East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan: Phase One
June 2020

A Hazard Mitigation Plan for AEMADivsions D Counties: Lee County, Russelll County, the City of Auburn, the City of Opelika, the City of Smiths Station, Town of Loachapoka, Russell County, City of Phenix City, Town of Hurtsboro

Prepared For:
Lee County, City of Auburn, City of Opelika, City of Smiths Station, Town of Loachapoka, Russell County, City of Phenix City, Town of Hurtsboro

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Section 1: Introduction

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1.1 Introduction

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is a plan that details the multitude of hazards that affect the Alabama Emergency Management Agency (AEMA) Division D area. The Phase I, which is covered in this plan, will be adopted by the following jurisdictions in Lee and Russell counties: the City of Auburn, Town of Loachapoka, the City of Opelika, Town of Smiths Station, Lee County, Hurtsboro, Phenix City, and Russell County.

Alabama Emergency Management Agency (AEMA) Division D region will include the following counties when it is complete: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell and Tallapoosa counties and the jurisdictions, within these counties. The remaining counties will be addressed in Phase 2 or Phase 3.

This plan fulfills the requirements set forth by the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires counties to formulate a hazard mitigation plan in order to be eligible for mitigation grants made available by the Federal Emergency Management Agency (FEMA).

Each county in AEMA Division D has an existing multi-jurisdictional hazard mitigation plan. This plan will compile information from each of those existing plans and documents the incorporation of hazard mitigation objectives into the region, as a whole. The AEMA Division D is diverse in terms of development and physical geography, but many of the hazards affecting the region have similar impacts throughout the area. A community must deal with localized threats such as flooding, wildfires, or sinkholes as well as the hazard that do not have geographical limitations like tornadoes, hail, or high winders. A regional hazard mitigation plan is able to encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts. Local Emergency management agencies in the counties have a responsibility for both urban and rural areas of varying population density. A regional hazard mitigation plan is able to encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts.

1.2 Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a hazard mitigation plan as a condition of receiving federal disaster assistance. These plans should be approved by FEMA and updated every five years.

1.3 Funding

Funding for the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan was made available through the Hazard Mitigation Grant Program (HMGP), under Disaster Recovery Declaration 1971 (DR-1971). Supplemental funding was supplied by the county commissions of Lee and Russell counties and the Lee-Russell Council of Governments.

1.4 Purpose

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an effort to evaluate and identify all prioritized hazards which may affect AEMA Division D. It presents mitigation

strategies that address the hazards identified. This plan is only one of many steps jurisdictions in East Alabama will take to protect the welfare of residents by achieving a safer environment for its residents.

1.5 Multi-Jurisdictional Plan Adoption

The City of Auburn, Town of Hurtsboro, Lee County, Town of Loachapoka, City of Opelika, City of Phenix City, Russell County, and Town of Smiths Station are the eligible jurisdictions to adopt Phase I of the Hazard Mitigation Plan when it is deemed "approvable pending adoption" by the Federal Emergency Management Agency (FEMA). The plan can also be adopted by but not limited to the following: regional planning councils and local governing bodies, including municipal councils, county commissions, and local school districts.

The jurisdiction in the remaining AEMA Division D counties is not eligible to adopt Phase I of the AEMA Division D Hazard Mitigation Plan. Those counties will be covered in Phase 2 (Autauga, Elmore, and Montgomery) or Phase 3 (Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa) of the Division D Hazard Mitigation plan. At the conclusion of the three-phased process, the plan will be compiled to create a regional AEMA Division D Hazard Mitigation Plan with the same deadline/update cycle.

1.6 Multi-Jurisdictional Planning Process

Each eligible local jurisdiction, The City of Auburn, Town of Hurtsboro, Lee County, Town of Loachapoka, City of Opelika, City of Phenix City, Russell County, and Town of Smiths Station, provided participation in the development of this regional hazard mitigation plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee.

The jurisdiction that will be included in Phases 2 and Phase 3 will follow the same process.

Each eligible local jurisdiction, The City of Auburn, Town of Hurtsboro, Lee County, Town of Loachapoka, City of Opelika, City of Phenix City, Russell County, and Town of Smiths Station, participated in the development of the plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee and were involved in the updated hazard mitigation planning process. Participants include but are not limited to local government leaders, members of law enforcement, first responders, school boards, and public utilities. The previous hazard mitigation plan and a presentation were distributed to the participant stakeholders along with surveys for feedback identifying hazards, risks, vulnerabilities, and strategies. A list of stakeholders can be found in Table 1.2. Each participating jurisdiction was represented by personnel that performed a variety of functions including review of the plan at various stages during its drafting, attending meetings and updates on plan progress and contents, and providing feedback, comments, and consultation during the plan's drafting stages. Refer to Table 1.22 for the summary of each jurisdictions' involvement, name the representatives from each jurisdiction involved in the plan, and how involved each jurisdiction was during Phase 1. Threats are assessed for each jurisdiction so that hazards affecting one jurisdiction are considered to have an equal impact or potential impact on assets located in those jurisdictions. It is assumed those hazards affecting a specific jurisdiction will have a similar impact on school systems and utilities of the jurisdiction.

1.7 Hazard Mitigation Plan Process

At the beginning of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan a Division D Core Team was developed through interaction between AEMA Division D EMA Directors, the AEMA Division D Coordinator, and the Lee-Russell Council of Governments. Members of the AEMA Division D Core Team developed county-level planning subcommittees primarily based on past Hazard Mitigation Plan update participants and the Local Emergency Planning Committees. The teams reviewed previous county-wide local hazard mitigation plans and development of the plan requirements and hazards for Division D Region.

The AEMA Division D Core Team developed the phased process of preparing the Regional Hazard Mitigation Plan based upon the staggered deadlines for each jurisdiction. The AEMA Division D Core Team met to compare the identified hazards in each individual jurisdiction plan in order to reach a consensus of the identified Regional Hazard Profiles. The AEMA Division D Core Team also met to discuss Division D Mitigation Goals/Strategies based on these items found in each individual jurisdiction plan. The meetings took place on July 29th and September 19th, 2019.

The July 20th, 2019 meeting included discussion of the following:

- Meet with other Division D leaders
- Introduction to hazard mitigation in the region
- Established core planning team responsibilities
- Identified deadlines
- Updated and outlined the evaluation process
- Organize the process

The September 19th, 2019 meeting included discussion of the following:

- Compared goals and hazards in Division D
- Identified goals for Division D
- The Lee-Russell council of local governments (LRCOG) was in charge of the planning process.

Phase 1 of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan was developed through the cooperation between Lee County EMA, Russell County EMA, the AEMA Division D Coordinator, and Lee-Russell Council of Governments, as well as stakeholders representing organization such as county commissions, local governments, local school districts, local utility boards, or law enforcement.

The natural hazard that threatens and impacts the jurisdiction in Lee and Russell counties were identified by the Division D Core Team, as well as noted in previous county-level hazard plans. The mitigation actions from the previous county-level hazard plans were identified and presented to the stakeholders, local EMA directors, and participating jurisdictions for reviewed and approved. These hazard and mitigation actions were updated to reflect current information, such as hazard frequency and severity, available on natural hazard events in Lee and Russell counties. Risk analysis was conducted using historical data estimates of magnitude and extent of damage from events. Results were presented to stakeholders and participating jurisdictions in print format, electronically and in hard copy, and were reviewed in a series of local meetings.

Stakeholders participated and helped facilitate the planning process by:

- Attend scheduled meetings, or if unable to attend, send a designee or make themselves available to discuss the agenda through a phone conversation, email, or in-person meeting.
- Represent their jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Collecting and reviewing information on their jurisdiction's conditions and resources
- Facilitating the development of a comprehensive range of mitigation alternatives
- Recommending selected alternatives for action
- Facilitating information exchange among participating jurisdictions, acting as liaisons to eligible entities of each jurisdiction
- Provide an assessment of prioritized projects that have been completed or are ongoing or changes to prioritization.

The discussions with the AEMA Division D Core Team led to county-level meetings with Lee and Russell counties to review the Risk, Vulnerability, and Mitigation components of the Hazard Mitigation Plan. During the summer and fall of 2019, the Hazard Mitigation Plan and the Hazard Mitigation Plan Action Strategies were sent to each participant of the county-level subcommittee prior to the meetings held in 2019. The scope of the meetings was to assess the progress of each jurisdiction's mitigation goals and objectives and to determine recent hazard events and how they affected the jurisdictions. From these meetings, hazard profiles were consolidated, updated for the regional scope of the plan, and risk analysis updates were conducted using historical and local documentation. Plan drafts were distributed to stakeholders and local jurisdictions for review and the plan draft was discussed in the realm of public meetings before submission to AEMA and FEMA.

The October 10th and October 17th meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Benefits of Mitigation Planning
- Legal Regulations for Local Hazard Mitigation
- Plan Requirements
- Core Planning Team for Division D
- Responsibilities, Processes, Timeline
- Hazards Introduced
- Risk Index

The October 31st and November 5th meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Plan Requirements, Process, and Timeline
- Role of Stakeholders and Technical Advisors
- Benefits of Mitigation Planning
- Mission Statement
- Hazard Identified
- Historical Hazard Events Recap

The January 14th and January 16th, 2020 meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Division D Goals
- Introduce the Community Survey
- Russell County Survey Findings
- How to Measure Community Resilience
- Social Vulnerability
- Hazards Ranked
- Recap Past Hazards Events

The January 22nd and January 30th, 2020 meetings included discussion of the following:

- Briefed the public on updates to the plan
- Received feedback on the plan

Barbour County EMA director was consulted to review the plan and provided comments, please refer to Section 7.5 in the appendix to see the email chain.

