 to ensure our update properly assesses the vulnerabilities of all communities in Lee County and contains effective strategies to mitigate loss of property and life.

The first meeting of Stakeholders and Technical Advisors will take place from 10:00-12:00 noon CST on Wednesday, February 26, 2014 at the Lee County Emergency Management Agency, which is located at 908 Avenue B in Opelika.

Please contact Barbara Scott at Lee-Russell Council of Governments by February 21, 2014 via phone (334-749-5264) or e-mail ([Barbara.scott@adss.alabama.gov](mailto:Barbara.scott@adss.alabama.gov)) to RSVP your attendance. If you cannot attend this meeting, we ask that you send a representative in your place.

Sincerely,

A handwritten signature in cursive script that reads "Barbara Scott". The signature is written in dark ink and is positioned above the printed name and title.

Barbara Scott  
PED Specialist



# 2014 Lee County Hazard Mitigation Plan Invitation List

Title	First Name	Middle	Last Name	Organization	Street Address	City	State	Zip	Committee
Mayor	Gary		Fuller	City of Opelika	P.O. Box 390	Opelika	AL	36803	Stakeholder
Mr.	John		Seymour	City of Opelika	P.O. Box 390	Opelika	AL	36803	Stakeholder
Mayor	Bill		Hamm	City of Auburn	1846 Hayden Avenue	Auburn	AL	36830	Stakeholder
Mr.	Charles	M.	Duggan	City of Auburn	144 Tichenor Avenue; Suite 1	Auburn	AL	36830	Stakeholder
Mayor	LaFaye		Dellinger	City of Smiths Station	P.O. Box 250	Smiths Station	AL	36877	Stakeholder
Mr.	Jerry		Bentley	City of Smiths Station	P.O. Box 250	Smiths Station	AL	36877	Stakeholder
Mayor	James		Grout	City of Loachapoka	P.O. Box 10	Loachapoka	AL	36865	Stakeholder
Judge	Bill		English	Lee County Commission	P.O. Box 666	Opelika	AL	36803	Stakeholder
Mr.	Roger		Rendleman	Lee County Commission	P.O. Box 666	Opelika	AL	36803	Stakeholder
Mr.	Jeffrey	L.	Ramsey	Auburn Director of Public Works/City Engineer	171 N. Ross Street; Suite 200	Auburn	AL	36830	Technical Advisory
Mr.	Scott		Parker	City of Opelika Engineer	P.O. Box 390	Opelika	AL	36803	Technical Advisory
Mr.	Justin		Hardy	Lee County Engineer	P.O. Box 1007	Opelika	AL	36803	Technical Advisory
Mr.	David		Veal	Lee County Building Inspection	100 Orr Avenue	Opelika	AL	36801	Technical Advisory
Ms.	Lisa		Wimberly	Lee County Animal Control	P.O. Box 4187	Opelika	AL	36803	Technical Advisory
Ms.	Oline		Price	Lee County Revenue Commission	P.O. Box 3050	Opelika	AL	36803	Technical Advisory
Dr.	James	E.	McCoy	Lee County Schools	2410 Society Hill Road	Opelika	AL	36804	Stakeholder
Dr.	Karen	T.	DeLano	Auburn City Schools	P.O. Box 3270	Auburn	AL	36831	Stakeholder
Dr.	Mark		Neighbors	Opelika City Schools	300 Simmons Street	Opelika	AL	36801	Stakeholder
Mr.	Chance		Corbett	Auburn University Department of Public Safety	543 West Magnolia	Auburn	AL	36849	Technical Advisory
Ms.	Susan		McCallister	Auburn University Department of Public Safety	543 A West Magnolia	Auburn	AL	36849	Technical Advisory
Dr.	Phillip		Chaney	Auburn University Department of Geology	210 Petrie Hall	Auburn	AL	36849	Technical Advisory
Dr.	Linda		North	Southern Union Community College	1701 Lafayette Parkway	Opelika	AL	36801	Stakeholder
Sheriff	Jay		Jones	Lee County Sheriff's Department	1900 Frederick Road	Opelika	AL	36803	Technical Advisory
Chief	Paul		Register	Auburn Police Department	161 North Ross Street	Auburn	AL	36830	Technical Advisory
Chief	Lee		Lamar	Auburn Fire Department	161 North Ross Street	Auburn	AL	36830	Technical Advisory
Mr.	Bill		James	City of Auburn; Director of Public Safety	161 North Ross Street	Auburn	AL	36830	Stakeholder
Chief	John		McEachern	Opelika Police Department	501 S. 10th Street	Opelika	AL	36803	Technical Advisory



Chief	Terry	Adkins	Opelika Fire Department	1015 Avenue B	Opelika	AL	36803	Technical Advisory
Mr.	Bill	Meadows	Lee County E-911 Communication	1819 Pepperall Parkway; #202	Opelika	AL	36801	Technical Advisory
	Riley	Land	Columbus Fire and Emergency Medical Services	510 10th Street	Columbus	GA	31901	Technical Advisory
Ms.	Susanna	Capps	Alabama Department of Public Safety	1220 Fox Run Parkway; Bldg A-3	Opelika	AL	36801	Technical Advisory
Mr.	Bill	Harris	Lee County Coroner	P.O. Box 2770	Opelika	AL	36803	Technical Advisory
Mr.	Charles	Browne	Lee County Extension	600 S. 7th Street; Suite 4	Opelika	AL	36803	Technical Advisory
Mr.	Andrew	Guy	Lee County Forestry	1696 US Highway 29 N.	Auburn	AL	36830	Technical Advisory
Mr.	Robert	Bayliss	Alabama Emergency Management	P.O. Drawer 2160	Clanton	AL	35046	Stakeholder
Ms.	Kathi	Carson	Lee County Emergency Management	908 Avenue B	Opelika	AL	36803	Both
Mr.	Johnny	Langley	Lee County Emergency Management	908 Avenue B	Opelika	AL	36803	Both
Ms.	Rita	Smith	Lee County Emergency Management	908 Avenue B	Opelika	AL	36803	Both
Mr.	Bob	Franklin	Russell County Emergency Management	P.O. Box 1786	Phenix City	AL	36868	Technical Advisory
Ms.	Judy	Kinebrew	Macon County Emergency Management	210 N. Elm Street; Suite 006	Tuskegee	AL	36083	Technical Advisory
Mr.	Roderick	Clark	Bullock County Emergency Management	P.O. Box 472	Union Springs	AL	36089	Technical Advisory
Mr.	Donnie	Smith	Chambers County Emergency Management	3507 Veteran's Memorial Pkwy	Lanett	AL	36863	Technical Advisory
Mr.	Jeff	Meyer	Muscogee County Emergency Management	510 10th Street	Columbus	GA	31901	Technical Advisory
Mr.	Jerry	Carroll	Alagasco	3400 Skyway Drive	Auburn	AL	36830	Technical Advisory
Mr.	Titus	Lindsey	Alabama Power Company	1699 S. College Street	Auburn	AL	36832	Technical Advisory
Mr.	Steve	Williams	Tallapoosa River Electric Cooperative	P.O. Box 675	LaFayette	AL	36862	Technical Advisory
Mr.	Eric	Carson	City of Auburn Director of Water Resources	1501 W. Samford Avenue	Auburn	AL	36832	Technical Advisory
Mr.	Brian	Skelton	Opelika Power and Light	204 S. 7th Street	Opelika	AL	36801	Technical Advisory
Mr.	Marty	Nelson	East Alabama Chapter; American Red Cross	206 26th Street	Opelika	AL	36801	Technical Advisory
Mr.	Terry	Andrus	East Alabama Medical Center	2000 Pepperall Parkway	Opelika	AL	36801	Stakeholder



Mr.	Randy		Causey	East Alabama Medical Center	2000 Pepperall Parkway	Opelika	AL	36801	Technical Advisory
Mr.	Joe		Martin	ETS	2000 Pepperall Parkway	Opelika	AL	36801	Technical Advisory
Mr.	Charles		Gray	ADPH; Area 8	2500 Fairlane Drive; Bldg 2	Montgomery	AL	36112	Stakeholder
Mr.	John		Trimble	Alabama Department of Transportation	9100 Highway 280 W	Auburn	AL	36830	Technical Advisory
Mr.	Vance		Beck	Alabama Department of Transportation	56 Silver Run Drive	Seale	AL	36875	Technical Advisory
Mr.	Sandford		Downs	Lee-Russell Public Transportation	2207 Gateway Drive	Opelika	AL	36801	Technical Advisory
Ms.	Lisa		Sandt	Lee-Russell Council of Governments	2207 Gateway Drive	Opelika	AL	36801	Both
Ms.	Barbara		Scott	Lee-Russell Council of Governments	2207 Gateway Drive	Opelika	AL	36801	Both

## Appendix B

# Committee Meetings and Public Involvement



*Community Meeting, June 5, 2014*

**2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
STAKEHOLDER AND TECHNICAL ADVISORY COMMITTEE MEETING  
FEBRUARY 26, 2014**

**AGENDA**

Welcome and Introductions

Brief Overview of Disaster Mitigation Act and Local Mitigation Planning

Roles of Stakeholders and Technical Advisors

Update Timeline

Review of Existing Mission Statement

Hazard Identification & Risk Assessment

In Kind Cost Worksheets

Next Meeting April 23, 2014



Attendees: 46





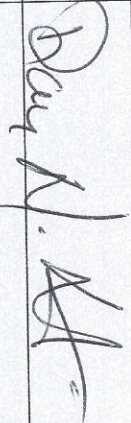


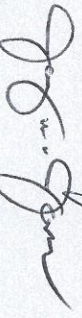
LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
2/26/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING

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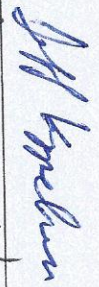
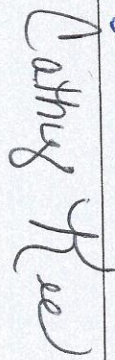
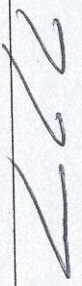
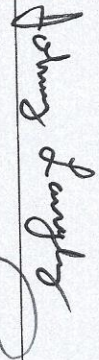
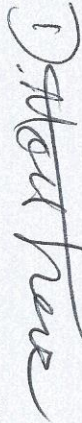

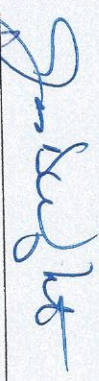
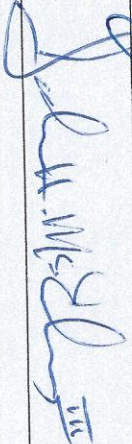
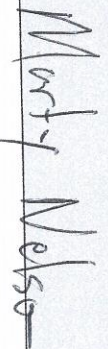
Name	Organization	Signature	E-mail
ADKINS, Chief Terry <i>Tom Kennedy</i>	Opelika Fire Department	<i>gk</i>	<i>tkennedy@opelika.net</i>
BENTLEY, Jerry <i>James Rader</i>	City of Smiths Station <i>James Rader</i>	<i>AS</i>	<i>trader@ci.opelika.ms.us</i>
BROWDY, Bill	East Alabama Medical Center	<i>Bill Browdy</i>	<i>bill.browdy@arcema.us</i>
<i>Graham Yull</i> BURNETTE, Suzanne	Lee-Russell Council of Governments	<i>Suzanne Burnette</i>	<i>suzanneburnette@adss.alabamasgov</i>
BURTON, Kenneth	Opelika City Schools	<i>Kenneth Burton</i>	<i>kenneth.burton@opelikaschools.org</i>
CARROLL, Jerry	Alagasco	<i>Jerry Carroll</i>	<i>jerry.carroll@alagasco.com</i>
CARSON, Eric	Auburn Water Works	<i>Eric Carson</i>	<i>ecarson@auburnwaterworks.org</i>
CARSON, Kathy	Lee County EMA	<i>Kathy Carson</i>	<i>kcarson@leecoma.co</i>
CHANEY, Dr. Phillip	Auburn University	<i>Phillip Chaney</i>	<i>chanep1@auburn.edu</i>
CORBETT, Chance	Auburn University	<i>Chance Corbett</i>	<i>corbett,cem@auburn.edu</i>



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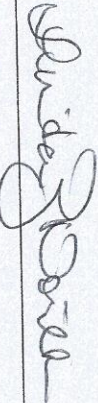





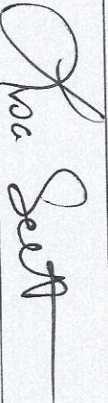
Name	Organization	Signature	E-mail
COX, Steve	Columbus EMA		SteveCox@cumbeqa.org
DELLINGER, LaFaye	City of Smiths Station		
DYKES, Trent	Lee County Engineering		tdykes@lccco.us
FRANKLIN, Bob	Russell County EMA		bfrankline@rcema.us
HAM, Robert	Lee County Commission		
HILYER, Dan	Opelika Utilities		dhilyer@owusb.com
JAMES, Bill	City of Auburn		billjames@auburnutl.com
JONES, Patsy	City of Opelika		pajones2@cheater.net
JONES, Sherriff Jay	Lee County Sheriff		jones@lee-county-sheriff.org

LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
2/26/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
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Name	Organization	Signature	E-mail
KAPPELMAN, Jeff	City of Opelika		jkappelman@ci.opelika,al.us
KEE, Cathy	Columbus EMA		ckee@columbusga.org
LAMAR, Chief Lee	Auburn Fire Department		llamar@auburnalabama.org
LANGLEY, Johnny	Lee County EMA		JLangley@leeccoma.com
MATTHEWS, Dee Dee or MEADOWS, Bill	Lee County E-911		dmatthews@lee911@ NINELSPRING- AL.com
MCCALLISTER, Susan	Auburn University		mccalsm@auburn.edu
MCGEEY, Dr. James <del>WRIGHT, Dr. Jason</del>	Lee County Schools		wright.jason@lee.k12 .al.us
MCEACHERN, Chief John	Opelika Police Department		jmceachern@ci.opelika,al.us
NELSON, Marty	American Red Cross		marty.nelson@redcross.org



**LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
2/26/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
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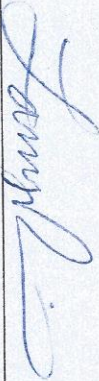
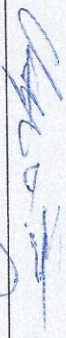
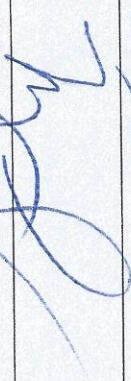
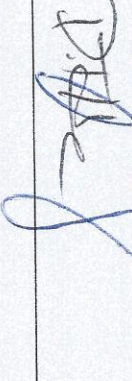
Name (Please Print Clearly)	Organization	Signature	E-mail
NORTH, Dr. Linda	Southern Union Community College		Lnorth@suscc.edu
O'DONNELL, Jeanne	Town of Loachapoka (Cassville)		adonnelly@lakelandss.net
PARKER, Scott	City of Opelika Engineer		sparker@ci.opelika.al.us
PECKHAM, Micah	Opelika Power and Light		micah.peckham@opelikapower.com
PRICE, Oline	Lee County Revenue		lteel@leeco.us
RAMSEY, Jeff	City of Auburn Engineer		jrarmey@auburnalabama.org
REGISTER, Chief Paul	City of Auburn Police Department		Preyster@auburnaleb.us
ROBERTS, David	Alabama Power Company		drcabelf@southernco.com
SANDT, Lisa	Lee-Russell Council of Governments		lisa.sandt@adss.alabama.gov

LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
2/26/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
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Name (Please Print Clearly)	Organization	Signature	E-mail
SCOTT, Barbara	Lee-Russell Council of Governments	<i>Barbara Scott</i>	<i>barbara.scott@lrcog.alabama.gov</i>
SEYMOUR, John	City of Opelika		
SMITH, Rita	Lee County EMA	<i>Rita A Smith</i>	<i>RSmith@leeemergency.com</i>
SWAN, Wendy	Lee County Commission	<i>Wendy Swan</i>	<i>wswan@leecountys.com</i>
UPHOLD, Jay	City of Auburn	<i>Jay Uphold</i>	<i>juphold@auburn-alabama.org</i>
VEAL, David	Lee County Building Inspection	<i>David Veal</i>	<i>dveal@leeco.us</i>
VERONESE, Dennis	Auburn City Schools		
WILLIAMS, Steve	Tallapoosa River Electric Cooperative	<i>Steve Williams</i>	
WORDON, Tom	City of Auburn	<i>Tom Wordon</i>	<i>twordon@charter.net</i>



LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
2/26/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
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Name (Please Print Clearly)	Organization	Signature	E-mail
Larry Prince	Opelika Power Services		Larry.Prince@opelika-power.com
Chris Tate	Lee Co. EMA		chris@leeema.com
Mike Hilger	Opelika PD		
Doug Hubbard	Lee Co EMA		dhubbard@leeema.com

**LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
STAKEHOLDER AND TECHNICAL ADVISORY COMMITTEE MEETING  
APRIL 23, 2014**

**AGENDA**

Welcome and Introductions

In Kind Cost Worksheets

Recap of February 26, 2014 Meeting

Goal Review

Objectives and Mitigation Actions

EOC Expansion/Renovation

Mitigation Plan Maintenance

Next Steps

Public Meeting: June 4, 2014

2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
4/23/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
SIGN IN SHEET

Name	Organization	E-mail
① David Canon	City of Opelika	dcanon2@gmail.com
② Terry Bentley	City of Smith Station	ssfi.reference@ctea.net
③ Bryce James	City of Auburn	bjames@auburnalabama.org
④ Michael Peckham	City of Opelika OPS	michael.peckham@opelikaops.com
⑤ Tim Johnson	City of Auburn	tjohnson@auburnalabama.org
⑥ Lisa Sandt	LECOG	
⑦ Phillip Cheney	Auburn Univ	chenepl@auburn.edu



2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
4/23/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
SIGN IN SHEET

	Name	Organization	E-mail
8.	Cathy Fee	Columbus EMA	CFee@columbusga.org
9.	Lisa Teel	Lee Co. Revenue Commission	lteel@leeco.us
10.	Eric Prichard	ESG	epritchard@ci.opelika.al.us
11.	Terry Woodall	Lordsburg of Town Council	twoodall@ci.crx.org
12.	Scott Parka	Opelika Engineering	sparka@ci.opelika.al.us
13.	Jay Upshaw	City of Auburn	upshaw@auburn-alabama.org
14.	Katharine Carson	LEEMA	kcarson@leecoema.org
15.	RHA Smith	Lee County EMA	RSMITH@LEECOEMA.COM

**2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
4/23/14 STAKEHOLDERS AND TECHNICAL ADVISORS MEETING  
SIGN IN SHEET**

	Name	Organization	E-mail
16.	Steve Miller	Columbus Police Dept	Scot@columbusga.com
17.	Wanda Sueann <del>Paul Register</del>	Lee Co Commission	wsueann@leeco.us
18.	Paul Register	Arbun P.D	register@arbunadaberna.org
19.	Matty Nelson	A&C	mattynelson@redcross.org



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**LEE-RUSSELL  
COUNCIL OF GOVERNMENTS**  
Planning and Economic Development

## **LEE COUNTY HAZARD MITIGATION PLAN OPEN HOUSE ANNOUNCEMENT**

Lee-Russell Council of Governments will hold a Hazard Mitigation Plan Open House on Thursday, June 5, 2014 from 10:00 A.M. CDT to 4:30 CDT. The Open House will take place in the Conference Room at Lee-Russell Council of Governments, which is located at 2207 Gateway Drive in Opelika, AL.

The purpose of this Open House is to provide information about natural hazards such as flood and severe storms which affect Lee County and gain insight from citizens on how prepared they feel for a natural disaster.

**Citizens are urged to stop by and share their concerns about natural hazards and suggestions for improving preparedness and response in the event of a disaster.**

If you require special assistance to attend this Open House, please call 334-749-5264, ext 237 by June 3, 2014.

A Citizen Survey on Natural Hazards can also be downloaded at [www.lrcog.com](http://www.lrcog.com). The completed survey and any comments may be submitted to Lee County Natural Hazard Comments, 2207 Gateway Drive, Opelika, AL 36801-6582, no later than June 20, 2014.





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#### **FY 2014-2015 SECTION 5310 NOTICE OF FUNDING AVAILABILITY**

The Alabama Department of Transportation (ALDOT), Modal Programs Bureau, is now accepting Applications for funding consideration through the Section 5310 Enhanced Mobility of Seniors and Individuals with Disabilities Program. The Federal Transit Administration (FTA) provides funding for transit related services that assist the state's population of seniors & individuals with disabilities. For information on who is eligible to apply, amount of funds available, and grant instructions, click on the pdf below for this and other information.

[5310 Grant Application Package](#)



### **2014 Hazard Mitigation Plan Updates in Lee and Russell County**

The local mitigation plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards.

Click [HERE](#) for the Russell County Citizen Survey

#### **Upcoming Meetings/Russell County**

To be announced

**To See a Slide Show on Natural Hazards in Russell County please click [HERE](#).**

**To rate Russell County's vulnerability to Natural Hazards yourself, use the documents below:**

[Hazard Risk Rating Key](#)

[Hazard Risk Rating Sheet](#)

Click [HERE](#) for the Lee County Citizen Survey

#### **Upcoming Meetings/Lee County**

Public Meeting

June 5, 2014

11:00 am -1:00 pm CST

Lee-Russell Council of Governments Conference Room - 2207 Gateway Drive Opelika, AL 36801

**To See a Slide Show on Hazards in Lee County [click here](#).**

**To rate Lee County's vulnerability to Natural Hazards yourself, use the documents below:**

[Lee County Hazard Risk Rating Key](#)

[Lee County Hazard Risk Rating Sheet](#)

**Please send your vulnerability ratings to [Barbara.scott@adss.alabama.gov](mailto:Barbara.scott@adss.alabama.gov) by April 4, 2014.**


For more information, please contact Barbara Scott at 334-749-5264 ext. 237 or at [barbara.scott@adss.alabama.gov](mailto:barbara.scott@adss.alabama.gov)

The 2010 Census Population Data is now available for Lee and Russell Counties. Please click the links below for more information.

- [Lee County 2010 Census Population Map](#)
- [Russell County 2010 Census Population Map](#)
- [2010 Census Lee County Population and Housing Data](#)
- [2010 Census Russell County Population and Housing Data](#)

The Draft 2009 Comprehensive Economic Development Strategy for Lee & Russell Counties is now available [2009 Draft CEDS](#). For more information or to make comments please contact [Barbara Scott](#) or call 334.749.5264 ext.237

[Opelika, AL](#)  
[Get the 10 day forecast](#)

 **68°F**  
Cloudy

[Garden Calendar](#)  
[For Your Lawn](#)  
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**Feels Like: 68°F**  
**Humidity: 82%**  
**Wind: NE at 8 mph**  
Enter city/zip   
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Lee-Russell Council of Governments  
2207 Gateway Drive Opelika, AL 36801-6834  
Phone: (334) 749-5264 Fax: (334) 749-6582  
1-800-243-5463 (1-800-AGELINE)



**2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE**  
**6/5/14 OPEN HOUSE**  
**SIGN IN SHEET**

	Name	City/Community	E-mail, If you would like more information
1	Taylor Dobson	Auburn	taylor.dobson@adss.alabama.gov
2	Berniene Sandt	Opelika	
3	Megan McCollough	Auburn	megan.megan@adss.alabama.gov
4	Juliana Scott	Auburn, AL	aubell@bellsouth.net
5	Lisa Sandt	Auburn	lisa.sandt@adss.alabama.gov
6	Luther Holt	ILVborn	
7	Maria M Davis	Opelika Lee Co	Maria.Davis@adss.alabama.gov
8	Charlette Bledsoe	Auburn	,
9	Lisa Barnes	Opelika	

**2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE**  
**6/5/14 OPEN HOUSE**  
**SIGN IN SHEET**

	Name	City/Community	E-mail, If you would like more information
10	Dobbie Abby	101 Lee Rd 593 Peach St, AL	
11	Paul Jackson	Dixton, AL	
12	howell Fox	Auburn	
13	Jeanne Thomas	Auburn	
14	Barbara Graddy	Auburn	
15	Sanford Downs	Salem	
16	Jessie Osborn	Opelika	
17	Jennifer Stoud	Opelika	
18	Sackie Pinkard	Opelika	



2014 LEE COUNTY HAZARD MITIGATION PLAN UPDATE  
6/5/14 OPEN HOUSE  
SIGN IN SHEET

	Name	City/Community	E-mail, if you would like more information
19	Van Vurey	Opelika	Van.Vurey@adss.alabama.gov
20	KENT BARN	OPELIKA	
21	Carolyn Brewer	Auburn	Carolyn.Brewer@adss.alabama.gov
22	Brandie Battiste	Auburn	Brandie.Battiste@adss.alabama.gov
23	Donna Rowell	Opelika	donna.rowell@adss.alabama.gov
24	Hyp HON	OP	
25	Becky Carnack	Opelika	becky.carnack@adss.alabama.gov

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Welcome to the Lee-Russell Council of Governments website.

Lee-Russell Council of Governments is a regional planning and development organization that serves member governments by managing programs, promoting collaborative efforts, and serving as a clearinghouse for federal, state, and local funds.

**Executive Director: Suzanne G. Burnette**

**Established: 1967**

**Area: 1,262.9 sq. mi.**

**Population: 193,194**

**LRCOG Board Chairman**

**Mayor Gary Fuller**

**City of Opelika, Alabama**

## Lee-Russell Aging Foundation 9th Annual Unforgettable Footsteps Mardi Gras Run/Walk

The Lee-Russell Aging Foundation sponsored the 9th Annual Unforgettable Footsteps Mardi Gras Walk/Run on January 25, 2014 to raise funds to provide quality services to elderly citizens in Lee and Russell Counties. We would like to thank the following sponsors for their generous donations:

**KING - Mitchell and Sons; Oxford Healthcare**

**QUEEN - Tiger Rags**

We would also like to thank all of our Fancy Flirt and Jester level sponsors for their generous donations and all of those who helped make this year's Unforgettable Footsteps a huge success!

Fri - May 02
<b>Auburn University Internet Research for Seniors</b> Who: Men and Women 65 years and older who have used the Internet before (each participant will receive \$40.00)  Where: Spidle Hall, Auburn University  When: Friday, May 2, 2014 9:30am - 12:30pm CST  Contact Lou Ella Foxx at 334-749-5264 ext. 209 for more information
Fri - May 09
<b>Annual Older Americans Celebration</b> Where: Kiesel Park (520 Chadwick Lane Auburn, AL)  When: Friday May 9, 2014 9:00am - 1:00pm CST  Contact Lou Ella Foxx at 334-749-5264 ext. 209 for more information

[visit our calendar for a full listing](#)

## 2014 Hazard Mitigation Plan Updates in Lee and Russell County



Click [HERE](#) for more information

[Opelika, AL](#)





slide1

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## [Welcome to the Lee-Russell Council of Governments](#)



### 2014 Hazard Mitigation Plan Updates in Lee and Russell County

The local mitigation plan is the representation of the jurisdiction's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards.

#### **Upcoming Meetings/Russell County**

Stakeholder and Technical Advisor Meeting

Thursday, April 17, 2014

10:00 am -12:00 pm EST

Russell County Courthouse; Commission Chambers

1000 Broad Street

Phenix City, AL

To See a Slide Show on Natural Hazards in Russell County please click [HERE](#).

To rate Russell County's vulnerability to Natural Hazards yourself, use the documents below:

[Hazard Risk Rating Key](#)

[Hazard Risk Rating Sheet](#)

#### **Upcoming Meetings/Lee County**

Stakeholder and Technical Advisor Meeting

Wednesday, April 23, 2014

10:00 am -12:00 pm CST

Location TBD

To See a Slide Show on Hazards in Lee County [click here](#).

To rate Lee County's vulnerability to Natural Hazards yourself, use the documents below:

[Lee County Hazard Risk Rating Key](#)

[Lee County Hazard Risk Rating Sheet](#)

Please send your vulnerability ratings to [Barbara.scott@adss.alabama.gov](mailto:Barbara.scott@adss.alabama.gov) by April 4, 2014.