Table 1.1: AEMA Division D Core Team

Organization	Contact
Autauga County EMA	Ernie Baggett
Bullock County EMA	Josh Powell
Chambers County EMA	Jessica Yeagar
Chilton County EMA	Derrick Wright
Coosa County EMA	Terri Q. Hale
Elmore County EMA	Keith Barnett
Lee County EMA	Rita Smith
Lowndes County EMA	David Butts
Macon County EMA	Frank Lee
Montgomery County EMA	Christina Thornton
Russell County EMA	Robert “Bob” Franklin
Tallapoosa County EMA	Jason Moran
AEMA Division D Coordinator	Monique Smith
Lee-Russell Council of Governments	Lisa Sandt/Tracie Hadaway

Source: Alabama Emergency Management Agency, County EMA Director

Table 1.2: Phase One Regional Hazard Mitigation Plan subcommittee

Participant	Jurisdiction	Department & Title	Attended Meeting	Opportunity for Written Comments	In-Person / Phone Consultation
Lee County Representatives					
Blake Simpkins	Beulah	Fire Chief		X	X
Joe Walden	Smith Station	Volunteer Fire Chief		X	X
Alice McCall	Lee County	Deputy Administrator		X	X
Erica Norris	Lee County	HR Director		X	X
Roger Rendleman	Lee County	County Administrator		X	X
Justin Hardee	Lee County	County Engineer		X	X
Chris Wallace	Lee County Sherriff	Captain	X	X	X
Jeff Pitts	Lee County Sherriff	Chief Deputy		X	X
“Bubba” Copeland	Smith Station	Mayor		X	X
Will Matthews	City of Auburn	Assistant Chief Police		X	X
Paul Register	Auburn City Schools	Safety Director		X	X
Gary Fuller	City of Auburn	Mayor		X	X
Mike Hilyer	City of Opelika	Director of Public Works	X	X	X
Ron Anders	City of Auburn	City of Auburn		X	X
Wendy Swann	Lee County	Governmental Relations Coordinator		X	X
Richard LaGrand	Lee County	Commissioner		X	X
Austin Byles	City of Opelika	EMS Manager		X	X
Bill Harris	Lee County	Corner		X	X
Scott Cummings	City of Auburn	Construction and Maintenance: Public Works Director		X	X
Megan McGowen Crouch	City of Auburn	Assistant City Manager		X	X
James C. Buston	City of Auburn	City Manager		X	X
Rod Cater	Alabama Power Company	Community Relations Manager		X	X
Brooke Harris	Auburn Opelika Tourism	Digital Marketing Manager		X	X
Tim Woody	City of Auburn	Public Works Director		X	X
Cristen Herring	Auburn City Schools	Superintendent		X	X
Douglas Hubbard	Lee County Emergency Agency	Financial Planner		X	X
Bill Meadows	Lee County	911 Director		X	X
Billy Browdy	East Alabama Medical Center	Hospital Safety		X	X
Chance Corbett	Auburn University	Associate Director Emergency Management		X	X
Chandler Barrett	United Way of Lee County	Initiatives		X	X
Gary Long	Lee County	Commissioner		X	X

Rita Smith	Lee County Emergency Agency	Deputy Director	X	X	X
Austin Jones	Lee County Emergency Agency	Emergency Management Specialist	X	X	X
Jay Jones	Lee County Sherriff	Sherriff		X	X
John Wild	Auburn Opelika Tourism	President		X	X
Johnny Lawrence	Lee County	Commissioner		X	X
Randy Causey	East Alabama Medical Center	Director Support Svcs	X	X	X
Robert Ham	Lee County	Commissioner		X	X
Sheila Eckman	Lee County	Commissioner		X	X
Carson Stroud	Lee County	Commissioner		X	X
Daniel Sexton	Smith Station Fire	Deputy Fire Chief		X	X
Stan Cox	Lee Scott Academy	Headmaster		X	X
Chris Hardman	Auburn City School	Safety Coordinator		X	X
Kenneth Burton	Opelika City School	Assistant Superintendent Buildings/ Student Services		X	X
Lee Lindsay	Lee County	Transportation Supervisor		X	X
Dennis Veronese	Auburn City Schools	Assistant Superintendent/ Chief Financial Officer	X	X	X
Leigh Krehling	City of Opelika	Public Relations		X	X
David Dorton	City of Auburn	Public Relations		X	X
John Konstant	City of Opelika	Fire Chief		X	X
Bill English	Lee County	Probate Judge		X	X
John Lankford	City of Auburn	Police Chief		X	X
Byron Prather	City of Opelika	Fire Chief	X	X	X
Cecil Rogers	Salem VED	Chief		X	X
Josh Datnoff	Lee County Fire Fighters Association	President		X	X
Bradley Bowen	City of Opelika	Firefighter		X	X
Mike Holden	Beauregard VED	Fire Chief		X	X
Matt Jordan	Auburn Fire Department	Deputy Chief	X	X	X
Steve Tucker	Auburn Fire Department	Firefighter		X	X
LeeAnn Bolt	Smith Station Fire	Assistant Fire Chief		X	X
Justin Farmer	Auburn Fire	Firefighter		X	X
John Kennedy	Opelika Fire	Haz-Mat EMS	X	X	X
Kathy Carson	Lee County	LCEMA	X	X	X
Monique Smith	Lee County	AEMA	X	X	X
Mike Harper	Lee County	EEMS	X	X	X
Jim Grout	Loachapoka	Mayor			X

Participant	Jurisdiction	Department & Title	Attended Meeting	Opportunity for Written Comments	In-Person / Phone Consultation
Russell County Representatives					
William Alexander	Russell County	Chief Deputy		X	X
Health Taylor	Russell County	Sheriff		X	X
Jarrod Barr	Russell County	Chief Investigator		X	X
H. Ward Dudley	Russell County	Director of Transportation	X	X	X
Bob Franklin	City of Phenix City	CLEM, MLEM Director	X	X	X
David Martin	City of Phenix City	Fire Chief	X	X	X
Samantha Cato	City of Phenix City	Russell Co. EMA	X	X	X
Shawn Blakeney	City of Phenix City	Russell Co. Engineering	X	X	X
Ray Martin	City of Phenix City	Russell Co. Engineering		X	X
Peggy Martin	City of Phenix City	County Commission	X	X	X
LeAnn Horne	City of Phenix City	County Administrator	X	X	X
Naomi Elliott	City of Phenix City	Revenue Commissioner		X	X
Wanda Hardie	City of Phenix City	County Sanitation Dept.		X	X
Jennifer Davidson	City of Phenix City	Extension Office	X	X	X
Ashley Haden	Russell County	Russell Co. Forestry		X	X
Todd Hodges	City of Phenix City	Russell Co. Water Authority		X	X
Brenda Coley	City of Phenix City	Supt., Russell Co. Schools		X	X
Randy Wilkes	City of Phenix City	Supt., Phenix City Schools		X	X
Joe Blevins	City of Phenix City	Assist. Supt. Phenix City Schools		X	X
Eddie Lowe	City of Phenix City	Mayor, Phenix City		X	X
Wallace Hunter	City of Phenix City	City Manager, Phenix City		X	X
Angel Moore	City of Phenix City	City Engineer, Phenix City	X	X	X
Ray Smith	City of Phenix City	Chief of Police, Phenix City	X	X	X
Gail Green	City of Phenix City	Phenix City Police		X	X
Kristin Kennedy	City of Phenix City	Fire Chief, Phenix City	X	X	X
Tommy Cox	City of Phenix City	Phenix City Fire Dept.		X	X
Todd Hughes	City of Phenix	Phenix City Parks and	X	X	X

	City	Recreation Director			
David Gibson	City of Phenix City	Phenix City Schools Director		X	X
David Ellis	City of Phenix City	Fort Mitchell Water System		X	X
Vivian Covington	Town of Hurtsboro	Mayor, City of Hurtsboro		X	X
Victor Cross	City of Phenix City Chamber	President		X	X
John Dozier	Town of Hurtsboro	Hurtsboro Waterworks		X	X
Anthony Gosdin	Russell County	Tallapoosa River Electric Cooperative		X	X
Brooke Goff	Russell County	Alabama Power Co.		X	X
Monique Smith	Russell County	AEMA Division D Coordinator	X	X	X
Omar Armstrong	Russell County	ALDOT Assistant District Manager	X	X	X
Rufus Boutwell	Russell County	ALDOT		X	X
Tim Seigal	Russell County	Fort Benning Fire Chief	X	X	X
Col. Matthew Scalia	Russell County	Fort Benning Garrison Commander		X	X
Ferdinand Crawford	Russell County	West Rock		X	X
Greg Johnstone	Russell County	Continental Carbon Company	X	X	X
David Hodge	Russell County	CVCC		X	X
Dr. David White	Russell County	Troy University		X	X
Tammie Creech	Russell County	Red Cross, East Alabama Chapter		X	X
Erica Hare	Russell County	Jack Hughston Memorial Hospital	X	X	X
Dave Alexander	Russell County	AIMS	X	X	X
Kerry Pope	Russell County	Spire		X	X
Lon Russell	Russell County	Russell County School District	X	X	X
Marianne Michael	Russell County	Troy University	X	X	X
Parker Goodman	Russell County	Tallapoosa River Electric Co.	X	X	X
Jennifer Davidson	Russell County	Alabama Extension - Russell	X	X	X
Eula Phillips	Town of Hurtsboro	Councilmember	X	X	X
Tammy Barnes	Russell County Schools	HR Director	X	X	X
Rebekah Crawford	Russell County	ALDOT	X	X	X

Participant	Jurisdiction	Department & Title	Attended Meeting	Opportunity for Written Comments	In-Person / Phone Consultation
David Logan	Barbour County	EMA Director		X	

1.8 Public and Other Stakeholder Involvement

The presence of community engagement is an important element to consider during the planning process because it allows the public/ residences to have input in potential projects specifically at the local level. According to APA, public engagement is "the key to building an inclusive community," because it gives everyone access to participate in the planning process. Working with the people who live in Lee and Russell counties gives the community an active role in planning, creates a partnership between the public and planners.

The opportunity for the public to participate was accomplished through multiple strategies. The public was invited to attend and participate in all stakeholder meeting for Lee and Russell counties, please refer to section 7.3 in the Appendix for the dates and details on meetings. The public was encouraged to voice their opinions and concerns at these meetings in regards to how natural hazards impact their local jurisdiction and what potential mitigation actions should be implemented. All meetings were advertised in the Auburn Opelika News Paper, East Alabama Citizen Newspaper, on a local radio station, Lee Russell Council of Governments website, The Lee County EMA Website, and the Russell County EMA website. The public was invited to the meetings held on January 22nd and January 30th to review the final draft for the hazard mitigation plan. For those individuals who were unable to attend to the meetings, a digital copy was uploaded on the Lee Russell Council of Governments and county websites as well as hard copies were available at the local libraries, at the local Senior Citizen Centers. These initiatives were done prior to the plan approval and adoption of the plan. A copy of the final plan approved by FEMA will be placed on the LRCOG website as well as hard copies at the local EMA offices, city and county offices (as determined), school boards, and water authorities will also receive a hard copy. The Lee-Russell Council of Governments consulted with other regional planning offices in the state in order to receive feedback on Phase 1 of the Hazard Mitigation Plan. Due to the nature of a regional plan, it was impossible to reach out to neighboring jurisdictions because the regional plan covers all the jurisdictions in the closest eleven counties. Therefore, the planning staff decides to contact the planning directors following regional planning offices in order to meet FEMA's requirements on having the plan reviewed by a non-Division D entity: East Alabama Regional Planning, Regional Planning Commission of Greater Birmingham, North-central Alabama Regional Council of Governments, Southeast Alabama Regional Planning & Development Commission, The Alabama-Tombigbee Regional Commission, and West Alabama Regional Council. The feedback we received from the regional planning was positive and did not have any adjustments made to the content in the plan.