For more information, please contact Barbara Scott at 334-749-5264 ext. 237 or at [barbara.scott@adss.alabama.gov](mailto:barbara.scott@adss.alabama.gov)

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The Draft 2009 Comprehensive Economic Development Strategy for Lee & Russell Counties is now available [2009 Draft CEDS](#) For more information or to make comments please contact [Barbara Scott](#) or call 334.749.5264 ext.237

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**77°F**  
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**Feels Like:** 77°F  
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1-800-243-5463 (1-800-AGELINE)

# Appendix C

## Critical Facilities



*Lee County Emergency Operations Center*

## **Lee County Natural Hazards Mitigation Plan – Critical Facilities**

<b>Type of Asset</b>	<b>Name</b>
Essential/Medical	East Alabama Medical Center
Essential/Medical	East Alabama Mental Health
Essential/Medical	Emergency Management System
Essential/Medical	Lee County Health Department
Essential/Medical	Auburn University Medical Clinic
Essential/Law Enforcement	City of Auburn Police Department
Essential/Law Enforcement	Lee County Justice & Detention Center
Essential/Law Enforcement	Lee County Sheriff's Office
Essential/Law Enforcement	Lee County Sheriff's Office - Annex Smiths Station
Essential/Law Enforcement	Lee County Youth Development Center
Essential/Law Enforcement	Federal Courthouse located in City of Opelika
Essential/Law Enforcement	State Troopers Division for Lee County
Essential/Fire	Alabama Forestry Commission
Essential/Fire	City of Auburn Fire Division
Essential/Fire	City of Auburn Fire Station #1
Essential/Fire	City of Auburn Fire Station #2
Essential/Fire	City of Auburn Fire Station #3
Essential/Fire	City of Auburn Fire Station #4
Essential/Fire	City of Auburn Fire Station #5
Essential/Fire	City of Auburn Fire Station #6
Essential/Fire	Beauregard Volunteer Fire Department
Essential/Fire	Farmville Volunteer Fire Department
Essential/Fire	Lee-Chambers Volunteer Fire Department
Essential/Fire	Notasulga Volunteer Fire Department
Essential/Fire	City of Opelika Fire Department
Essential/Fire	City of Opelika Fire Station #1
Essential/Fire	City of Opelika Fire Station #2
Essential/Fire	City of Opelika Fire Station #3
Essential/Fire	City of Opelika Fire Station #4
Essential/Fire	City of Opelika Fire Station #5
Essential/Fire	Salem Volunteer Fire Department
Essential/Fire	Smiths Station, Friendship Volunteer Fire Department (7 Locations)
Essential/Fire	Southwest Lee County Volunteer Fire Department
Essential/Emer. Operation Centers	Lee County Emergency Management Agency
Essential/Governmental	City of Auburn City Hall
Essential/Governmental	City of Auburn Development Services Building
Essential/Governmental	City of Opelika City Hall
Essential/Governmental	Lee County Courthouse
Essential/Governmental	Lee County Courthouse (Smiths Station Annex)
Essential/Governmental	Lee County Courthouse (Auburn Annex)
Essential/Governmental	Loachapoka Town Hall (Auburn Annex)

Type of Asset	Name
Essential/Governmental	Smiths Station Government Center
Essential/Governmental	T.K. Davis Justice Center, Lee County
Essential/Governmental	Sheriff W.S. Jones Detention Center
Essential/Evacuation Shelters	Auburn First Baptist Church
Essential/Evacuation Shelters	Auburn United Methodist Church
Essential/Evacuation Shelters	Auburn Univ. Eaves Memorial Coliseum
Essential/Evacuation Shelters	Auburn Univ. Student Activities Center
Essential/Evacuation Shelters	Farmville Baptist Church / Auburn
Essential/Evacuation Shelters	Samford Junior High School / Auburn
Essential/Evacuation Shelters	Loachapoka High School / Lee County
Essential/Evacuation Shelters	Covington Recreation Center / Opelika
Essential/Evacuation Shelters	Opelika First Baptist Church
Essential/Evacuation Shelters	Opelika First Presbyterian Church
Essential/Evacuation Shelters	Opelika First United Methodist Church
Essential/Evacuation Shelters	Opelika Recreation Center
Essential/Evacuation Shelters	Opelika Middle School
Essential/Evacuation Shelters	Pepperell Baptist Church / Opelika
Essential/Evacuation Shelters	Trinity United Methodist Center / Opelika
Essential/Evacuation Shelters	Sanford Middle School / Opelika
Essential/Evacuation Shelters	Southern Union; Health Sciences Building / Opelika
Essential/Evacuation Shelters	Southern Union; Cafeteria / Opelika
Essential/Evacuation Shelters	Wacoochee Junior High / Lee County
Essential/Evacuation Shelters	Smiths Station High School / Lee County
Essential/Evacuation Shelters	Smiths Station Primary School Lee County
Essential/Evacuation Shelters	St. Stephens Episcopal Church / Lee County
Essential/Evacuation Shelters	Smiths Station Elementary / Lee County
Essential/Evacuation Shelters	Beulah Baptist Church / Lee County
Essential/Evacuation Shelters	Beulah High School / Lee County
Essential/Evacuation	Evacuation Shelters
Essential/Education	Auburn University Main Campus Buildings
Essential/Education	Southern Union Community College Opelika Campus
Essential/Education	Auburn City Schools Board of Education Building
Essential/Education	Auburn Early Education Center
Essential/Education	Auburn High School
Essential/Education	Auburn Junior High School
Essential/Education	Cary Woods Elementary School / Auburn
Essential/Education	Dean Road Elementary School / Auburn
Essential/Education	Drake Middle School / Auburn
Essential/Education	Ogletree Elementary School / Auburn
Essential/Education	Pick Elementary School / Auburn
Essential/Education	Richland Road Elementary School
Essential/Education	Wrights Mill Road Elementary School / Auburn
Essential/Education	Yarborough Elementary School / Auburn

Type of Asset	Name
Essential/Education	Lee County Board of Education Building
Essential/Education	Beauregard High School / Lee County
Essential/Education	Beauregard Elementary School / Lee County
Essential/Education	Beulah High School / Lee County
Essential/Education	Beulah Elementary School / Lee County
Essential/Education	Loachapoka High school & Elementary School / Lee County
Essential/Education	Sanford Middle School / Lee County
Essential/Education	Smiths Primary School / Lee County
Essential/Education	Smiths High School / Lee County
Essential/Education	Smiths Elementary School / Lee County
Essential/Education	Smiths Intermediate School / Lee County
Essential/Education	Wachoochee Jr. High School / Lee County
Essential/Education	Instructional Center - Salem / Lee County
Essential/Education	Technology Center - Salem / Lee County
Essential/Education	Maintenance Facility / Lee County
Essential/Education	Lee-Scott Academy Campus & Administration Buildings
Essential/Education	City of Opelika Board of Education Building
Essential/Education	Northside Elementary School / Opelika
Essential/Education	Jeter Primary School / Opelika
Essential/Education	Opelika Middle School
Essential/Education	Carver primary School / Opelika
Essential/Education	Opelika High School
Essential/Education	Morris Avenue Intermediate School / Opelika
Essential/Education	Southview Primary School / Opelika
Essential/Education	West Forest Intermediate / Opelika
Transportation/Airways	Auburn University Regional Airport
Transportation/Highways	Interstate 85
Transportation/Highways	State Highway 280/431
Transportation/Highways	State Highway 14
Transportation/Highways	State Highway 29
Transportation/Railways	CSX
Transportation/Railways	Northfolk-Southern Railways
Transportation/Motor Freight/Air Carriers	Federal Express
Transportation/Motor Freight/Air Carriers	UPS
Transportation/Motor Freight/Air Carriers	Airborne
Infrastructure/Communications	AT&T / Opelika
Infrastructure/Communications	Charter Communications
Infrastructure/Communications	Cellular Phone Carriers
Infrastructure Systems/Electricity	Alabama Power
Infrastructure Systems/Electricity	City of Opelika Light and Power
Infrastructure Systems/Electricity	Dixie Electric
Infrastructure Systems/Electricity	Tallapoosa River Electric Cooperative
Infrastructure Systems/Public Works	City of Auburn's Public Works Building

Type of Asset	Name
Infrastructure Systems/Public Works	City of Auburn's Water Resource Management Pumping Stations
Infrastructure Systems/Public Works	City of Auburn's Water Resource Management Water Treatment Plant
Infrastructure Systems/Public Works	City of Auburn Water Resource Management Water Storage Tanks (8)
Infrastructure Systems/Public Works	City of Auburn Water Resource Management Dam and Spillway
Infrastructure Systems/Public Works	Beauregard Water Authority Building
Infrastructure Systems/Public Works	Beauregard Water Authority Pumping Station (1)
Infrastructure Systems/Public Works	Beauregard Water Authority Storage Tanks (4)
Infrastructure Systems/Public Works	Beauregard Water Authority Well (1)
Infrastructure Systems/Public Works	Lee-Chambers Utilities District Pumping Station (1)
Infrastructure Systems/Public Works	Lee-Chambers Utilities District Storage Tank (1)
Infrastructure Systems/Public Works	Loachapoka Water Authority Office Building
Infrastructure Systems/Public Works	Loachapoka Water Authority Pumping Stations (4)
Infrastructure Systems/Public Works	Loachapoka Water Authority Storage Tanks (5)
Infrastructure Systems/Public Works	Opelika Water Works Building
Infrastructure Systems/Public Works	Opelika Water Works Pumping Stations (3)
Infrastructure Systems/Public Works	Opelika Water Works Water Treatment Plant
Infrastructure Systems/Public Works	Opelika Water Work Storage Tanks (8)
Infrastructure Systems/Public Works	Smiths Water Authority Office Building
Infrastructure Systems/Public Works	Smiths Water Authority Water Treatment Plant
Infrastructure Systems/Public Works	Smiths Water Authority Pumping Stations (4)
Infrastructure Systems/Public Works	Smiths Station Water Authority Storage Tanks (8)
Infrastructure Systems/Utility	Alabama Gas / Alagasco
High Potential Loss / Infrastructure	Goats Rock Dam / Lee County
High Potential Loss / Infrastructure	Bartlett's Ferry Dam / Lee County
Hazardous Material Facilities	Alabama Dept. of Trans. / Opelika
Hazardous Material Facilities	Alabama Power (Auburn Crew HQ)
Hazardous Material Facilities	APAC-Alabama Inc. Couch Division / Opelika
Hazardous Material Facilities	Argos /Auburn
Hazardous Material Facilities	AT&T / Opelika
Hazardous Material Facilities	Auburn Compressor Station
Hazardous Material Facilities	BellSouth - 12703 (Auburn)
Hazardous Material Facilities	BellSouth - 12752 (Opelika)
Hazardous Material Facilities	Blossman Gas (Opelika Bulk Plant)
Hazardous Material Facilities	Briggs & Stratton Corporation / Auburn
Hazardous Material Facilities	Bullock Propane / Opelika
Hazardous Material Facilities	Distribution Center #6095 / Opelika
Hazardous Material Facilities	D&J Enterprises at Vulcan / Loachapoka
Hazardous Material Facilities	Dowdle Gas Company Opelika
Hazardous Material Facilities	East Alabama Paving at Martin Marietta / Auburn
Hazardous Material Facilities	Ferrellgas Auburn
Hazardous Material Facilities	Georgia Power Company - Goat Rock Combined Cycle / Lee County



<b>Type of Asset</b>	<b>Name</b>
Hazardous Material Facilities	Georgia Power Co. Bartlett's Ferry / Lee County
Hazardous Material Facilities	Green's Propane Gas Co. Inc. (Smith's Plant)
Hazardous Material Facilities	Hanson Aggregates Southeast Inc. - Opelika Quarry
Hazardous Material Facilities	H.C. Morgan Pollution Control Facility / Auburn
Hazardous Material Facilities	International Paper- Opelika Sawmill
Hazardous Material Facilities	Northside Pollution Control Facility / Auburn
Hazardous Material Facilities	NuCo,2,Inc / Opelika
Hazardous Material Facilities	Opelika Divison Service Center
Hazardous Material Facilities	Ryder Transportation Services / Opelika
Hazardous Material Facilities	Sage Technologies / Opelika
Hazardous Material Facilities	Salem Waste Disposal Center/ Lee County
Hazardous Material Facilities	Smiths Water Treatment Plant / Lee County
Hazardous Material Facilities	Sungas, Inc. / Opelika
Hazardous Material Facilities	Superior Gas (Smiths Bulk Plant) / Lee County
Hazardous Material Facilities	The Opelika-Auburn News / Opelika
Hazardous Material Facilities	Tiger Lawn Care d/b/a Trugreen - Chemlawn / Opelika
Hazardous Material Facilities	Twin City /Auburn
Hazardous Material Facilities	Twiss Associates, Inc. / Opelika
Hazardous Material Facilities	United Parcel Service Inc. / Opelika
Hazardous Material Facilities	Waste Management of Alabama East / Opelika

## Appendix D

# Hazard Mitigation Project Listings



*Individual Safe Room*

## LEE COUNTY NATURAL HAZARD MITIGATION PLAN PROJECT LISTINGS

Buyout Locations	Jurisdiction	Address	Update
Grady Carroll's House	City of Opelika	1909 Jollet Avenue	Complete
Other sites to be added at Lee County EMA or municipality discretion.			

HAM Radio Locations	Jurisdiction	Address	Update
Red Cross Headquarters	City of Opelika	206 26th Street	Complete
Red Cross Shelters (7)	City of Opelika, City of Auburn, Smiths Station & Lee County		
East Alabama Medical Center	City of Opelika	2000 Pepperell Parkway	Complete
Lee County EMA	City of Opelika	908 Avenue B	Complete
Public Service Agencies (12)	City of Opelika, City of Auburn, Smiths Station & Lee County		Complete
Other sites to be added at Lee County EMA or municipality discretion.			

Siren Locations	Jurisdiction	Latitude	Longitude	Update
2501 E Glenn	City of Auburn	32 36 38	85 25 44	In Service
Auburn High School	City of Auburn	32 35 49	85 27 43	In Service
Drake Middle School	City of Auburn	32 37 06	85 29 42	In Service
Willow Creek Park Hwy 14	City of Auburn	32 36 23	85 31 51	In Service
Village Mall	City of Auburn	32 37 35	85 27 01	In Service
Softball Complex US 29 S	City of Auburn	32 33 15	85 30 33	In Service
Ogletree Rd Fire Station	City of Auburn	32 33 48	85 27 38	In Service
Wrights Mill Elementary School	City of Auburn	32 35 20	85 28 20	In Service
Yarbrough Elementary School	City of Auburn	32 38 24	85 30 20	In Service
Moore's Mill & Hamilton Rd	City of Auburn	32 35 03	85 26 18	In Service
1388 S Donahue	City of Auburn	32 34 41	85 29 18	In Service
Duck Samford Park	City of Auburn	32 36 34	85 26 47	In Service

Siren Locations	Jurisdiction	Latitude	Longitude	Update
197 Shelton Mill Rd	City of Auburn	32 37 23	85 28 48	In Service
Asheton Park	City of Auburn	32 38 47	85 28 46	In Service
344 E. Glenn Av, E. Glenn at Public Safety Bldg	City of Auburn	32 36 32	85 28 35	In Service
8197 Society Hill Rd, Society Hill Rd & Menewa Dr	City of Auburn	32 35 9	85 26 20	In Service
2257 Wrights Mill Rd, Wrights Mill Rd Cemetery @ Church	City of Auburn	32 33 26	85 28 45	In Service
471 Persimmon Dr	City of Auburn	32 32 4	85 31 39	In Service
1842 West Farmville Rd, LR 72 at Water Tank	City of Auburn	32 39 27	85 31 28	In Service
Airport Road at Church-Hi Pack Dr.	City of Opelika	32 37 31	85 25 41	In Service
Opelika Softball Complex	City of Opelika	32 40 17	85 20 41	In Service
Morris Avenue School	City of Opelika	32 40 48	85 22 21	In Service
Opelika Light and Power	City of Opelika	32 38 37	85 22 47	In Service
Waverly Parkway Substation	City of Opelika	32 38 54	85 24 39	In Service
Lee County Justice Center	City of Opelika	32 37 01	85 24 14	In Service
Union Hall on AL Hwy 169	City of Opelika	32 37 0	85 21 06	In Service
Northside Middle School	City of Opelika	32 39 28	85 22 53	In Service
S.W. Sewer Pond	City of Opelika	32 38 45	85 20 24	In Service
Water Board Office	City of Opelika	32 37 44	85 22 24	In Service
681 Jeter Ave	City of Opelika	32 38 18	85 20 33	In Service
Health Services Center	City of Opelika	32 38 12	85 24 30	In Service
Opelika Parks & Rec/ Aquatic Center	City of Opelika	32 39 30	85 23 04	In Service
Water Plant	City of Opelika	32 39 51	85 26 17	In Service
3918 Marvyn Pw & 51S Faith Freewill Baptist	City of Opelika	32 36 01	85 22 18	In Service
2398 Andrews Rd	City of Opelika	32 41 53	85 19 45	In Service
West Point Parkway & Hanson Street	City of Opelika	32 40 19	85 20 12	In Service
Veterans & Oak Bowery Rd	City of Opelika	32 40 42	85 24 08	In Service
2908 Old Columbus Rd. & Old Columbus Rd/Deer Run	City of Opelika	32 36 45	85 19 15	In Service
497 Veterans Pw, 280 W. & Veterans Pkwy	City of Opelika	32 39 47	85 24 00	In Service

Siren Locations	Jurisdiction	Latitude	Longitude	Update
Lee-Chambers VFD Sta #1	Lee County	32 42 38	85 10 46	In Service
Lee-Chambers VFD Sta #3	Lee County	32 39 10	85 05 46	In Service
9269 Hw 29 N, Lee-Chambers VFD Sta #2	Lee County	32 43 44	85 14 03	In Service
Salem VFD Sta #1	Lee County	30 35 52	85 13 25	In Service
10805 Al Hw 169 S, Salem/Crawford VFD	Lee County	32 30 26	85 14 19	In Service
Beauregard VFD #1	Lee County	32 32 56	85 22 28	In Service
1129 Lee Rd 400/Beauregard VFD #2	Lee County	32 31 15	85 19 23	In Service
Beauregard VFD #3	Lee County	32 29 54	85 23 37	In Service
396 Lee Road 166/Dumpster Hwy 166	Lee County	32 34 15	85 20 24	In Service
5919 Al Hw 51, Dumpster Hwy 51	Lee County	32 34 14	85 22 14	In Service
Southwest VFD #1	Lee County	32 34 30	85 31 36	In Service
Southwest VFD #2 AC/DC	Lee County	32 36 17	85 35 46	In Service
Loachapoka High School	Loachapoka	32 35 17	85 34 46	In Service
Plainview AC Only	Lee County	32 43 45	85 23 34	In Service
Friendship VFD #1 old	Lee County	32 33 44	85 07 36	In Service
Friendship VFD #2	Lee County	32 30 42	85 04 61	In Service
Smith High School	Smiths Station	32 32 09	85 06 02	In Service
Glenwood School	Lee County	32 32 16	85 02 56	In Service
Friendship VFD #3	Smiths Station	32 33 05	85 08 09	In Service
Friendship VFD # 4	Lee County	32 29 39	85 08 50	In Service
Smith sports complex	Smiths Station	32 31 8	85 7 6	In Service
10 Lee Rd 486, LR 486 at LR 219	Lee County	32 29 2	85 04 31	In Service
2469 Lee Road 242, in front of 2491 LR 242	Lee County	32 31 11	85 07 42	In Service
9496 Lee Road 240, Friendship Fire Sta #5	Lee County	32 29 41	85 05 55	In Service
4643 Lee Road 246, LR 246 & 571 NE corner	Lee County	32 32 29	85 08 22	In Service
741 Lee Road 208, in front of 795 LR 208 btwn LR 660 & 749	Lee County	32 29 35	85 6 55	In Service
Farmville The Bottle	Lee County	32 40 44	85 29 25	In Service

<b>Siren Locations</b>	<b>Jurisdiction</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Update</b>
Other sites to be added at Lee County EMA or Jurisdiction discretion.				

<b>Generator Locations</b>	<b>Jurisdiction</b>	<b>Address</b>	<b>Update</b>
Sewer Lift Stations (6)	City of Opelika	City of Opelika	Complete
For use in Community Shelters (2)	City of Opelika	City of Opelika	Complete
Back-up Generators at Douglas J. Watson Municipal Complex, Public Works Construction and Maintenance Building, Water Resource Management Facility, Fire Station #5, and City Hall	City of Auburn	City of Auburn	Complete
Back-up Generators to support Sanitary Lift Stations	City of Auburn	City of Auburn	Complete
Back-up Generator for Loachapoka Water Authority	Town of Loachapoka		
Back-up Generator for Smiths Station City Hall	City of Smiths Station		
Back-up Generator for Beulah Senior Center	Lee County		
Back-up Generator for Salem Hill Tower	Lee County		
Replacement Generator for Lee County EOC	All		
Other sites to be added at Lee County EMA or municipality discretion.			

<b>Safe Room Locations</b>	<b>Jurisdiction</b>	<b>Address</b>	<b>Update</b>
7 Individual Shelters	City of Auburn	Not disclosed due to confidentiality	Complete
3 Individual Shelters	City of Opelika	Not disclosed due to confidentiality	Complete
6 Individual Shelters	Unincorporated Lee County	Not disclosed due to confidentiality	Complete
Open waiting list maintained at Lee Co EMA; 82 names as of 9/30/14			



<b>Dredging, Drainage &amp; Water Projects</b>	<b>Jurisdiction</b>	<b>Location/Body of Water</b>	<b>Update</b>
Construct Retention Pond; Help with water flow / drainage issues	City of Opelika	NW of tennis complex towards McClure Ave.	
Cook St Detention Pond; Drainage Issues	City of Auburn		Complete
Country Circle; Drainage Issues	City of Auburn		Complete
Create Stomacher Retention Basins; Repetitive Flooding / EMS Access to and from hospital	City of Opelika	EAMC Complex	Under Construction
Dam rebuild & Storage Capacity Improvements; Repetitive Flooding & Road disintegration	City of Opelika	Rocky Brook Road & Lake Forest Estates	
Drain and Repair Lake; Repetitive Flooding / Water drainage issues	City of Opelika	West Ridge Lake adjacent to baseball complex	
Drainage Study	City of Auburn		Complete
Dredge & Repair along with storage capacity improvements; Silt Buildup	City of Opelika	Jackson's Lake	
Dredge drainage way; Repetitive Flooding / Water drainage issues	City of Opelika	Apartments by EAMC / drainage way	Under Construction
East University Dr/Green Street; Drainage Issues	City of Auburn		Complete
Magnolia Ave. Drainage Issues	City of Auburn		Complete
North of EAMC - Build Retention Pond 7 Drainage Channel Improvements to mitigate repetitive flooding	City of Opelika	Pepperell Creek Parkway	Under Construction
Opelika Rd @ Guthrie's;	City of Auburn		Complete

<b>Dredging, Drainage &amp; Water Projects</b>	<b>Jurisdiction</b>	<b>Location/Body of Water</b>	<b>Update</b>
Drainage Issues			
South Donahue Street (Red Oak)	City of Auburn		Complete
W. Glenn @ Toomer Street	City of Auburn		Complete
Other sites to be added at the discretion of the jurisdiction or LCEMA			

<b>Bridge Projects</b>	<b>Jurisdiction</b>	<b>Update</b>
Bridge Replacement of bridge on Saughatachee Lake Road	City of Opelika	Bridge was closed; Alternate routes available
Wire Road Bridge Placement	City of Auburn	Complete
Bent Creek @ Moores Mill Creek	City of Auburn	
WMR @ Town Creek-Culvert	City of Auburn	
Samford @ Brookwood Dr- Culvert	City of Auburn	
Heard @ Town Creek - Culvert	City of Auburn	
N Donahue: Bridge to Farmville	City of Auburn	Complete
Other sites to be added at Lee County EMA or municipality discretion.		

## Appendix E

# Additional Hazard Information



*Recovery efforts after April 2014 Tornado*

**Presidential Disaster Declarations For Alabama  
1961-2014**

Number	Date	State/Tribal Government	Incident Description	Declaration Type
4176	5/2/2014	Alabama	Severe Storms, Tornadoes, Straight-line Winds, and Flooding	Major Disaster Declaration
4082	9/21/2012	Alabama	Hurricane Isaac	Major Disaster Declaration
4052	2/1/2012	Alabama	Severe Storms, Tornadoes, Straight-Line Winds, And Flooding	Major Disaster Declaration
1971	4/28/2011	Alabama	Severe Storms, Tornadoes, Straight-line Winds, and Flooding	Major Disaster Declaration
3319	4/27/2011	Alabama	Severe Storms, Tornadoes, and Straight-line Winds	Emergency Declaration
1908	5/3/2010	Alabama	Severe Storms, Tornadoes, Straight-line Winds, and Flooding	Major Disaster Declaration
1870	12/31/2009	Alabama	Severe Storms and Flooding	Major Disaster Declaration
1866	12/22/2009	Alabama	Tropical Storm Ida	Major Disaster Declaration
1842	6/3/2009	Alabama	Severe Storms, Tornadoes, Flooding, and Straight-line Winds	Major Disaster Declaration
1836	5/8/2009	Alabama	Severe Storms, Flooding, Tornadoes, and Straight-line Winds	Major Disaster Declaration
1835	4/28/2009	Alabama	Severe Storms, Flooding, Tornadoes, and Straight-line Winds	Major Disaster Declaration
1797	9/26/2008	Alabama	Severe Storms and Flooding associated with Hurricane Ike	Major Disaster Declaration
1789	9/10/2008	Alabama	Hurricane Gustav	Major Disaster Declaration
3292	8/30/2008	Alabama	Hurricane Gustav	Emergency Declaration
1687	3/3/2007	Alabama	Severe Storms and Tornadoes	Major Disaster Declaration
3237	9/10/2005	Alabama	Hurricane Katrina Evacuation	Emergency Declaration
1605	8/29/2005	Alabama	Hurricane Katrina	Major Disaster Declaration
3214	8/28/2005	Alabama	Hurricane Katrina	Emergency Declaration
1593	7/10/2005	Alabama	Hurricane Dennis	Major Disaster Declaration
1549	9/15/2004	Alabama	Hurricane Ivan	Major Disaster Declaration

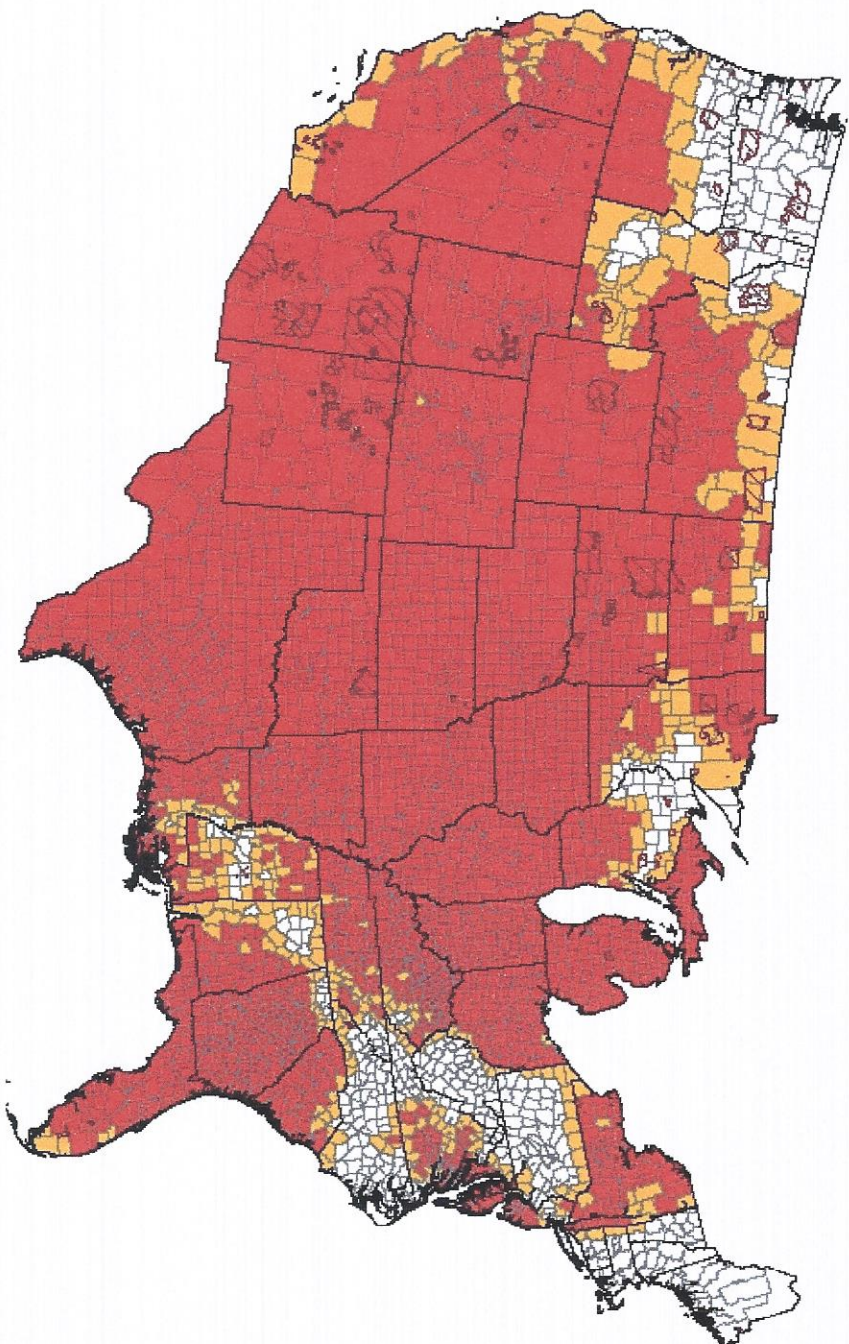
Number	Date	State/Tribal Government	Incident Description	Declaration Type
1466	5/12/2003	Alabama	Severe Storms, Tornadoes and Flooding	Major Disaster Declaration
1442	11/14/2002	Alabama	Severe Storms and Tornadoes	Major Disaster Declaration
1438	10/9/2002	Alabama	Tropical Storm Isidore	Major Disaster Declaration
1399	12/7/2001	Alabama	Severe Storms and Tornadoes	Major Disaster Declaration
2395	11/20/2001	Alabama	Northeast Alabama Fire Complex	Fire Management Assistance Declaration
1362	3/5/2001	Alabama	Severe Storms & Flooding	Major Disaster Declaration
1352	12/18/2000	Alabama	Tornadoes	Major Disaster Declaration
2339	9/17/2000	Alabama	County Line Fire	Fire Management Assistance Declaration
1322	3/17/2000	Alabama	Severe Storms And Flooding	Major Disaster Declaration
1317	2/18/2000	Alabama	Winter Storm	Major Disaster Declaration
2283	9/24/1999	Alabama	Martin School Fire	Fire Management Assistance Declaration
2277	9/18/1999	Alabama	Russellville Fire	Fire Management Assistance Declaration
2278	9/18/1999	Alabama	Chelsea Community Fire	Fire Management Assistance Declaration
2276	9/18/1999	Alabama	Jackson Farms Fire	Fire Management Assistance Declaration
2279	9/18/1999	Alabama	Fayette Fire	Fire Management Assistance Declaration
2280	9/18/1999	Alabama	Macintosh Fire	Fire Management Assistance Declaration
2281	9/18/1999	Alabama	Lookout Mountain Fire	Fire Management Assistance Declaration
1261	1/15/1999	Alabama	Freezing Rain and Ice Storm	Major Disaster Declaration
1250	9/30/1998	Alabama	Hurricane Georges	Major Disaster Declaration
3133	9/28/1998	Alabama	Hurricane Georges	Emergency Declaration
1214	4/9/1998	Alabama	Tornadoes and Severe Thunderstorms	Major Disaster Declaration
1208	3/9/1998	Alabama	Severe Storms and Flooding	Major Disaster Declaration
1185	7/25/1997	Alabama	Severe Storms/High Winds/Flooding	Major Disaster Declaration