Extensive public outreach was conducted with surveys to garner input on hazard assessment in the region in order to could obtain helpful information about the residences' knowledge, needs, and concerns. The survey consisted of multiple choice and short answer questions that focused on understanding the residences' knowledge, needs, and concerns in regards to hazard events and hazards preparation. For this particular project, we chose to use a non-probability sampling method because we do not know the probability of each individual has been chosen or not chosen to participate in the survey. This type of survey method is focused on qualitative research rather than quantitative research, which will allow us to understand people's feelings towards hazards.

The target population for our survey was those individuals who live or work in Lee and Russell counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys. Interactive surveys were posted on the Lee-Russell Council of Governments website and their availability was announced on the local radio station. Staff was available at two community events to receive citizen input and resources available through the RSVP program were used to survey senior citizens in the region.

The following results from the public outreach survey were broken down by county.

A total of 307 responses to the survey were recorded, and all survey was complete. Of the 307 responses, 230 responses were from Lee County residents. Of those participants, 57%, 131 persons, responded that they felt somewhat prepared for a natural hazard, while 29%, 66 persons said they did not feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than an option on this question. 35%, 80 persons, expressed having access to community shelter would help them feel more prepared, 18%, 41 persons, felt that access to safe rooms would make them feel more prepared, and 16%, 36 persons said access to a readiness kit would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Lee County. The top four sources that participants found the most effective way to get information were as followed: 18% chose cell phones (41 persons), 18 % chose weather radio (41 persons), 16% chose TV (36 persons), and 13% said radio (30 persons). 46%, 105 persons, did not know if they lived in a floodplain.

Of the 307 responses, 77 responses were from Russell County residents. Of those participants, 43%, 33 persons, responded that they felt somewhat prepared for a natural hazard, while 41%, 31 persons said they did not feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than one option on this question. 22%, 16 persons, expressed having access to community shelter would help them feel more prepared, 23%, 17 persons, felt that access to safe rooms would make them feel more prepared, and 18%, 14 persons said access to a readiness kit would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Russell County. The top four sources that participants found the most effective way to get information were as followed: 26% chose TV (20 persons), 22% chose cell phones (16 persons), 15% said internet websites (11 persons), 12 % chose weather radio. 47%, 36 persons, did not know if they lived in a floodplain.

The feedback received from the public during meetings and comment periods mainly focused on what areas of Hurtsboro tended to flood, concerns about access to safe places during natural hazard events. We received a lot of supportive feedback from the public that focused on how important they thought this project was to communities. The feedback received from these comments and the survey results were used to help write narrative sections of the plan as well as used to support the mitigation action strategies.

The Lee-Russell Council of Governments and the local EMA directors involved multiple stakeholders in the formation of this plan as identified in Table 3.2. These stakeholders were

informed of the process, plan update, and information. Comments were solicited from the stakeholders identified.

1.9 Integration with Existing Plans

Existing plans were consulted upon drafting the Phase One Regional Hazard Mitigation Plan to gauge understanding of the region's capacity for hazard mitigation. Plans reviewed include:

Alabama State Hazard Mitigation Plan (2018 Update):
The State Hazard Mitigation Plan was consulted to assist with the consistency of information within the regional plan, including items within the Risk Assessment and local capabilities.

Lee County and Russell County Hazard Mitigation Plans:
Lee County and Russell County both have previously developed and approved local hazard mitigation plans. These plans were reviewed for consistency of information within the regional plan.

Local Comprehensive/Master Plans:
Local Comprehensive/Master Plans that that have been prepared and adopted in the Lee County and Russell County region were reviewed for consistency with information in the regional hazard mitigation plan.

- City of Auburn Comprehensive Plan 2030
- City of Auburn 2020 Long Range Plan
- City of Auburn Zoning Ordinances
- City of Auburn Subdivision Regulations
- City of Opelika Comprehensive Plan 2020
- City of Opelika Zoning Ordinances
- City of Opelika Master Plan 2030
- City of Opelika Subdivision Regulations
- City of Smiths Station Zoning Ordinance
- City of Smiths Station Comprehensive Plan 2036
- Russell County Comprehensive Plan
- Russell County Subdivision Regulations
- Phenix City Zoning Ordinance
- Phenix City Comprehensive Plan 2014
- Phenix City Subdivision Regulations

LRCOG Comprehensive Economic Development Strategy 2010 Update:
The LRCOG CED's was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for the Lee-Russell region.

Emergency Operations Plans:
Lee County and Russell County both have an Emergency Operation Plan (EOP) that is utilized in an emergency. The plans summarize various hazards and provide direction for emergency

personnel in disaster situations. These plans complement the hazard mitigation plan but do not necessarily cover the same material.

Alabama Drought Management Plan (2018)

The Alabama Drought Management Plan was studied to provide background information about drought impacts on the planning area.

Section 2- Regional Profile

Section Contents

2.1 Background
2.2 Demographics
2.3 Business and Industry
2.4 Infrastructure
2.5 Land Use and Development Trends
2.6 NFIP Compliance

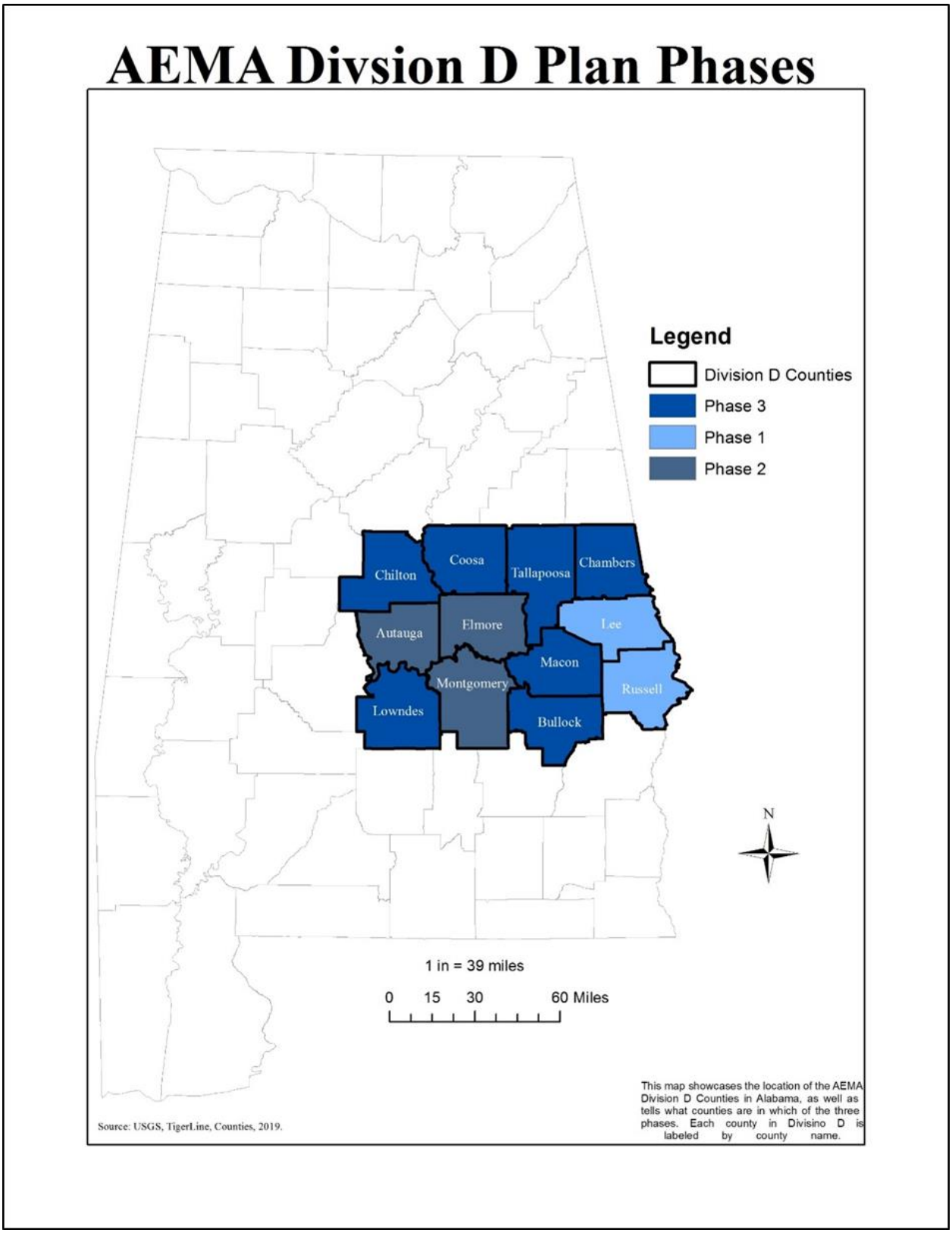
2.1 Background

The planning area is defined by the Alabama Emergency Management Agency (AEMA) as Division D, which is one of seven emergency management divisions within the state. AEMA Division D is located in eastern Alabama (Figure 2.1). AEMA D is comprised of the following twelve counties: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell, Tallapoosa and the jurisdictions in those counties. This version of the multi-jurisdictional hazard mitigation plan covers two of the twelve AEMA Division D counties and the jurisdictions in Lee and Russell Counties. Phase I, which is covered in this plan, will be adopted by the following jurisdictions in Lee and Russell counties: the City of Auburn, Town of Loachapoka, the City of Opelika, Town of Smiths Station, Lee County, Hurtsboro, Phenix City, and Russell County. The additional ten counties and the jurisdictions in the AEMA Division D are currently covered by their own hazard mitigation plan but will be fully included in subsequent update(s). Information for Lee and Russell County are the only counties included. Please refer to Figure 1 to see where in Alabama Division D is located.

Lee County and the northern portion of Russell County is part of the Piedmont Plateau, largely characterized by a hilly topography with gentle to steep slopes. The terrain in the southern portion of Russell County is largely level to gently rolling, as it is located in the Coastal Plain. The soil varies from rocky, red clay in the north to a sand-clay mixture in the center and a more sand soil in the south.

The Chattahoochee River borders Lee and Russell counties on the east, forming the border between the State of Alabama and the State of Georgia. There are many large creeks in Lee County including Holland Creek, Mill Creek, Pepperell Creek, Rocky Creek, Saugahatchee Creek, and Town Creek. The main creeks in Russell County include Uchee Creek, Little Uchee Cree, Halawakee Creek, and Wacoochee Creek.