Number	Date	State/Tribal Government	Incident Description	Declaration Type
1108	3/20/1996	Alabama	Storms/Tornadoes/Floods	Major Disaster Declaration
1104	2/23/1996	Alabama	Storms/Flooding	Major Disaster Declaration
1070	10/4/1995	Alabama	Hurricane Opal	Major Disaster Declaration
1047	4/21/1995	Alabama	Severe Storm, Tornadoes, Flooding	Major Disaster Declaration
1034	7/8/1994	Alabama	Severe Storm, Flooding, Tropical Storm Alberto	Major Disaster Declaration
1019	3/30/1994	Alabama	Severe Storm, Flooding, Tornado	Major Disaster Declaration
1013	3/3/1994	Alabama	Winter Storm, Severe Storm, Freezing, Flooding	Major Disaster Declaration
3096	3/15/1993	Alabama	Severe Snowfall, Winter Storm	Emergency Declaration
890	1/4/1991	Alabama	Flooding, Severe Storm	Major Disaster Declaration
861	3/21/1990	Alabama	Flooding, Severe Storm, Tornado	Major Disaster Declaration
856	2/17/1990	Alabama	Flooding, Severe Storm, Tornado	Major Disaster Declaration
848	11/17/1989	Alabama	SEVERE STORMS, TORNADOES	Major Disaster Declaration
742	9/7/1985	Alabama	HURRICANE ELENA	Major Disaster Declaration
3088	5/11/1984	Alabama	Severe Storms and Tornadoes	Emergency Declaration
695	12/13/1983	Alabama	SEVERE STORMS,FLOODING, TORNADOES	Major Disaster Declaration
639	5/14/1981	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration
638	4/10/1981	Alabama	SEVERE STORMS, TORNADOES, FLOODING	Major Disaster Declaration
619	4/20/1980	Alabama	SEVERE STORMS, TORNADOES, FLOODING	Major Disaster Declaration
598	9/13/1979	Alabama	HURRICANE FREDERIC	Major Disaster Declaration
578	4/18/1979	Alabama	Storms, Wind, Flooding	Major Disaster Declaration
3074	3/17/1979	Alabama	Flooding	Emergency Declaration
563	8/9/1978	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration
3064	4/24/1978	Alabama	Tornadoes	Emergency Declaration
3045	7/20/1977	Alabama	Drought	Emergency Declaration
532	4/9/1977	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration
488	10/2/1975	Alabama	SEVERE STORMS, TORNADOES, FLOODING	Major Disaster Declaration
464	4/23/1975	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration
458	3/14/1975	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration



Number	Date	State/Tribal Government	Incident Description	Declaration Type
3007	1/18/1975	Alabama	Tornadoes	Emergency Declaration
422	4/4/1974	Alabama	TORNADOES	Major Disaster Declaration
388	5/29/1973	Alabama	SEVERE STORMS, FLOODING	Major Disaster Declaration
369	3/27/1973	Alabama	TORNADOES, FLOODING	Major Disaster Declaration
285	4/9/1970	Alabama	Heavy Rains, Tornadoes, Flooding	Major Disaster Declaration
280	11/7/1969	Alabama	HURRICANE CAMILLE	Major Disaster Declaration
109	2/27/1961	Alabama	FLOODS	Major Disaster Declaration

# 2012 Secretarial Drought Designations - All Drought

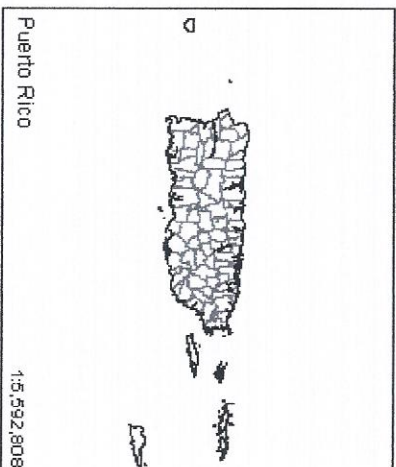
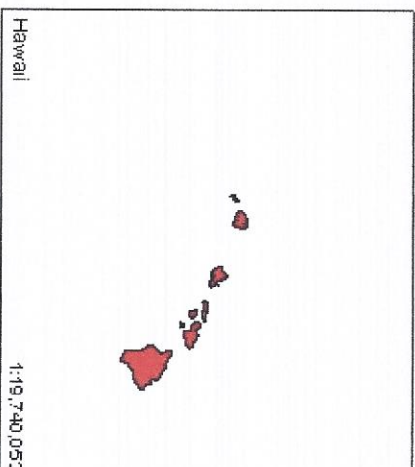
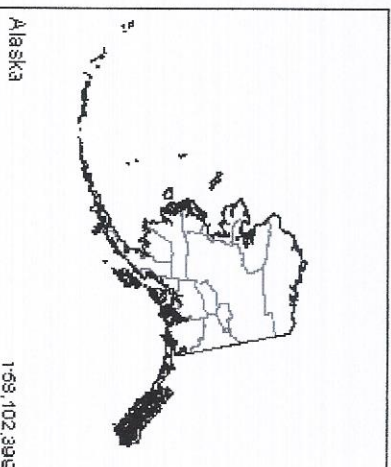


All Drought Disaster Incidents as of 2/13/2013



USDA Farm Service Agency  
Production, Emergencies and Compliance Division  
Washington, D.C.  
February 13, 2013

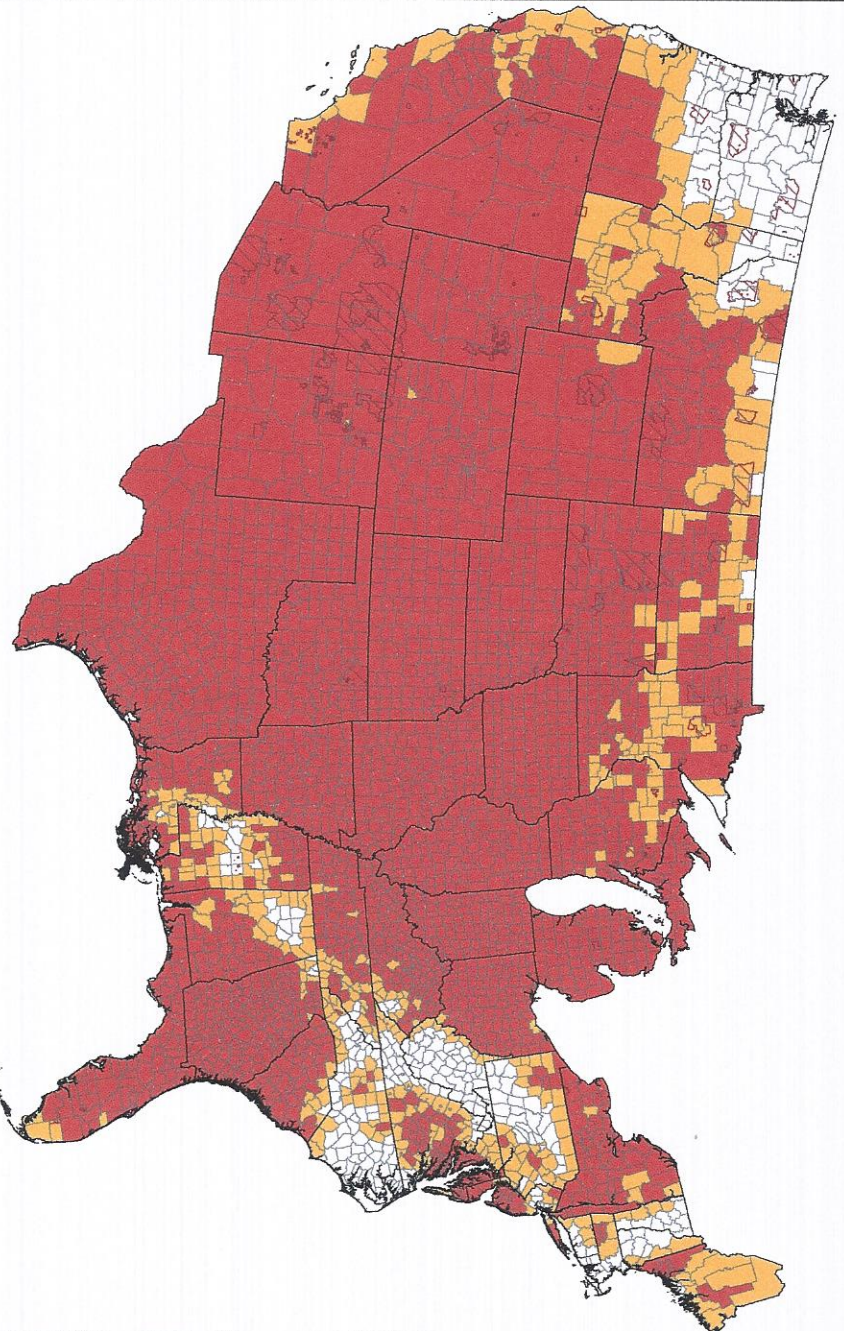
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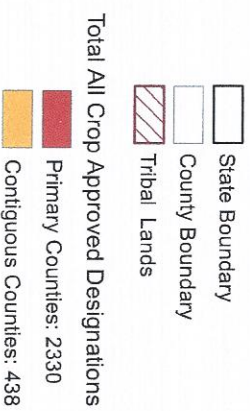


# Secretarial Disaster Designations - CY 2012

Primary and Contiguous Counties Designated for 2012 All Crop Disaster Losses

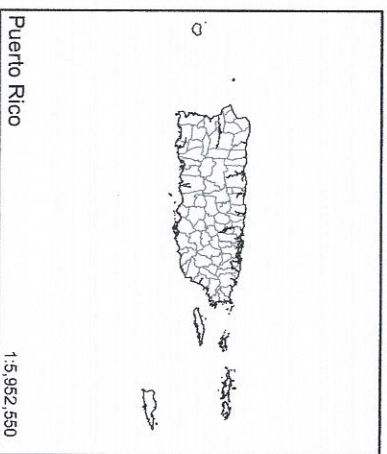
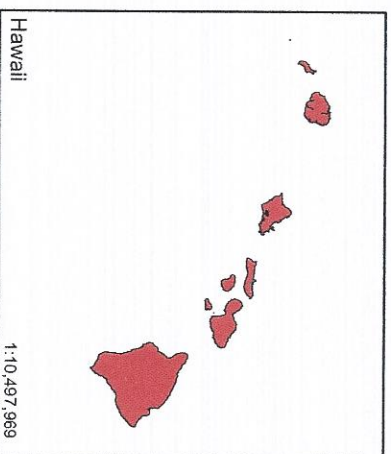
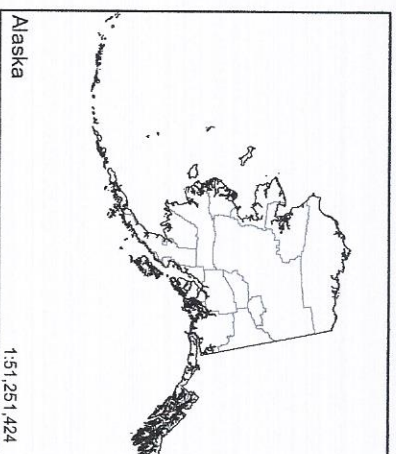