Figure 1: AEMA Division D Plan Phases



Lee and Russell counties are located in East Central Alabama along the Chattahoochee River, which is the western boundary of the State of Georgia. Lee County occupies 608 of the 50,744 square miles of Alabama, while Russell County occupies 647 acres. Table 2.1 presents the land area of each county and that of its municipalities.

Table 2.1 Total Area by County

Jurisdiction	Total Area
Lee County (entire)	608
City of Auburn	59.375
Town of Loachapoka	1.18
City of Opelika	59
City of Smiths Station	6.59
Unincorporated County	481.855
Russell County (entire)	647
Town of Hurtsboro	1
City of Phenix City	24
Unincorporated County	622

Source: United States Census Bureau, Total Area

2.2 Demographics

According to the 2010 Census, the combined population of the Lee and Russell counties was 193,194 persons. The following table provides the 2010 population according to the US Census Bureau as well as the latest estimates for each jurisdiction. As evidenced in Table 2.2, Lee and Russell counties region are experiencing population growth.

Table 2.2: Jurisdiction Population

Jurisdiction	2010 Census Population	2018 Census Estimate	% Change
Lee County	140,247	163,941	16.89%
City of Auburn	53,380	65,738	23.15%
Town of Loachapoka	180	200	11.11%
City of Opelika	26,477	30,555	15.40%
City of Smiths Station	4,926	5,427	10.17%
Russell County	52,947	57,781	9.13%
Town of Hurtsboro	550	586	6.55%
City of Phenix City	32,822	36,435	11.00%

Source: United States Census Bureau (2010 Census and 2018 Population Estimates)

Based on the 2010 Census, the median age for residents within this region ranges from 23.3 years of age in Auburn to 47 years of age in Loachapocka. Much of the lower median age in Auburn can be attributed to Auburn University. Racial and ethnic characteristics from 2010 by county are presented below in Table 2.3:

Table 2.3: Racial and Ethnic Demographics by County

County	White%	Black %	Other %	Hispanic % (*)
Lee County	71.3%	22.7	4.0%	3.3
Russell County	53.7%	41.8%	2.9%	3.7%

Source: United States Census Bureau, 2010 Census
(*Hispanic Population may be of any race)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, there are 89,257 total housing units in Lee and Russell counties Housing information estimates, including more vulnerable housing such as mobile homes and aging housing, are presented by county in Table 2.4 below:

Table 2.4: Housing Conditions by County

County	Occupied Housing Units	Mobile Homes, (%)	Housing 38+ Years, (%)
Lee County	59,001	9,622; (16.3%)	16,613; (28.2%)
Russell County	22,690	3,419; (15.06%)	10,091; (44.5%)

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

All persons living in manufactured homes, as well as older housing, are vulnerable to natural disasters due to the building materials and standards are not the same as homes built on a slab. The unincorporated areas of Lee and Russell counties have the largest amount of manufactured homes, which is dangerous because these people should not stay in their homes in the event of natural disasters like a tornado, or severe thunderstorm with high winds. For more details on housing characters please refer to the table below.

Table 2.5: Housing Characteristics

Jurisdiction	Total Housing	Manufactured Homes	Housing 30+ Years
All Lee County	70,372	10,893	27,164
Unincorporated Lee County	25,093	7,802	8,718
Auburn	29,936	1,094	9,788
Opelika	13,361	1,670	7,562
Smiths Station	5,427	327	1,096
Loachapoka	NA*	NA*	NA*
All Russell County	27,855	4,972	16,181
Unincorporated Russell County	10,347	3,714	6,122
Hurtsboro	29,936	NA*	NA*
Phenix City	17,079	72	10,059

Source: U.S. Census Bureau (2018 ACS 5-Year Estimates)

- *The ACS Data does collect data for Loachapoka and Hurtsboro for Housing characteristics*.

Based on the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, Lee County has a total of 59,001 households and Russell County has 22,690 households. The U.S. Census Bureau defines a "household" to include all people who occupy one unit of residence, such as an apartment, single room, mobile home, or a house. Table 2.6 represents the median income for the Lee-Russell region:

Table 2.6: Household Median Income by County

County	Income
Lee County	$47,564
Russell County	$38,988

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

The U.S. Census Bureau determines poverty based on the poverty threshold. If the total income is greater than the poverty threshold, then the family or person is not considered in below the poverty line. The U.S. Census Bureau uses the following two equations to determine poverty status: *Income / Threshold =X or Income – Threshold =X*. Table 2.7 displays the total number of an individual below the poverty line and the percent below the poverty line.

Table 2.7: Individuals below the Poverty Line by County

County	Individuals Below Poverty Line	% Below Poverty Line
Lee County	33,132	22%
Russell County	12,024	20.9%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, there are 92,452 persons in Lee County and 38,710 persons in Russell County 25 years or older. Table 2.8 shows the total number and rate for the highest education attained (high school graduate or less) of a person 25 and older.

Table 2.8: Highest Education Attained (High school Graduate or Less) by County

County	Individuals (25+) with High School Graduate or Less	% of Individuals (25+) with High School Graduate or Less
Lee County	31,963	34.6%
Russell County	19,154	49.5%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Based on the U.S. Census Bureau's 2010 Census there were 5,189 (Lee County) and 2,905 (Russell County) persons 75 years or older. The 2013-2017 ACS 5-Year Population Estimate reported 7,321 (Lee County) and 3,281 (Russell County) persons 75 years or older. From 2010 to 2018 in Lee County there was a 41.09% increase in the population of 75 years or older, and a 12.94% increase in Russell County. The large increase in the persons 75 years or older can be attributed to the large Baby Boomer population reaching 75 years old.

Table 2.9: People 75 years or older in 2010 and 2018

County	2010	2018
Lee County	5,189	7,321
Russell County	2,905	3,281

Source: U.S. Census Bureau (2010 Census and 2018 ACS Population Estimates)

The table below shows the breakdown of minors and the elderly by jurisdiction. This breakdown shows that the unincorporated portions of Lee and Russell counties have a great number of minors followed by the City of Auburn, City of Opelika, and Phenix City. Minors are a vulnerable group of the population due to age, education, and knowledge in regards to dangerous natural hazards. Lee County as a whole has double the amount of elderly than Russell County, but specifically, Unincorporated Lee County and the City of Auburn have the largest group of elderly. These persons are extremely vulnerable to hazards due to possible limited mobility, education, income, and physical disabilities.

Table 2.10: People 18 years and Under & 75 years or Older in 2018

Jurisdiction	18 and Under	75 and Older
All Lee County	34,795	6,626
Unincorporated Lee County	15,587	2,374
Auburn	11,508	1,935
Opelika	6,555	1,887
Smiths Station	1,096	423
Loachapoka	49	7
All Russell County	14,358	3,124
Unincorporated Russell County	4,653	1,174
Hurtsboro	101	52
Phenix City	9,604	628

Source: U.S. Census Bureau (2018 ACS Population Estimates)

2.3 Business and Industry

The Lee-Russell region supports a wide variety of industrial and commercial stakeholders. The area is home to a large, widely diverse economic base, with automotive, aviation, medical, and other manufacturing and high-tech industry. The region is also home to a world-class whitewater course on the Chattahoochee River as well as being home to Auburn University, the state's original land grant university is located in Lee County. Table 2.11 shows the largest employers in Lee and Russell County.

Table 2.11: Major Employers (Over 400 employees)

Employer	County	Product	#Employees
Auburn University	Lee	Land-Grant Public Research University	7,100
East Alabama Medical Center	Lee	Regional Hospital	3,200
Lee County Schools	Lee	Education	1,260
Auburn City Schools	Lee	Education	1,010
Phenix City Board of Education	Russell	Education	983
WestRock	Russell	Kraft Container Board	870
Walmart Distribution Center	Lee	Grocery Distribution Center	825
Ala. Trade Foods, LLC	Russell	Food Processing	800
City of Auburn	Lee	Local Government	725
Opelika City Schools	Lee	Education	590
Employer	County	Product	#Employees
Afni, Inc	Lee	Call Center	540
Briggs & Stratton Corp.	Lee	Gasoline Engines	505
Mando America Corp.	Lee	Automotive – Brakes, Steering	499
Russell Co. Board of Education	Russell	Education	445
CSP Technologies North America, LLC	Lee	Specialty Plastics Packaging	400

Source: Economic Development Partnership of Alabama, Local Economic Development Contact

The individual industries are susceptible to the same natural hazards as the remainder of the region, i.e., high wind events, tornadoes, flooding, etc. The economic impact of losing any industry is directly related to the size/type of business and the duration/severity of the loss.

2.4 Infrastructure

2.4.1 Transportation

The region is bisected by Interstate 85 and lies midway between the capital cities of both Alabama and Georgia. Atlanta, Georgia is one hour northeast, and Montgomery, Alabama is one hour to the west. I-85 is the main transportation corridor between the Port of Mobile and the east coast. The region is also convenient to Birmingham, the largest metropolitan area in Alabama, and Columbus, Georgia to include the Fort Benning Military Installation. Major highways that are located in the region are U.S. Highway 80, 29, and 431. There are no commercial airports in the region; residents must drive to Columbus, GA, Montgomery, AL, Atlanta, GA or Birmingham, AL. The Robert J. Pitts airport in Auburn provides services to private planes and corporate jets. Rail lines serving the region include Norfolk Southern and CSX Transportation.

2.4.2 Utilities

Electrical service in the Lee and Russell County region is provided by Alabama Power, Tallapoosa River Electric Cooperative, Opelika Power and Light, and Dixie Electric Cooperative. Natural Gas service is provided by the Spire.

Water and sewer service is provided by a mixture of municipal and county utility authorities. Most populated areas have public water service; however, most unincorporated areas rely on septic systems for sewer disposal.

2.5 Land Use and Development Trends

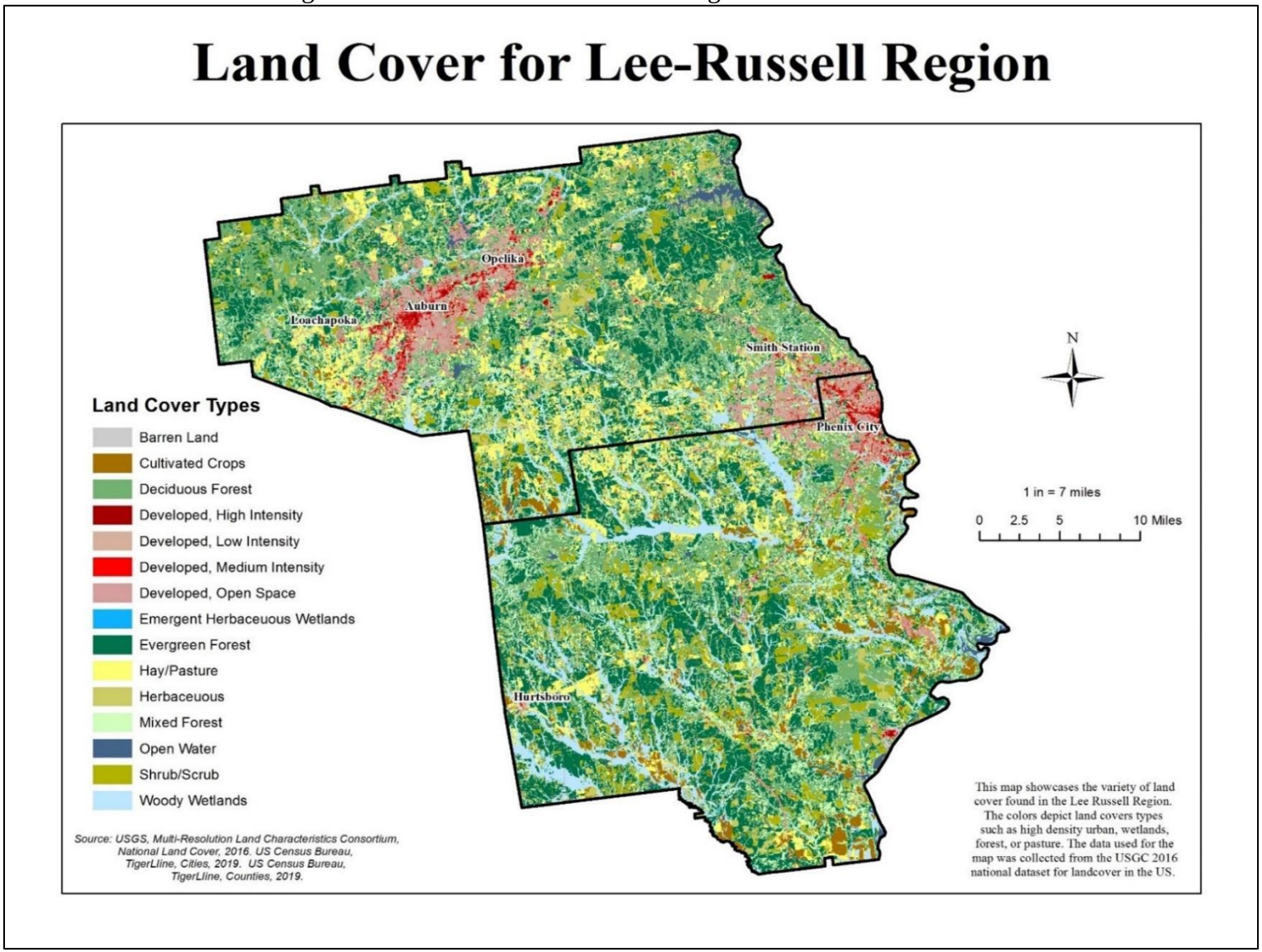
The Lee and Region counties are semi-rural predominantly composed of evergreen forest, deciduous forest, pasture, and urban areas. Lee County has a larger urban footprint than Russell County due to the size of Auburn and Opelika. Russell county is completely rural expect for Phenix City. The largest urban area in the Lee-Russell Region is Auburn with a population of 65,738, which continues to be a fast-growing metropolitan area in the East Central portion of Alabama. Auburn is the economic driver for the region due to Auburn University, which is the largest employer in the region.

Based on the data collected from the U.S. Census Bureau the EMA Division D area grew by 14.76% from 2010 to 2018. The largest growth from 2010 to 2018 occurred in Auburn (23.15%), Opelika (15.40%), and Phenix City (11.11%), which means these areas continued to expand their urban footprint. Smiths Station, unincorporated Lee County and Russell County have grown at a much smaller rate than the urban areas. As the population in these areas continues to grow the so does the vulnerability of natural hazards. An increase in population increases the vulnerability a population has towards natural hazards as well as the opportunity to damage or destroy the newly built urban environment associated with growth.

Every community in the region, particularly the fast-growing areas, should work towards building incompatible areas that are not susceptible hazards such as flooding and other location-specific hazards in their long-range development plans in order to make communities more resilient to hazards.

Town of Hurtsboro and Town of Loachapoka vulnerability has not changed because the population in these areas have decreased since 2010.

Figure2: Land Cover for Lee-Russell Region



2.6 NFIP Compliance

Lee County, Alabama has 480 NFIP policies in force, which covers both commercial properties and residential properties. In Russell County there are 115 NFIP policies in force, which includes commercial and residential properties. Loachapoka does not participate in the NFIP because there are zero floodplains in the town limits.

The table below summarizes NFIP participation and policy statistics for each jurisdiction in the planning area as of December 31, 2019. More site-specific information is provided in the Risk Assessment section. Jurisdictions that are non-participating in the NFIP Program have participated in the hazard mitigation planning process.

Table 2.12 National Flood Insurance Program (NFIP) Status

Jurisdiction	County	Participation Status	Initial FBHM Identified	Initial FIRM Identified	Current Effective Map Date
Lee County	Lee	Yes	03/31/1978	09/6/1981	11/02/2011
City of Auburn	Lee	Yes	06/07/1974	09/16/1981	11/02/2011
Town of Loachapoka	Lee	No	NA	NA	NA
City of Opelika	Lee	Yes	07/26/1974	09/16/1981	11/01/2011
City of Smiths Station	Lee	Yes		11/02/2011	11/02/2011
Russell County	Russell	Yes	01/17/1975	09/16/1981	01/08/14
Town of Hurtsboro	Russell	Yes	07/18/1975	0/06/1982	07/22/010
City of Phenix City	Russell	Yes	11/26/1976	09/16/1981	01/08/2014

Source: FEMA, the National Flood Insurance Program Community Status Book, 2019

Lee County has a floodplain development application for all types of development that will be built in a floodplain. This application ensures that regulatory measures such as elevation certification are completed. The county does have the authority to deny a floodplain development permit if the development does not meet requirements. Lee County does maintain a floodplain map and a floodplain layer in their GIS database for the county. The floodplain manager works as the chief building inspector and works towards reducing the risk of flooding.

The City of Opelika inquires during the application process for residential and commercial structures if the proposed development is in an identified floodway. If the proposed project is in fact in a floodplain then a no-rise certification must be included in the application. The city has the authority to deny the permit if the development does not meet city ordinances and building standards to building in a floodplain. Opelika does maintain a floodplain map and a floodplain layer in their GIS database for the City. The floodplain manager for the City of Opelika works in building services, which tries to reduce the risk of flooding.

The City of Auburn requires Graphical Information for all residential developments which includes stating if the property or any of the property is located in a floodplain. A site plan must be included for all commercial developments, which would denote any floodplains through the property. According to the City of Auburn has an overlay district called conservation overlay district that permanently preserve unique or sensitive natural resources like floodplain. In addition, any development in of impacting a floodplain must be designed and built in accordance with

regulations, requirements, and specification of FEMA requirements and Auburn Public Works Design and Construction Manual. Auburn does maintain a floodplain map and a floodplain layer in their GIS database for the City. The floodplain managers for the City of Auburn work in engineering services, inspection services, code enforcement, and as watershed coordinator. The City uses the floodplain managers to ensure the new development in floodplains happens in accordance to the city, state, and federal regulation.

According to ordinances for the Town of Smiths Station any application for development that involves a floodplain shall be approved as a conditional use. The Town has the ability to deny the permit if the development does not meet the development standards for a floodplain. The Town contracts building inspections with Lee County, therefore, they have the same standards as the county for floodplain regulations and floodplain manager. Smiths Station does maintain a floodplain map and a floodplain layer in their GIS database for the Town.

The Town of Loachapoka has zero floodplains in the town, therefore the town does not have a need to regulate the development in floodplains.

Russell County does maintain a floodplain map and a floodplain layer in their GIS database for the county. In the floodplain application for all types of development that will be built in a floodplain. This application ensures that regulatory measures such as elevation certification are completed. The floodplain manager works as the county engineer as well as works towards reducing the risk of flooding.

As a part of the building application for all new structures in the City of Phenix City the property owner and building official must certify that the “elevation on the lot or area upon which the building is to be constructed and the floor elevation of the building is sufficient to protect the lot and building against storm drainage caused by excessive rains or flash floods.” The City’s ordinances addresses floodplains and developments in floodplains. Phenix City does maintain a floodplain map and a floodplain layer in their GIS database for the City.

The Town of Hurtsboro uses the Russell County Building inspector and follows the same standards.

Section 3- Hazard Risk Assessment

3.1 Risk Assessment

3.2 Natural Hazards Identification and Description
3.3 Dams
3.4 Droughts
3.5 Earthquakes
3.6 Extreme Heat
3.7 Hail
3.8 High Winds/ Thunderstorms
3.9 Landslides
3.10 Lightning
3.11 Sinkholes
3.12 Tropical Depression/ Tropical Storm/ Hurricane
3.13 Tornado
3.14 Wildfire
3.15 Winter Storm
3.16 Vulnerability

3.1 Risk Assessment

The Lee and Russell counties are affected by a wide range of natural and human-caused hazards that negatively impact life and property. Current FEMA regulations are under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is allowed, but not required for plan approval. The Regional Hazard Mitigation Plan concentrates on natural hazards but does include a summarized assessment of potential human-caused hazards.

The AEMA Division D Core Team identified the hazard based on the vulnerability of the AEMA Division D to natural hazards. Lee County EMA, Russell County EMA, Lee Russell Council of Governments, local governments, and stakeholders developed a risk assessment for Lee and Russell counties, which details the risk Lee and Russell counties have towards each hazard. The following components are included for each hazard:

- Hazard Description
- Probability of Future Hazards
- Previous Occurrences
- Impact of Hazards by Jurisdiction
- Probability of Future Occurrence by Jurisdiction
- Vulnerability Overview
- Vulnerability Synthesis and Overall Risk

3.2 Natural Hazard Identification

AEMA Division B is affected by multiple hazards that are addressed below. These hazards were identified and evaluated through a process that included studying historical events, previous local mitigation plans, the susceptibility of the location to hazards, and input from local stakeholders. Each hazard addressed in the risk assessment will include a general description of the hazards and its extent of effects on the region. Phase I of the Regional Hazard Mitigation Plan will include only Lee County and Russell County. The remaining counties, Chilton, Coosa, Tallapoosa, Chambers, Autauga, Elmore, Macon, Lowndes, Montgomery, and Bullock will be added in a phased process.