**All Crop Disaster Incidents for the 2012 Crop Year**



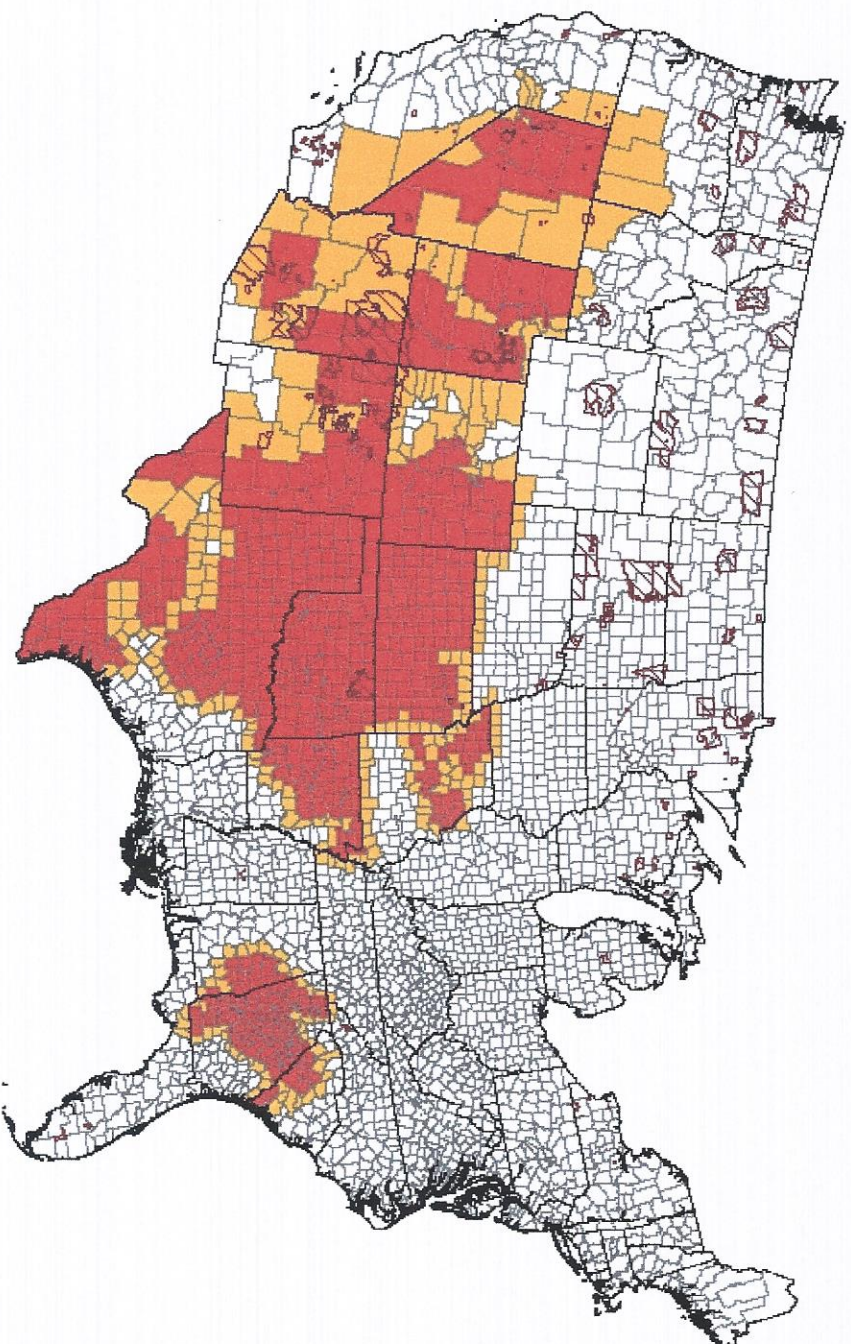
**USDA FSA**  
 USDA Farm Service Agency  
 Production, Emergencies and Compliance Division  
 Washington, D.C.  
 April 4, 2014

1:23,721,366





# 2013 Secretarial Drought Designations - All Drought

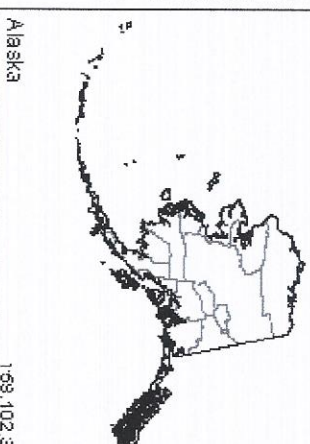


All Drought Disaster Incidents as of 1/09/2013



**USDA FSA**  
 U.S. DEPARTMENT OF AGRICULTURE  
 USDA Farm Service Agency  
 Production, Emergencies and Compliance Division  
 Washington, D.C.  
 January 9, 2013

1:23,520,203



Alaska

1:68,102,399



Hawaii

1:19,740,053



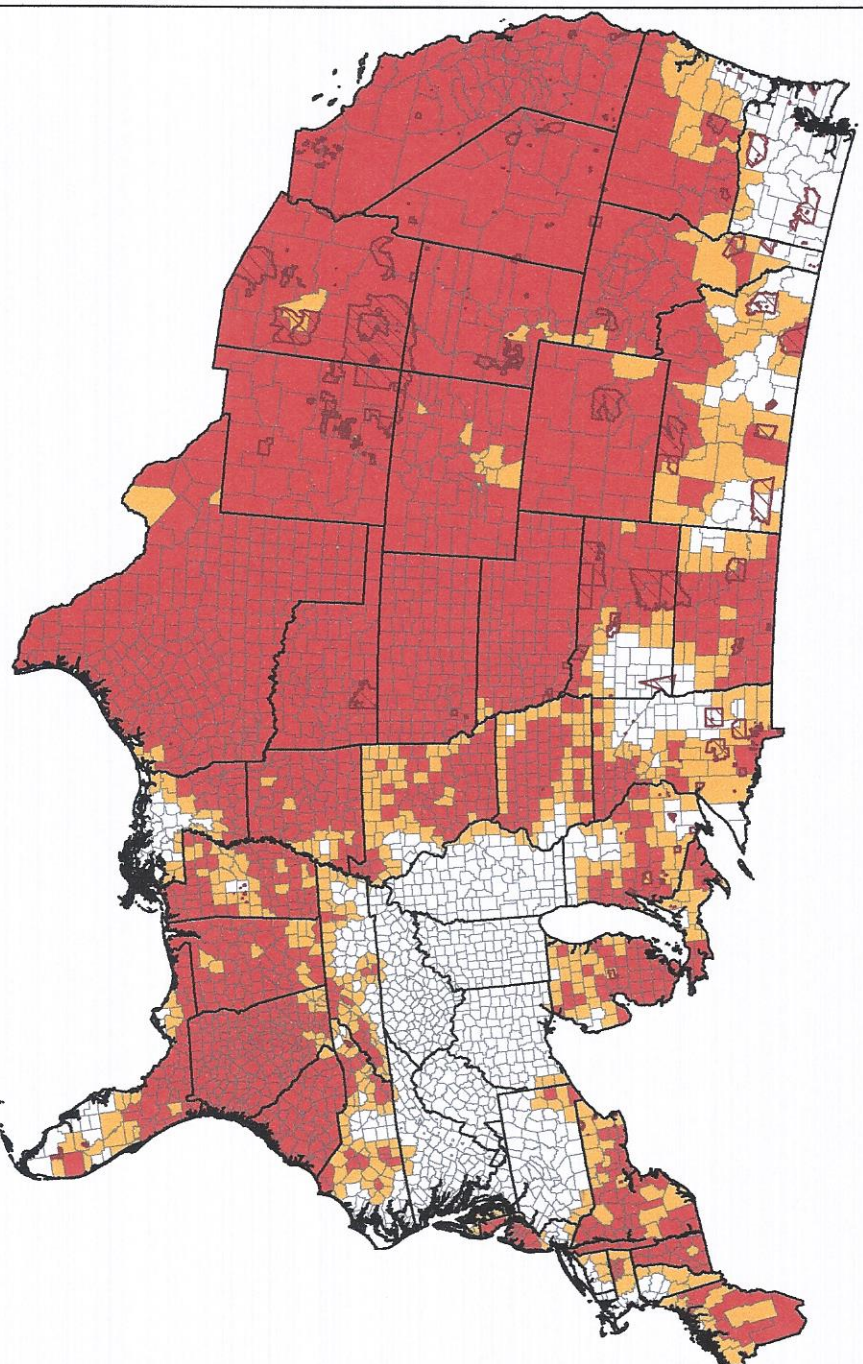
Puerto Rico

1:5,592,808



# Secretarial Disaster Designations - CY 2013

## Primary and Contiguous Counties Designated for 2013 Crop Disaster Losses

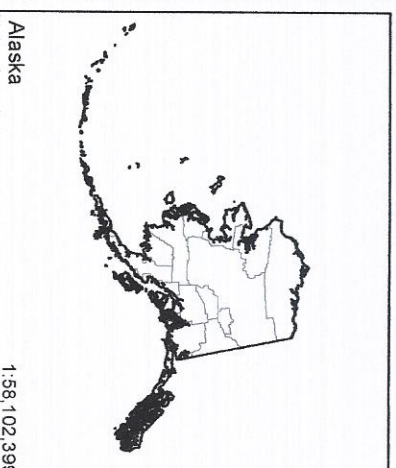


All Crop Disaster Incidents for 2013 Crop Year



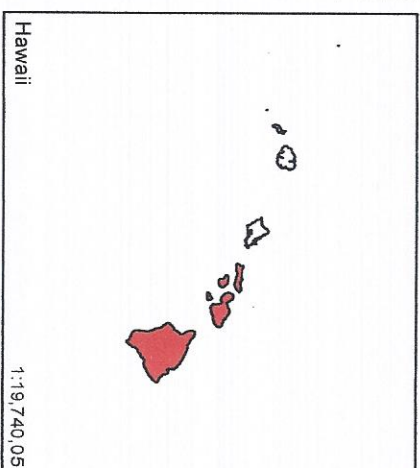
USDA Farm Service Agency  
Production, Emergencies and Compliance Division  
Washington, D.C.  
April 23, 2014

Total All Crop Approved Designations  
Primary Counties: 1604  
Contiguous Counties: 538



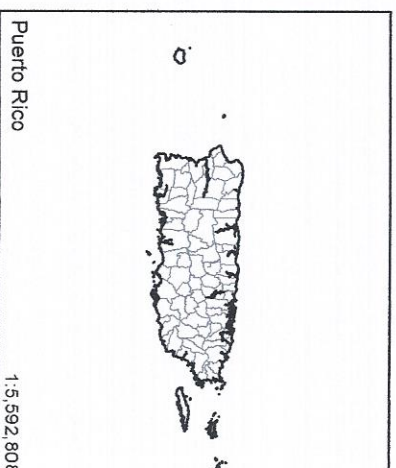
Alaska

1:58,102,399



Hawaii

1:19,740,053



Puerto Rico

1:5,592,808

# Federal Emergency Management Agency

## Community Status Book Report

### ALABAMA

Only pages with Lee County Communities are included.

#### Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
010259#	ABBEVILLE, CITY OF	HENRY COUNTY	01/31/75	09/04/85	09/28/07	09/04/85	No
010267#	ADAMSVILLE, CITY OF	JEFFERSON COUNTY	01/17/75	10/10/80	09/29/06	10/10/80	No
010504#	ADDISON, TOWN OF	WINSTON COUNTY		08/18/09	09/16/11(M)	04/01/13	No
010192#	ALABASTER, CITY OF	SHELBY COUNTY	05/24/74	06/15/81	02/20/13	06/15/81	No
010366#	ALBERTVILLE, CITY OF	MARSHALL COUNTY	10/01/76	09/04/85	09/16/11(M)	09/04/85	No
010210#	ALEXANDER CITY, CITY OF	TALLAPOOSA COUNTY	11/08/74	09/27/85	07/18/11	09/27/85	No
010180#	ALICEVILLE, CITY OF	PICKENS COUNTY	04/11/75	07/17/78	09/17/10	07/17/78	No
010078#	ALTOONA, TOWN OF	BLOUNT COUNTY/ETOWAH COUNTY	05/17/74	03/14/80	08/03/09(M)	03/14/80	No
010331#	ANDALUSIA, CITY OF	COVINGTON COUNTY	01/13/78	11/04/09	11/04/09(M)	11/04/09	No
010407#	ANDERSON, TOWN OF	LAUDERDALE COUNTY		11/24/78	09/11/09	09/07/00	No
010020#	ANNISTON, CITY OF	CALHOUN COUNTY	12/14/73	09/15/83	09/28/07	09/15/83	No
010345#	ARAB, CITY OF	MARSHALL COUNTY	07/09/76	08/01/87	09/16/11(M)	08/01/87	No
010306#	ARDMORE, TOWN OF	LIMESTONE COUNTY	12/17/76	04/15/86	07/07/09(M)	04/15/86	No
010450#	ARGO, CITY OF	ST. CLAIR COUNTY/JEFFERSON COUNTY		09/29/06	06/19/12	04/02/13	No
010411#	ARITON, TOWN OF	DALE COUNTY		08/16/07	08/16/07	01/30/08	No
010099#	ASHFORD, CITY OF	HOUSTON COUNTY	10/31/75	09/04/85	09/03/14	09/04/85	No
010168#	ASHLAND, TOWN OF	CLAY COUNTY		03/17/10	03/17/10(M)	03/17/10	No
010186#	ASHVILLE, CITY OF	ST. CLAIR COUNTY	06/21/74	04/17/87	06/19/12	04/17/87	No
010146#	ATHENS, CITY OF	LIMESTONE COUNTY	03/08/74	09/28/79	10/02/14(>)	09/28/79	No
010071#	ATMORE, CITY OF	ESCAMBIA COUNTY	04/05/74	04/05/74	06/05/12(M)	06/24/77	No
010079#	ATTALLA, CITY OF	ETOWAH COUNTY	12/28/73	12/01/81	09/26/08	12/01/81	No
010144#	AUBURN, CITY OF	LEE COUNTY	06/07/74	09/16/81	11/02/11	09/16/81	No
010314#	AUTAUGA COUNTY *	AUTAUGA COUNTY	03/24/78	12/18/85	09/03/14	12/18/85	No
010001#	AUTAUGAVILLE, TOWN OF	AUTAUGA COUNTY	06/07/74	12/18/85	09/03/14	02/03/86	No
010100#	AVON, TOWN OF	HOUSTON COUNTY	09/20/74	09/01/86	09/03/14	09/01/86	No
015000#	BALDWIN COUNTY*	BALDWIN COUNTY		01/12/73	07/17/07	01/12/73	No
010315#	BARBOUR COUNTY*	BARBOUR COUNTY	04/28/78	01/01/87	08/18/09	01/01/87	No
010004#	BAY MINETTE, CITY OF	BALDWIN COUNTY	10/24/75	12/01/81	07/17/07	12/01/81	No
015001#	BAYOU LA BATRE, CITY OF	MOBILE COUNTY		03/17/72	03/17/10	03/17/72	No
010134#	BEAVERTON, TOWN OF	LAMAR COUNTY	09/20/74	07/03/86	05/03/10(M)	07/03/86	No
010083#	BELK, TOWN OF	FAYETTE COUNTY	09/13/74	06/04/10	06/04/10(M)	06/04/10	No
015002#	BENTON, TOWN OF	LOWNDES COUNTY		07/01/74	09/03/14	04/06/73	No
010255#	BERRY, TOWN OF	FAYETTE COUNTY	12/27/74	06/03/86	06/04/10(M)	06/03/86	No
010115#	BESSEMER, CITY OF	JEFFERSON COUNTY	06/28/74	06/01/81	09/03/10	06/01/81	No
010226#	BIBB COUNTY*	BIBB COUNTY	02/14/75	08/01/87	08/18/09	08/01/87	No
010116#	BIRMINGHAM, CITY OF	JEFFERSON COUNTY	06/28/74	03/16/81	02/20/13	03/16/81	No
	INCLUDES THE TOWNS OF BROWNVILLE AND ROOSEVELT						
010257#	BLACK, TOWN OF	GENEVA COUNTY	02/07/75	02/20/08	02/20/08(M)	07/09/13	No
010230#	BLOUNT COUNTY*	BLOUNT COUNTY	02/24/78	06/17/91	08/03/09	06/17/91	No
010371#	BLOUNTSVILLE, TOWN OF	BLOUNT COUNTY	09/29/78	08/03/09	08/03/09(M)	08/03/09	No
010224#	BLUE SPRINGS, TOWN OF	BARBOUR COUNTY	01/10/75	09/01/86	08/18/09	09/01/86	No
010276#	BOAZ, CITY OF	ETOWAH COUNTY/MARSHALL COUNTY	02/14/75	09/04/85	09/16/11(M)	09/04/85	No
	INCLUDES TOWN OF MOUNTAINBORO, ETOWAH COUNTY, WHICH IS DEFUNCT AS OF 08/14/2009.						
010092#	BOLIGEE, CITY OF	GREENE COUNTY	12/13/74	08/05/10	08/05/10	08/07/12	No
010296#	BON AIR, TOWN OF	TALLADEGA COUNTY	03/04/77	09/28/07	09/28/07	07/18/08	No
010055#	BRANTLEY, TOWN OF	CRENSHAW COUNTY	06/28/74	10/16/09	10/16/09(M)	10/16/09	No
010012#	BRENT, CITY OF	BIBB COUNTY	04/11/75	09/04/85	08/18/09	09/04/85	No