Due to the geographical location of Lee and Russell counties, the region is vulnerable to many hazards that could potentially disrupt life and damage property year-round. The following hazard types do not have any applicability to the region, and will not be mentioned any further: Avalanche, coastal erosion, tsunami, and volcano. Table 3.1 below displays the hazards that can impact Lee and Russell counties, information sources, and how the hazard associates to the region.

Table 3.1: Potential Hazards and Data Sources

Hazard	Risk	Source	Correlation with Region
Dam Failure	Yes	USACE National Inventory of Dams	Population downstream from dams; flooding concerns; no State regulation of dam safety
Hazard	Risk	Source	Correlation with

			Region
Drought	Yes	United States Drought Monitor	Historic Incidents with damage
Earthquakes	Yes	USGS Earthquake Hazard Program	Proximity to Southeast US seismic zones
Extreme Temperatures	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Flooding	Yes	FEMA; NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents/identified flood hazard areas
Hail	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
High Winds/Thunderstorms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Landslides	Yes	Geological Survey of Alabama USGS Landslides Hazard Program Alabama State HMP	
Lightning	Yes	NOAA , National Centers for Environmental Information, Storm Events Database	Historic Incidents
Sinkholes and Land Subsidence	Yes	Geological Survey of Alabama	
Tropical Storms/Tropical Depressions/Hurricanes	Yes	NOAA , National Centers for Environmental Information, Storm Events Database	Historic Incidents
Tornadoes	Yes	NOAA , National Centers for Environmental Information, Storm Events Database	Historic Incidents
Wildfire	Yes	Alabama Forestry Commission Wildfire Assessment Maps	
Winter Storms	Yes	NOAA , National Centers for Environmental Information, Storm Events Database	Historic Incidents

Effects from tornadoes, high winds, and flooding are regarded as the most significant natural hazards affecting the county areas.

The Lee and Russell counties have been included in Federal Disaster Declarations twenty-four times since 1975, which can be seen in Table 3.2. The declared disasters have been primarily related to two major types of impacts: flooding (through both tropical and non-tropical events) and severe storms to include hurricanes and tornadoes. There has also been a declaration for a drought incident and a winter storm incident.

Table 3.2: Lee Russell Counties region, Federally-Declared Disasters

Declaration Date	Disaster Number	Type of Incident	Counties Declared
January 18, 1975	EM-3007	Tornadoes	Several counties to include **LEE**
March 14, 1975	DR-458	Severe Storms, Flooding	Several counties to include **LEE**
October 2, 1975	DR-488	Severe Storms, Tornadoes, Flooding	Several counties to include **LEE and RUSSELL**
July 20, 1977	EM-3045	Drought	Several counties to include **LEE and RUSSELL**
April 20, 1980	DR-619	Severe Storms, Tornadoes, Flooding	**LEE** and Mobile
April 10, 1981	DR-638	Severe Storms, Tornadoes, Flooding	RUSSELL
February 17, 1990	DR-856	Flooding, Severe Storm, Tornado	Several counties to include **RUSSELL**
March 21, 1990	DR-861	Flooding, Severe Storm, Tornado	Several counties to include **RUSSELL**
March 15, 1993	EM-3096	Severe Snowfall, Winter Storm	Several counties to include **LEE and RUSSELL**
July 8, 1994	DR-1034	Severe Storm, Flooding, Tropical Storm Alberto	Several counties to include **RUSSELL**
October 4, 1995	DR-1070	Hurricane Opal	Several counties to include **LEE and RUSSELL**
May 12, 2003	DR-1466	Severe Storms, Tornadoes, Flooding	Several counties to include **RUSSELL**
September 15, 2004	DR-1549	Hurricane Ivan	Statewide to include **LEE and RUSSELL**
July 10, 2005	DR-1593	Hurricane Dennis	Several counties to include **LEE and RUSSELL**
September 10, 2005	EM-3237	Hurricane Katrina Evacuation	Several counties to include **LEE and RUSSELL**

April 30, 2008	EM-3292	Hurricane Gustav	Several counties to include **LEE and RUSSELL**
April 18, 2009	DR-1835	Severe Storms, Flooding, Tornadoes and Straight-Line Winds	Several counties to include **RUSSELL**
December 31, 2009	DR-1870	Severe Storms, Flooding	Several counties to include **RUSSELL**
April 27, 2011	EM-3319	Severe Storms, Tornadoes, Straight-Line Winds	Several counties to include **LEE and RUSSELL**
April 28, 2011	DR-1971	Severe Storms, Tornadoes, Straight-Line Winds, Flooding	Statewide to include **LEE and RUSSELL**
May 2, 2014	DR-4176	Severe Storms, Tornadoes, Straight-Line Winds and Flooding	Several counties to include **LEE**
January 21, 2016	DR-4251	Severe Storms, Tornadoes, Straight-Line Winds, Flooding	Several counties to include **LEE and RUSSELL**
September 11, 2017	EM-3389	Hurricane Irma	Several counties to include **LEE and RUSSELL**
March 5, 2019	DR-4419	Severe storms, Straight-Line Wind, Tornadoes	LEE

Source: Federal Emergency Management Agency (December 2019)

Under a federally declared disaster, the State of Alabama and affected local jurisdictions are eligible to apply for federal reimbursement for debris removal, emergency services, and critical facility repair/replacement. Funding is also made available for hazard mitigation grants that allow for the implementation of mitigation projects that are listed in this plan.

Each hazard profile includes a summary of the following:

- **Background:** Provides general definitions and brief descriptions of the hazard, its characteristics, and potential effects.

- **Extent:** Provides information on the potential strength or magnitudes of the hazard.

- **Previous Occurrences:** Provides information on the history of previous hazard events in the planning area, including their impacts.

- **Impact:** Provides information on the geographic areas within the Lee Russel counties that are susceptible to hazard occurrences. Locations affected are described regionally unless a specific jurisdiction has different risks, which is further explained.

- **Probability of Future Events:** Describes the likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low or Very Low as described below:

  High: Probable major damage in a 1-10 Year Period
  Medium: Probable major damage in a 10-50 Year Period
  Low: Probable major damage in a 100 Year Period
  Very Low: No probable major damage in a 100 Year Period.