# Federal Emergency Management Agency

## Community Status Book Report

### ALABAMA

#### Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
010043#	HEFLIN, CITY OF	CLEBURNE COUNTY	11/01/74	07/05/82	08/16/11	07/05/82	No
010294#	HELENA, CITY OF	SHELBY COUNTY	01/10/75	01/06/82	02/20/13	01/06/82	No
010357#	HENAGAR, TOWN OF	DEKALB COUNTY	03/12/76	02/20/08	09/29/11(M)	02/20/08	No
010261#	HENRY COUNTY*	HENRY COUNTY	01/17/75	08/01/87	09/28/07	08/01/87	No
010019#	HIGHLAND LAKE, TOWN OF	BLOUNT COUNTY		08/03/09	08/03/09(M)	02/17/10	No
010305#	HILLSBORO, TOWN OF	LAWRENCE COUNTY	10/01/76	04/02/86	09/11/09(M)	04/02/86	No
010021#	HOBSON CITY, TOWN OF	CALHOUN COUNTY	05/17/74	09/30/83	09/28/07	09/30/83	No
010426#	HODGES, TOWN OF	FRANKLIN COUNTY		09/29/10	09/29/10(M)	09/29/10	No
010254#	HOKES BLUFF, TOWN OF	ETOWAH COUNTY	12/10/76	03/28/80	09/26/08(M)	03/28/80	No
010440#	HOLLY POND, TOWN OF	CULLMAN COUNTY		12/02/04	05/24/11(M)	06/26/06	No
010111#	HOLLYWOOD, TOWN OF	JACKSON COUNTY	03/08/74	09/29/86	12/16/08	09/29/86	No
015006#	HOMEWOOD, CITY OF	JEFFERSON COUNTY		03/30/73	09/03/10	03/30/73	No
010123#	HOOVER, CITY OF	SHELBY COUNTY/JEFFERSON COUNTY	11/29/74	02/04/81	02/20/13	02/04/81	No
010098#	HOUSTON COUNTY *	HOUSTON COUNTY	02/14/75	09/29/89	09/03/14	09/29/89	No
010337#	HUEYTOWN, CITY OF	JEFFERSON COUNTY	10/01/76	01/02/81	09/03/10	01/02/81	No
010153#	HUNTSVILLE, CITY OF	MADISON COUNTY	05/24/74	11/01/79	10/02/14(>)	11/01/79	No
010185#	HURTSBORO, TOWN OF	RUSSELL COUNTY	07/18/75	01/06/82	07/22/10	01/06/82	No
010389#	IDER, TOWN OF	DEKALB COUNTY		02/20/08	09/29/11(M)	02/02/11	No
010430#	INDIAN SPRINGS VILLAGE, TOWN OF	SHELBY COUNTY	11/29/74	09/16/82	02/20/13	08/10/99	No
	ADOPTED SHELBY COUNTY FIRM DATED 9-16-82.						
010124#	IRONDALE, CITY OF	JEFFERSON COUNTY	06/07/74	02/04/81	09/29/06	02/04/81	No
010110#	JACKSON COUNTY *	JACKSON COUNTY	04/28/78	05/03/90	12/16/08	05/03/90	No
010499#	JACKSON'S GAP, TOWN OF	TALLAPOOSA COUNTY		06/17/91	07/18/11(M)	09/11/07	No
	Use Tallapoosa County FIRM panels 010326 0075 B and 0100 B dated June 17, 1991.						
010040#	JACKSON, CITY OF	CLARKE COUNTY	06/27/75	12/17/87	07/17/12	12/17/87	No
010022#	JACKSONVILLE, CITY OF	CALHOUN COUNTY	05/17/74	07/05/82	09/28/07	07/05/82	No
010206#	JASPER, CITY OF	WALKER COUNTY	01/23/74	06/15/81	10/02/14(>)	06/15/81	No
010217#	JEFFERSON COUNTY *	JEFFERSON COUNTY	07/07/78	02/17/82	09/03/10	02/17/82	No
010501#	JEMISON, TOWN OF	CHILTON COUNTY		03/16/09	03/16/09(M)	09/09/10	No
010390#	KANSAS, TOWN OF	WALKER COUNTY	03/16/79	08/02/07	10/02/14(>)	09/09/10	No
010136#	KENNEDY, TOWN OF	LAMAR COUNTY	11/01/74	08/05/86	05/03/10(M)	08/05/86	No
010338#	KILLEN, TOWN OF	LAUDERDALE COUNTY	06/18/76	07/18/85	09/11/09(M)	07/18/85	No
010265#	KIMBERLY, TOWN OF	JEFFERSON COUNTY	07/11/75	08/29/80	09/29/06	06/18/81	No
010106#	KINSEY, TOWN OF	HOUSTON COUNTY	09/13/74	09/29/86	09/03/14	09/29/86	No
010237#	KINSTON, TOWN OF	COFFEE COUNTY	01/10/75	12/30/77	08/19/10(M)	12/30/77	No
010028#	LAFAYETTE, CITY OF	CHAMBERS COUNTY	12/06/74	09/18/85	02/18/11(M)	09/18/85	No
010483#	LAKE VIEW, TOWN OF	JEFFERSON COUNTY/TUSCALOOSA COUNTY		09/28/07	01/16/14	05/08/08	No
010271#	LAMAR COUNTY *	LAMAR COUNTY	12/06/74	06/04/90	05/03/10	06/04/90	No
010029#	LANETT, CITY OF	CHAMBERS COUNTY	05/03/74	07/04/88	02/18/11	07/04/88	No
010502#	LANGSTON, TOWN OF	JACKSON COUNTY		12/16/08	12/16/08	09/09/10	No
010323#	LAUDERDALE COUNTY *	LAUDERDALE COUNTY	03/31/78	02/04/81	09/11/09	02/04/81	No
010324#	LAWRENCE COUNTY *	LAWRENCE COUNTY	05/13/77	06/15/81	09/11/09	03/14/91	No
010250#	LEE COUNTY *	LEE COUNTY	03/31/78	09/16/81	11/02/11	12/29/05	No
010125#	LEEDS, CITY OF	ST. CLAIR COUNTY/JEFFERSON COUNTY	06/07/74	01/02/81	(NSFHA)	01/02/81	No
010235	LEESBURG, CITY OF	CHEROKEE COUNTY	10/15/76	01/19/11	01/19/11(M)	01/19/11	No
010046#	LEIGHTON, CITY OF	COLBERT COUNTY	06/14/74	08/19/85	02/17/10	08/19/85	No

# Federal Emergency Management Agency

## Community Status Book Report

### ALABAMA

#### Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
010047#	MUSCLE SHOALS, CITY OF	COLBERT COUNTY	03/08/74	12/15/77	02/17/10	12/15/77	No
010238#	NEW BROCKTON, TOWN OF	COFFEE COUNTY	01/17/75	07/22/77	08/19/10(M)	07/22/77	No
010154#	NEW HOPE, TOWN OF	MADISON COUNTY	10/08/76	11/24/78	10/02/14(>)	11/24/78	No
010395#	NEW SITE, TOWN OF	TALLAPOOSA COUNTY	10/27/78	07/18/11	07/18/11(M)	07/18/11	No
010419#	NEWTON, TOWN OF	DALE COUNTY		07/05/93	08/16/07	07/05/93	No
010260#	NEWVILLE, TOWN OF	HENRY COUNTY	01/10/75	09/29/86	09/28/07	09/29/86	No
010444#	NORTH COURTLAND, TOWN OF	LAWRENCE COUNTY		09/11/09	09/11/09	01/28/03	No
	USE BOTH THE LAWRENCE COUNTY (CID 010324) FIRM PANEL # 80, AND THE TOWN OF COURTLAND (CID 010141) FIRM PANEL 001.						
010202#	NORTHPORT, CITY OF	TUSCALOOSA COUNTY	12/28/73	09/05/79	01/16/14	09/05/79	No
010149#	NOTASULGA, TOWN OF	MACON COUNTY	10/25/74	11/24/78	11/18/09(M)	11/24/78	No
010299#	OAKMAN, TOWN OF	WALKER COUNTY	02/21/75	03/14/80	10/02/14(>)	03/14/80	No
010188#	ODENVILLE, CITY OF	ST. CLAIR COUNTY	05/24/74	08/05/86	06/19/12	08/05/86	No
	Includes the Town of Branchville.						
010232#	OHATCHEE, TOWN OF	CALHOUN COUNTY	01/31/75	09/28/07	09/28/07	08/18/04	No
	USE CALHOUN COUNTY (CID 010013) FIRM DATED FEB. 3, 1993, PANELS 25 & 125.						
010015#	ONEONTA, CITY OF	BLOUNT COUNTY	09/13/74	08/19/86	08/03/09	08/19/86	No
010145#	OPELIKA, CITY OF	LEE COUNTY	07/26/74	09/16/81	11/02/11	09/16/81	No
010241#	OPP, CITY OF	COVINGTON COUNTY	07/11/75	07/18/85	11/04/09(M)	07/18/85	No
015011#	ORANGE BEACH, CITY OF	BALDWIN COUNTY		09/03/92	07/17/07	01/12/73	No
	USE THE BALDWIN COUNTY [015000] FIRM.						
010064#	ORRVILLE, TOWN OF	DALLAS COUNTY	08/30/74	02/17/10	(NSFHA)	03/18/85	No
010218#	OWENS CROSS ROADS, TOWN OF	MADISON COUNTY	06/25/76	03/02/81	10/02/14(>)	03/02/81	No
010023#	OXFORD, CITY OF	TALLADEGA COUNTY/CALHOUN COUNTY	05/17/74	01/18/84	09/28/07	01/18/84	No
010062#	OZARK, CITY OF	DALE COUNTY	05/24/74	08/05/85	08/16/07(M)	08/05/85	No
010298#	PARRISH, TOWN OF	WALKER COUNTY	01/10/75	05/30/80	10/02/14(>)	05/30/80	No
010193#	PELHAM, CITY OF	SHELBY COUNTY	06/21/74	06/15/81	02/20/13	06/15/81	No
010189#	PELL CITY, CITY OF	ST. CLAIR COUNTY	06/21/74	07/04/89	06/19/12	07/04/89	No
010035#	PENNINGTON, TOWN OF	CHOCTAW COUNTY	03/03/78	09/18/85	09/03/10(M)	09/18/85	No
010523#	PERDIDO BEACH, TOWN OF	BALDWIN COUNTY		07/17/07	07/17/07	04/22/10	No
	Town of Perdido Beach adopted Baldwin County FIRM panels 01003C0980 L, 0960 L, and 0959 L, dated July 17, 2007.						
010184#	PHENIX CITY, CITY OF	LEE COUNTY/RUSSELL COUNTY	11/26/76	09/16/81	01/08/14	09/16/81	No
010333#	PHIL CAMPBELL, TOWN OF	FRANKLIN COUNTY	10/29/76	09/29/10	09/29/10(M)	09/29/10	No
010283#	PICKENS COUNTY *	PICKENS COUNTY	01/17/75	06/04/90	09/17/10	06/04/90	No
010423#	PICKENSVILLE, TOWN OF	PICKENS COUNTY		06/04/90	09/17/10	06/06/96	No
	USE THE PICKENS COUNTY [010283] FIRM						
010024#	PIEDMONT, CITY OF	CALHOUN COUNTY	06/07/74	06/15/84	09/28/07	06/15/84	No
010286#	PIKE COUNTY*	PIKE COUNTY	06/18/76	08/01/87	12/02/11(M)	08/01/87	No
010433#	PIKE ROAD, TOWN OF	MONTGOMERY COUNTY	01/17/75	01/06/82	02/05/14	08/04/03	No
010249#	PINCKARD, TOWN OF	DALE COUNTY	01/24/75	09/04/85	08/16/07(M)	09/04/85	No
010397#	PINE HILL, TOWN OF	WILCOX COUNTY	11/17/78	04/19/10	04/19/10	04/19/10	No
	Annexed areas on Wilcox County FHBM, Panel 010327 0005A, dated 5/1/87						
010447#	PINSON, CITY OF	JEFFERSON COUNTY		09/29/06	09/03/10	11/10/04	No
010268#	PLEASANT GROVE, CITY OF	JEFFERSON COUNTY	12/20/74	12/19/80	09/29/06	12/19/80	No