Figure 3: FEMA Disaster Declaration as of June 5th, 2015 for Alabama

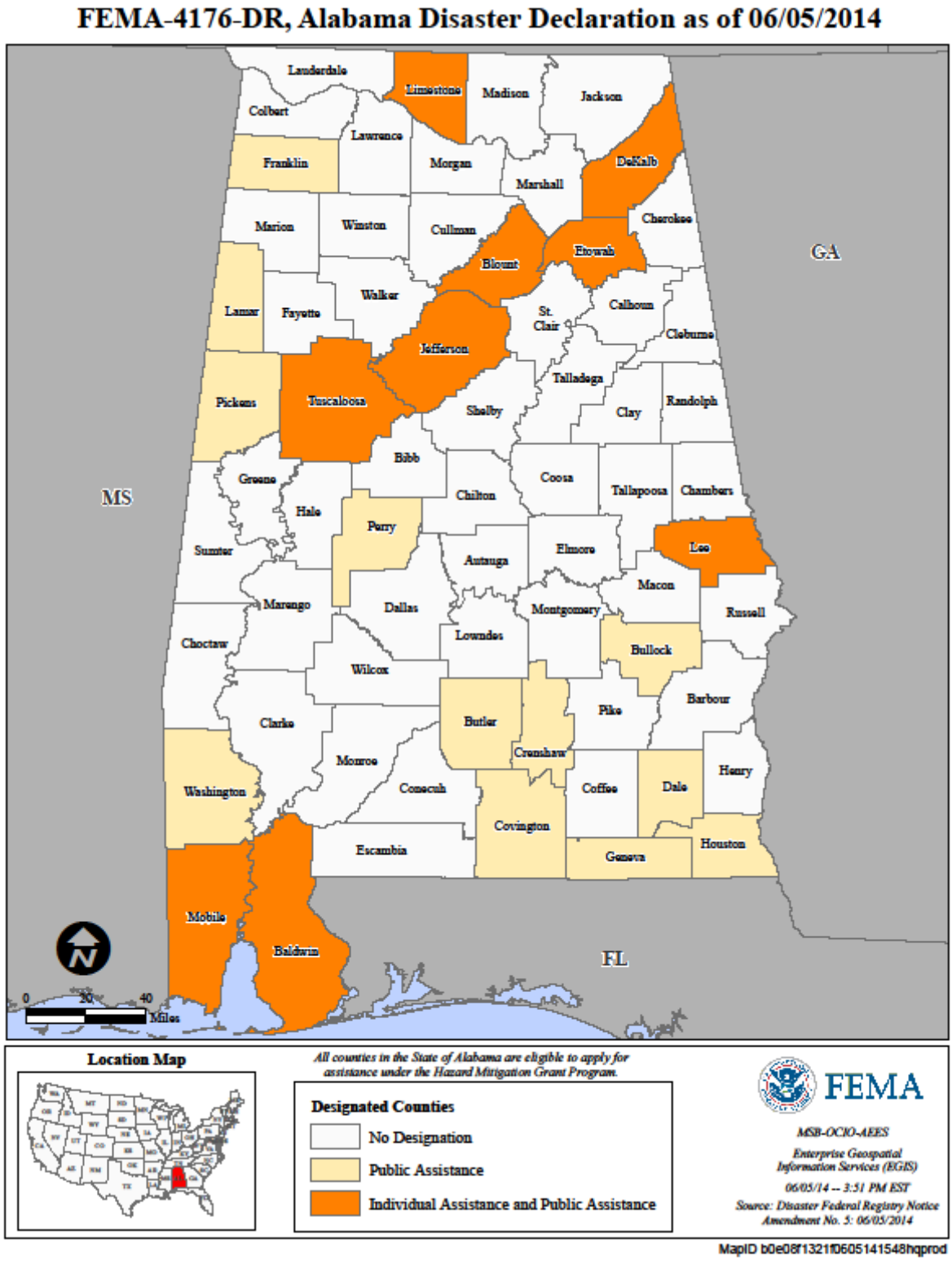


Figure 4: FEMA Disaster Declaration as of January 1st, 2016 for Alabama

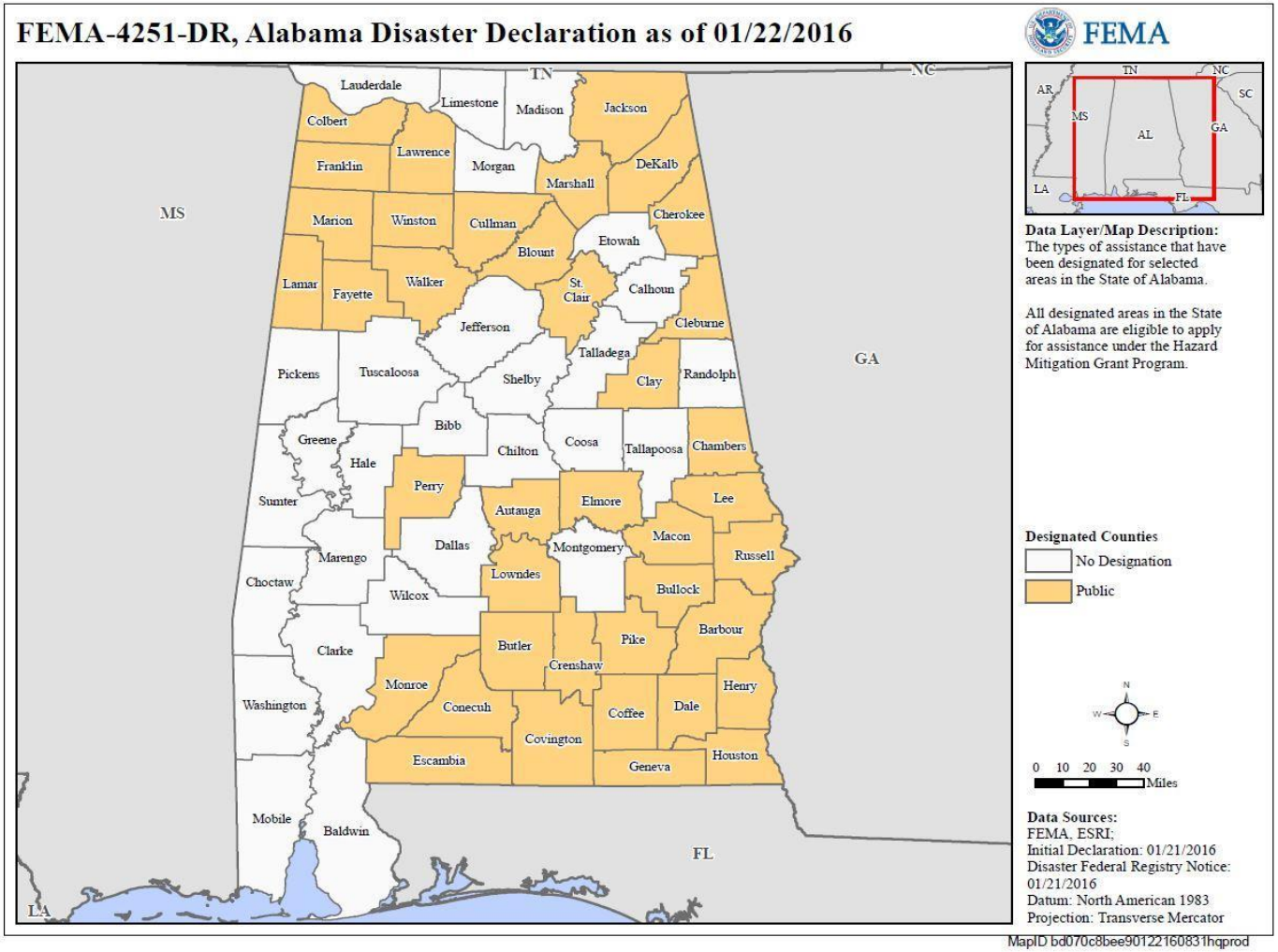
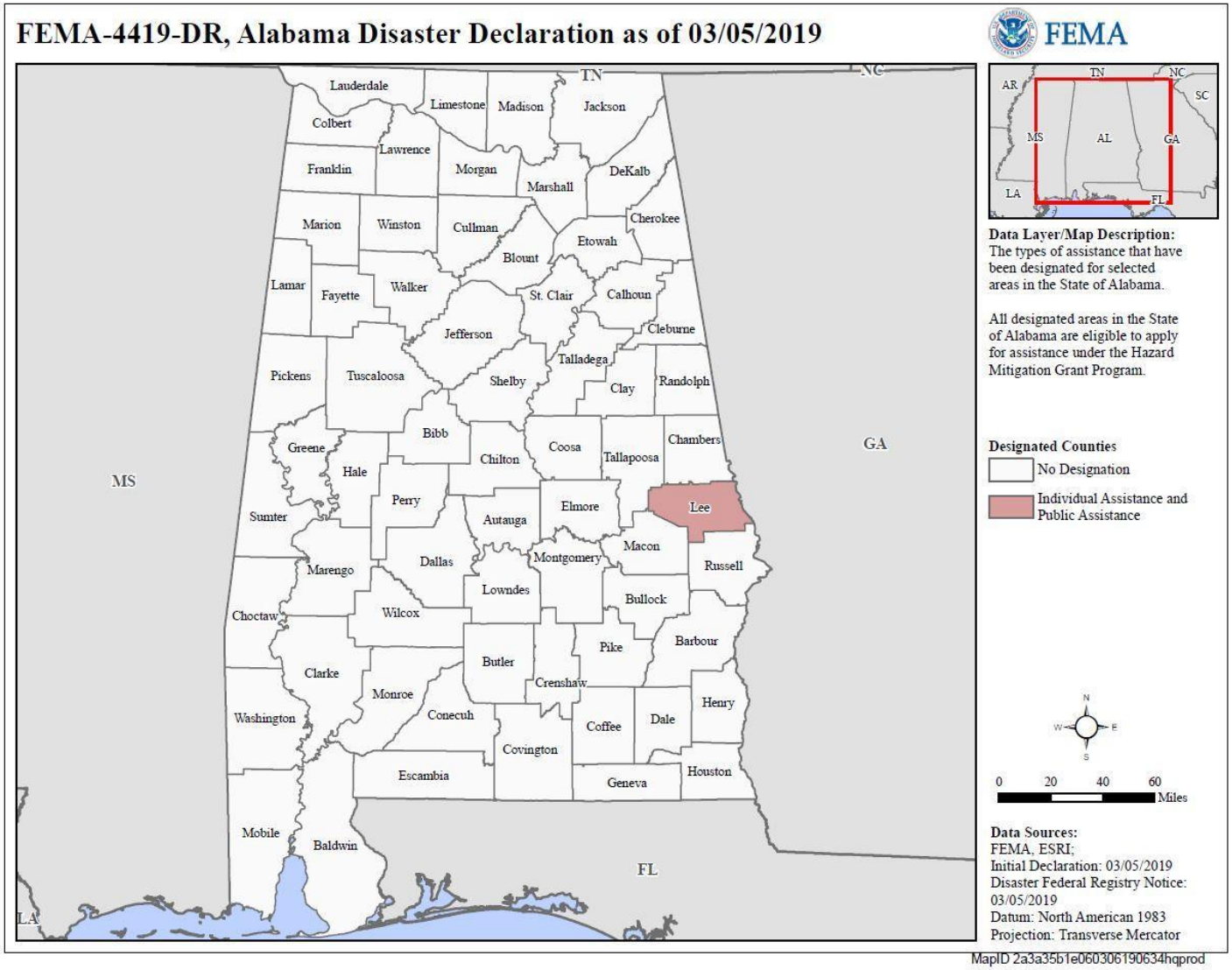


Figure 5: FEMA Disaster Declaration as of March 3rd, 2019 for Alabama



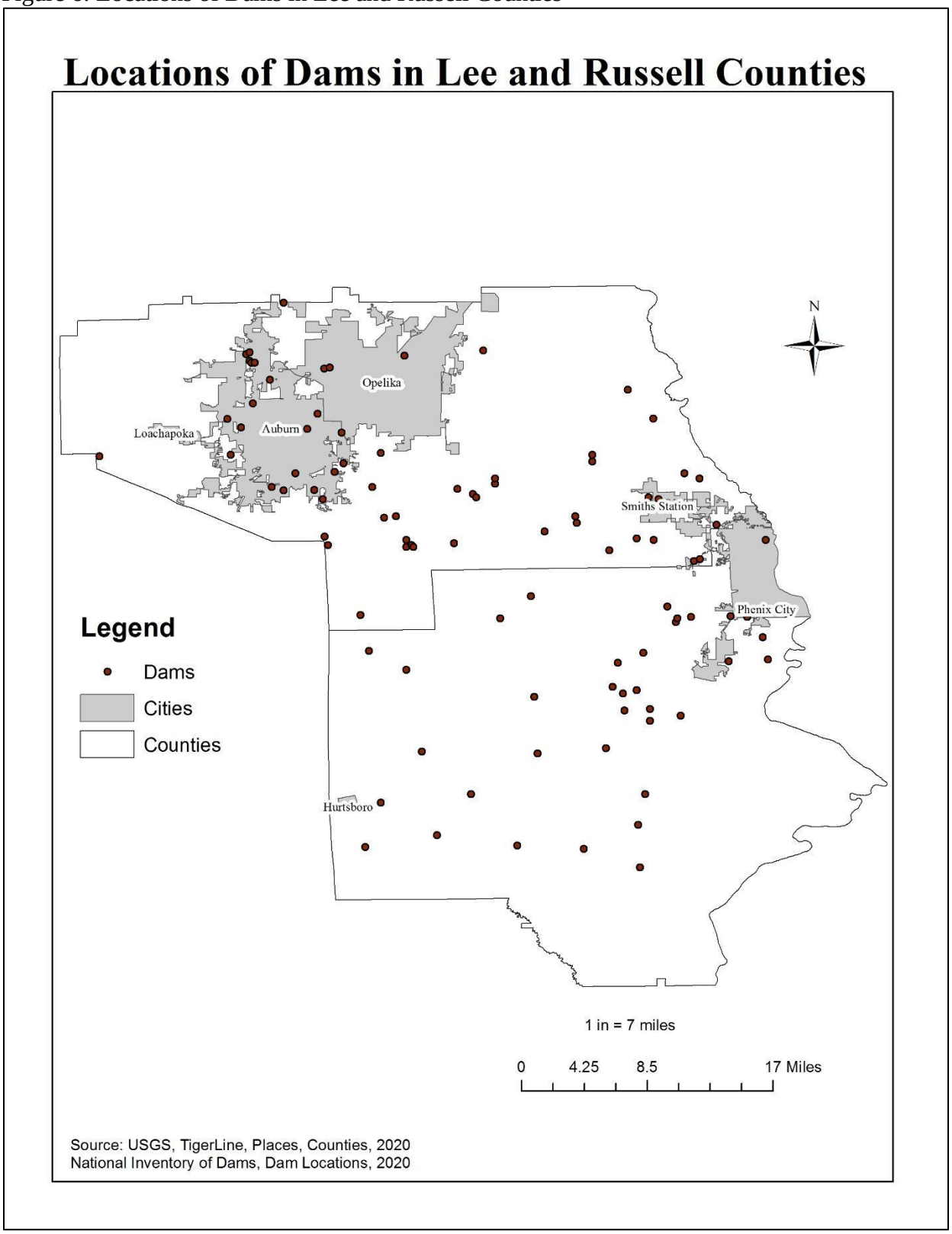
3.3 Dams

3.3.1 Description

Dams are a vital part of communities today because these assets provide drinking water, recreation, flood control, power generation, or water for agriculture and livestock. When a dam or levee failures arise, the areas located downstream are subject to flooding due to the large volumes of water released suddenly. These events happen with little warning are may cause extensive property damages and casualties. Dam safety is a hazard that the State of Alabama works on continuously for the last two decades as the infrastructure ages, especially small privately-owned dams and/or poorly maintained. Alabama currently does not have a state law to regulate existing private dams or new construction of private dams that do not require federal licenses or inspections. There are approximately 1,700 privately owned dams in Alabama that are on bodies of water over 50 acre-feet or dams higher than 25 feet. Efforts to pass legislation regarding the regulation of these 1,700 dams have not been successful.