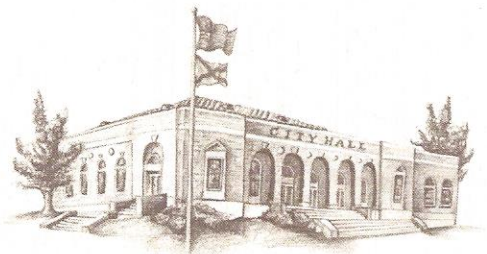
# Federal Emergency Management Agency

## Community Status Book Report

### ALABAMA

#### Communities Participating in the National Flood Program

CID	Community Name	County	Init FHBM Identified	Init FIRM Identified	Curr Eff Map Date	Reg-Emer Date	Tribal
010075#	POLLARD, TOWN OF	ESCAMBIA COUNTY	01/31/75	09/28/07	06/05/12(M)	09/28/07	No
010398#	POWELL, TOWN OF	DEKALB COUNTY	10/26/79	02/20/08	09/29/11(M)	02/20/08	No
010002#	PRATTVILLE, CITY OF	ELMORE COUNTY/AUTAUGA COUNTY	05/03/74	08/15/78	09/03/14	08/15/78	No
	The effective FIRM for Autauga County is dated 10/23/1981 panel number 0100020005C.						
010448#	PRICEVILLE, TOWN OF	MORGAN COUNTY		12/16/05	(NSFHA)	11/02/10	No
010170#	PRICHARD, CITY OF	MOBILE COUNTY	06/28/74	02/04/81	03/17/10	02/04/81	No
010159#	PROVIDENCE, TOWN OF	MARENGO COUNTY	11/01/74	11/17/78	11/02/11(M)	01/30/08	No
010190#	RAGLAND, TOWN OF	ST. CLAIR COUNTY	05/24/74	06/03/86	06/19/12	06/03/86	No
010351#	RAINBOW CITY, CITY OF	ETOWAH COUNTY	02/18/77	01/06/82	09/26/08	01/06/82	No
010368#	RAINSVILLE, CITY OF	DEKALB COUNTY	03/12/76	05/01/80	09/29/11	05/01/80	No
010182#	RANDOLPH COUNTY *	RANDOLPH COUNTY	09/13/74	07/05/82	04/18/11	11/05/03	No
010334#	RED BAY, CITY OF	FRANKLIN COUNTY	12/10/76	01/20/82	09/29/10	03/01/06	No
010243#	RED LEVEL, TOWN OF	COVINGTON COUNTY	01/10/75	11/04/09	11/04/09(M)	11/04/09	No
010253#	REECE CITY, CITY OF	ETOWAH COUNTY	02/21/75	02/01/91	09/26/08(M)	02/01/91	No
010221#	REFORM, TOWN OF	PICKENS COUNTY	12/27/74	07/03/78	09/17/10	07/03/78	No
010392#	REHOBETH, TOWN OF	HOUSTON COUNTY		11/21/02	09/03/14	07/17/03	No
010427#	REPTON, TOWN OF	CONECUH COUNTY		11/04/09	(NSFHA)	11/04/09	No
010054#	RIVER FALLS, TOWN OF	COVINGTON COUNTY	09/20/74	07/08/77	11/04/09(M)	07/08/77	No
010288#	RIVERSIDE, CITY OF	ST. CLAIR COUNTY	04/04/75	08/19/86	06/19/12	08/19/86	No
010076#	RIVERVIEW, TOWN OF	ESCAMBIA COUNTY	08/30/74	09/04/86	06/05/12	09/04/86	No
010348#	ROANOKE, CITY OF	RANDOLPH COUNTY	06/10/77	07/05/82	04/18/11	05/03/95	No
010222#	ROBERTSDALE, CITY OF	BALDWIN COUNTY	01/28/77	12/01/81	07/17/07	12/01/81	No
010339#	ROGERSVILLE, TOWN OF	LAUDERDALE COUNTY	03/10/78	09/11/09	09/11/09(M)	09/11/09	No
010044#	ROSA, TOWN OF	BLOUNT COUNTY		08/03/09	08/03/09(M)	03/08/13	No
010287#	RUSSELL COUNTY *	RUSSELL COUNTY	01/17/75	09/16/81	01/08/14	09/16/81	No
010216#	RUSSELLVILLE, CITY OF	FRANKLIN COUNTY	06/25/76	08/01/79	09/29/10	08/01/79	No
010505#	SAINT FLORIAN, TOWN OF	LAUDERDALE COUNTY		02/04/81	09/11/09(M)	10/21/08	No
010088#	SAMSON, CITY OF	GENEVA COUNTY	06/07/74	02/24/78	02/20/08	06/17/77	No
010485#	SAND ROCK, TOWN OF	CHEROKEE COUNTY		01/19/11	01/19/11(M)	10/13/11	No
010171#	SARALAND, CITY OF	MOBILE COUNTY	05/24/74	12/18/79	03/17/10	12/18/79	No
010361#	SARDIS CITY, TOWN OF	ETOWAH COUNTY	09/17/76	01/01/87	09/26/08(M)	01/01/87	No
010172#	SATSUMA, CITY OF	MOBILE COUNTY	05/03/74	09/29/78	03/17/10	09/29/78	No
010112#	SCOTTSBORO, CITY OF	JACKSON COUNTY	06/10/77	09/18/85	12/16/08	09/18/85	No
010065#	SELMA, CITY OF	DALLAS COUNTY	05/21/76	03/04/86	09/03/14	03/04/86	No
010048#	SHEFFIELD, CITY OF	COLBERT COUNTY	03/22/74	12/15/77	02/17/10	12/15/77	No
010191#	SHELBY COUNTY*	SHELBY COUNTY	11/29/74	09/16/82	02/20/13	12/15/86	No
010512#	SHORTER, TOWN OF	MACON COUNTY		11/18/09	11/18/09(M)	03/02/11	No
010036#	SILAS, TOWN OF	CHOCTAW COUNTY	07/11/75	09/30/88	09/03/10(M)	02/27/06	No
010010#	SILVERHILL, TOWN OF	BALDWIN COUNTY	06/28/74	12/14/79	07/17/07	12/14/79	No
010089#	SLOCOMB, CITY OF	GENEVA COUNTY	05/24/74	12/16/77	02/20/08(M)	12/16/77	No
010491#	SMITHS STATION, CITY OF	LEE COUNTY		11/02/11	11/02/11	08/24/09	No
	SMITHS STATION HAS ADOPTED THE LEE COUNTY FIRM DATED 09/16/1981.						
010227#	SNEAD, TOWN OF	BLOUNT COUNTY	06/27/75	08/03/09	08/03/09(M)	08/03/09	No
010363#	SOMERVILLE, TOWN OF	MORGAN COUNTY	06/04/76	05/02/99	12/16/05	06/26/06	No
010365#	SOUTH VINEMONT, TOWN OF	CULLMAN COUNTY	10/01/76	12/02/04	(NSFHA)	09/04/05	No
010082#	SOUTHSIDE, CITY OF	ETOWAH COUNTY	12/07/73	07/02/87	09/26/08(M)	07/02/87	No
010429#	SPANISH FORT, CITY OF	BALDWIN COUNTY		06/17/02	07/17/07	06/17/02	No
010289#	SPRINGVILLE, CITY OF	ST. CLAIR COUNTY	12/27/74	08/19/86	06/19/12(M)	08/19/86	No



## City of Auburn

Home of Auburn University

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### CITY OF AUBURN 2015 STATEMENT OF PARTICIPATION IN NFIP

Over the past five years the City of Auburn, Alabama has undertaken the following activities to mitigate the threat of flood in the community:

- Adopted and enforced a revised Flood Damage Prevention Ordinance.
- In conjunction with Lee County, updated base flood elevations and Flood Insurance Rate Maps.
- Became a CRS community, earning a Class 7 score which entitles citizens to a 15% discount on Flood Insurance.
- Placed information about flood risk, flood safety, National Flood Insurance Program and digital maps on the City website.
- Maintained the storm drainage system throughout the City.
- Cleared ditches, streams, and channels of debris.
- Worked with Lee County EMA to identify properties located in flood zones that might be candidates for buyouts.

Over the next five years the City of Auburn, Alabama intends to complete the following activities to mitigate the threat of flood in the community:

- Continue to enforce the Flood Damage Prevention Ordinance.
- Maintain/improve CRS community, Class 7 score.
- Maintain/update information about flood risk, flood safety, National Flood Insurance Program and digital maps on the City website.
- Continue to maintain the storm drainage system throughout the City.
- Continue to clear ditches, streams, and channels of debris.
- Work with Lee County EMA to identify properties located in flood zones that might be candidates for buyouts.

BILL HAM, JR., Mayor

2-24-15

Date

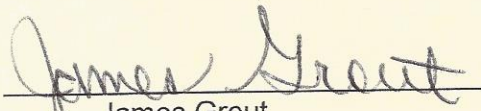


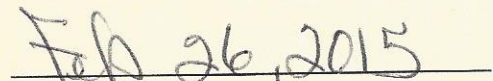
# Town of Loachapoka

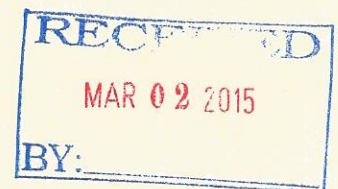
P.O. Box 10  
Loachapoka, Al. 36865-0010  
townofloachapoka@att.net

## TOWN OF LOACHAPOKA 2015 STATEMENT OF PARTICIPATION IN NFIP

According to the current Flood Insurance Study for Lee County and Incorporated Areas, the Town of Loachapoka is deemed to be non-floodprone.

  
James Grout  
Mayor, Town of Loachapoka

  
Date





## Planning Department

Telephone 334-705-5156  
Fax 334-705-5159

*Rich in heritage,  
with a vision  
for the future*

### STATEMENT OF PARTICIPATION IN NFIP CITY OF OPELIKA

Over the past five years the City of Opelika, Alabama has undertaken the following activities to mitigate the threat of flood in the community:

- Enforced the Opelika Flood Prevention Ordinance (Ordinance 117-02).
- In conjunction with the Lee County Floodplain Manager, updated base flood elevations and Flood Insurance Rate Maps.
- Maintained the storm drainage system throughout the City.
- Cleared ditches, streams, and channels of debris.
- Worked with Lee County EMA to identify properties located in flood zones that might be candidates for buyouts.

Over the next five years the City of Opelika, Alabama intends to complete the following activities to mitigate the threat of flood in the community:

- Continue to enforce the Opelika Flood Prevention Ordinance.
- Continue to monitor, inspect and maintain the storm drainage system throughout the City.
- Continue to clear ditches, streams, and channels of debris.
- Work with Lee County EMA to identify properties located in flood zones that might be candidates for buyouts.
- Work to improve the storm drainage and waterway infrastructure

Jeff Kappelman

Jeff Kappelman  
Floodplain Administrator

February 27, 2015

Date



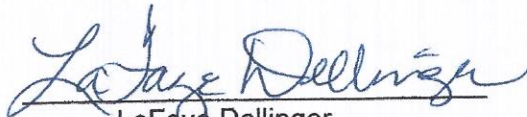
**STATEMENT OF PARTICIPATION IN NFIP  
CITY OF SMITHS STATION**

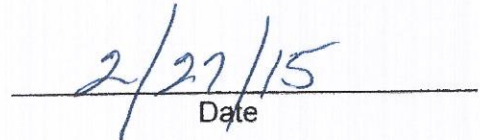
Over the past five years Smiths Station, Alabama has undertaken the following activities to mitigate the threat of flood in the community:

- Amended and enforced Zoning Ordinance 2011-075.09 to include stream buffers for development.
- Adopted and enforced a sediment control ordinance.
- Enacted a Stormwater Management Program.
- Worked collaboratively with Lee County to complete maintenance on roads, drainage culverts, creeks, and streams to mitigate the threat of flood.
- Worked collaboratively with the Lee County Floodplain Manager and the Lee County EMA to inform citizens of flood threats and NFIP.

Over the next five years Smiths Station, Alabama intends to complete the following activities to mitigate the threat of flood in the community:

- Continue to enforce amended Zoning Ordinance 2011-075.09
- Continue to enforce the sediment control ordinance.
- Continue to implement the Stormwater Management Program.
- Continue to work collaboratively with Lee County to perform maintenance on roads, drainage culverts, creeks, and streams to mitigate the threat of flood.
- Assist the Lee County EMA in identifying properties which may be candidates for future buyouts due to repetitive flooding.
- Work collaboratively with the Lee County Floodplain Manager and Lee County EMA to inform citizens of flood threats and NFIP.

  
LaFaye Dellinger  
Mayor, City of Smiths Station

  
Date

## LEE COUNTY BUILDING INSPECTIONS

Mailing Address:  
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Lee County, Alabama Est. 1866

March 18, 2015

### **LEE COUNTY ALABAMA STATEMENT OF PARTICIPATION THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP), 2015**

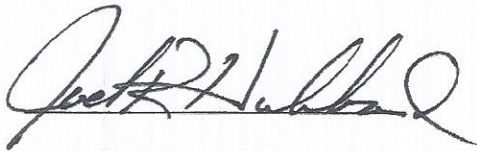
Lee County has participated in the National Flood Insurance Program (NFIP) since 2005. The Lee County Commission recognizes that while flooding can never be totally avoidable, there are certain activities which can and will lessen the impact of floods in the community. In the past five years, the Commission has taken the following actions in order to mitigate the damage in the event that flooding does occur:

- In conjunction with other jurisdictions within Lee County, updated base flood elevations and Flood Insurance Rate Maps to conform to the Flood Insurance Study (FIS) effective November 02, 2011.
- Sharing of information about flood risk, flood safety, and the National Flood Insurance Program with citizens and businesses.
- Posting updated Flood Maps and NFIP information on the County Website.
- Maintenance of storm drainage systems throughout the County.
- Included storm water runoff control provisions for construction sites to the County's MS4 Program with inspection over site by the Building Inspections Department.
- Provided information about storm water management practices on the County website.
- Instituted a program for clearing ditches, streams, and channels of debris.
- Monitoring development in flood prone areas and requiring Development Permits for Special Flood Hazard Areas (SFHA).
- Coordinating with Lee County EMA to identify properties located in flood zones that might be candidates for buyouts.

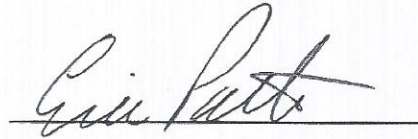


Over the next five years the Lee County Commission intends to continue its mitigation activities by:

- Providing ongoing, updated information about flood risk, flood safety, and the National Flood Insurance Program to our citizens and businesses.
- Modernizing flood maps and NFIP information on the County Website when possible.
- Monitoring the adequacy of storm drainage systems throughout the County.
- Educating the public about storm water management best practices.
- Actively clearing ditches, streams, and channels of debris as needed.
- Diligent over site and control of growth and development in Special Flood hazard Areas.
- Identifying additional properties located in flood hazard areas that might be candidates for buyouts.



Joel R. Hubbard, CBO  
Interim Building Official



Eric Parten, CFM  
Sr. Building Inspector