According to the National Inventory of Dams, there are 101 dams in the planning region. All of these dams are owned by a public utility, local government, or state government. Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: the City of Auburn, City of Opelika, Phenix City, Unincorporated Lee County, and Unincorporated Russell County. Lee and Russell counties do not have a reported history of dam failures. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk. Please refer to Figure 6 to see the locations of all dams in Lee and Russell Counties.

Figure 6: Locations of Dams in Lee and Russell Counties



3.3.3 Extent by Jurisdiction

Dams located in Lee and Russell counties are valuable assets for the communities in the region because these dams provide communities with benefits including water for drinking and agricultural purposes, recreation, flood control, and power generation. Despite the importance of the dams, if a dam failure was to occur large problems can arise downstream. The water that is stored behind the dam's wall has a large amount of energy stored, which can cause casualties and property damage should a dam fail and release its capacity uncontrolled. In Lee County, six dams' hazard potential is classified as high, Ogletree Lake Number 1 Dam, Sougahatchee Lake dam, Wilmore Lake dam, Kinnett Dam, Prather Dam, and Mitchell Dam. In Russell County, four dams' hazard potential is classified as high, Wilson Pond Dam, Moon Lake Dam, Knowls Pond Dam, and Asbury Dam. High-risk dams are those with the capacity to cause both property and casualties in the downstream areas should the dam fail. At least one high-risk dam is located in each of the counties of the mitigation planning jurisdiction. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All of these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams would be most susceptible, which is the most common type of dam found in Lee and Russell counties. Concrete structures with spillways and controls would be less susceptible. The larger dams on the Chattahoochee River are operated by Georgia Power are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

The dams in the regional area are considered to be earth dams, as reported by the National Inventory of Dams, which is constructed of earth material such as gravel, soil, rock, silt. The dam list from the National Inventory of Dams is outdated, due to the lack of regulatory authority in Alabama. Private dams may be missing from this list if local authorities are unaware of the features. Localized studies conducted by the Office of Water Resources (OWR) demonstrate that data collected from the National Inventory of Dams might be inaccurate due to locational errors and the misrepresentation of the potential hazards of dams. Future updates to the Regional Hazard Mitigation Plan will incorporate information regarding the classification of potential dam hazards.

"Hazard potential" is the classification used to indicate probability for damages, human losses, or property damage, which could arise to the region if a dam failure occurred. The Federal Guidelines for Dam Safety present three classifications of dams, please refer to Table 3.3, which is below to see the classifications. Tables 3.3 and 3.4 show the hazard level for all dams found in Lee and Russell counties, please refer to the Appendix to see the more details on Dams in section 7.4..

Table 3.3: Dam Hazard Classifications

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None Expected	Low; Generally Limited o Owner
Significant	None Expected	Yes
High	Probable; One or More Expected	Yes

Source: Federal; Guidelines for Dam Safety (published April 2004)

Table 3.4: Lee County Dams with Hazard Potential

Name	LONGITUDE	LATITUDE	OWNER	HAZARD
AUBURN FARM POND NO 1	-85.51167	32.68167	AUBURN UNIV	L
AUBURN FARM POND NO S-3	-85.515	32.68	AUBURN UNIVERSITY	L
AUBURN FARM POND NO S-6	-85.51167	32.67333	AUBURN UNIV	L
AUBURN FARM POND NO S-8	-85.51	32.67167	AUBURN UNIV	L
AUBURN FARM POND S-14	-85.50667	32.67167	AUBURN UNIV	L
AUBURN FARM POND STORAGE	-85.49167	32.655	AUBURN UNIV	L
RICE	-87.345	32.67333	DR MILLER W SAMFORD EST.	L
C E LEE	-87.35833	32.585	C E LEE	L
GEORGE MANN	-85.38333	32.58333	GEORGE C MANN	L
M M JONES	-85.42	32.57333	M M JONES	L
JOHNSON LAKE	-85.39167	32.55	CHARLES WHATLEY	L
LAKE OGLETREE NO 1	-85.448352	32.547305	CITY OF AUBURN	H
ROY LAZENBY	-85.43833	32.50167	WARREN LAZENBY	L
SOUGAHATCHEE	-85.438589	32.665867	CITY OF OPELIKA,ALABAMA	H
LEE COUNTY PUBLIC LAKE	-85.30833	32.54833	STATE OF ALABAMA	S
H H WEBB	-85.055	32.51333	MRS VIOLA WEBB	L
AG ENGINEERING FARM POND	-85.40333	32.425	AUBURN UNIV.	L
DR JAMES BRUCE	-85.35167	32.49167	JOHN R DUDLEY	L
ALONAME 1	-85.42833	32.565	DR ROBT BURNEY	L
JACKIE OSMENT	-85.28333	32.68333	JACKIE OSEMENT	S
DR JAMES BRUCE NO 3	-85.35833	32.49833	WAYNE MCCLENDON	L
DR JAMES BRUCE NO 2	-85.35833	32.49167	J R DUDLEY	L
LOUIS MURPHY	-85.36833	32.52167	YETTA SANFORD	L
DR JAMES BRUCE NO 4	-85.35333	32.49333	J P HIMMELWRIGHT	L
AUBURN OUTING CLUB	-85.49	32.55	AUBURN OUTING CLUB	L
E T CONWAY NO 1	-85.53	32.58167	E T CONWAY	L
CHEWACLA STATE PARK	-85.47833	32.54667	STATE OF ALABAMA	S

OGLETREE OUTING CLUB	-85.50833	32.63167	CITY OF AUBURN	L
OGLETREE NO 2	-85.44	32.53833	CRESS OUTING CLUB	L
WILMORE	-85.46667	32.56333	CITY OF AUBURN	H
HAMILTON	-85.42167	32.60333	SAUGAHATCHEE CC	L
JACOBS	-85.435	32.49333	JOE MCKAY	L
THOMAS CHERRY	-85.31167	32.495	THOMAS CHERRY	L
FRANK R POPE NO 1	-85.29	32.54	FRANK R POPE	L
FRANK R POPE NO 2	-85.29333	32.54333	FRANK R POPE	L
SAMFORD BROTHERS NO 1	-85.27167	32.55833	T D SAMFORD	L
SAMFORD BROS NO 2	-85.27167	32.55333	T D SAMFORD	L
A N INGRAM	-85.39333	31.44667	ANDREW N INGRAM	L
W B COGDELL	-85.17667	32.58167	W R CODGELL	L
CLYDE POWELL	-85.12167	32.54	CLYDE POWELL	S
LAKE THEL	-85.11167	32.53833	L G FREDRICK	L
C L MULLINS	-85.08333	32.53	ROBIN MULLINS	L
SMITHS	-85.07167	32.55833	J R	L
COUNTRY CLUB	-85.445	32.62167	INDIAN PINES COUNTRY CL	S
REX RANIER	-85.43333	32.66667	REX RAINER	L
G E KIMBROUGH	-85.65833	32.58	CLYDE KIMBROUGH	L
R F NEWMAN	-85.13333	32.5	R F NEWMAN	L
PLAINSMAN CLUB	-85.52	32.60833	THAD WEBSTER	S
DUDLEY	-85.095	32.41833	JOHN DUDLEY	L
SELF	-85.22333	32.50667	ROBERT SELF	L
HEATH	-85.16	32.48833	HEATH LAKE ESTATES	L
HUDSON	-85.11667	32.49833	J E	L
KINNETT	-85.071484	32.479532	J R KINNETT	H
MITCHELL	-85.077256	32.477651	DR J S MITCHELL	H
MULLINS LAKE	-85.08667	32.56333	S L MULLINS	L
ALNONAME 2	-85.17667	32.575	GEO KING JR	L
HUBBARD	-85.19333	32.52167	C HUBBARD	L
CONDY	-85.36	32.67833	E A BARKS	L
RE NEWMAN NO 2	-85.14167	32.645	R E NEWMAN	L
GULLATTE	-85.19167	32.515	GEORGE GULLATTE	L
MURPHY	-85.38	32.52	LOUIS MURPHY	L
PRATHER	-85.45524	32.606912	A PRATHER	H
FOLMAR	-85.53333	32.61667	FOLMER REAL ESTATE	L
HOMER FRANKLIN	-85.11694	32.61694	HOMER FRANKLIN	L

Source: National Inventory of Dams, 2020

Table 3.5: Russell County Dams with Hazard Potential

Name	LONGITUDE	LATITUDE	OWNER	HAZARD
MULLIN LAKE	-85.12	32.32167	YUCHI LAKE ESTATES	S
WADSWORTH LAKE	-85.16333	32.295	J O WADSWORTH	L
DYKES POND	-85.39833	32.19833	M M DYKES	L
CHATFIELDS POND	-85.32833	32.21	W H CHATFIELD	L
BUSSEY LAKE	-84.98667	32.42667	JOHN BUSSEY	L
GOLDEN STREAM LAKE	-85.08	32.42333	JAMES P. CAMPBELL	L
WILSON POND	-85.025	32.42333	UNKNOWN AT THIS TIME	H
LAKE BICKERSTAFF	-85.005	32.38167	RICHARD BICKERSTAFF	L
BUSH POND	-85.10333	32.43333	MRS. J H VENABLE	L
WILLIAMS LAKE	-85.23667	32.44333	KENT BRAGG	L
PORTER BRANCH LAKE	-85.15667	32.355	JOE FLOWERS	L
CARROLL LAKE	-85.23	32.29	A B CARROLL JR %EST<	L
MOTT LAKE	-85.13333	32.35167	ROY M GREENE	L
YUCHI LAKE	-85.12	32.33333	YUCHI COUNTRY CLUB	S
JOHN ONEALL	-85.25	32.2	JOHN ONEALL	L
SNYDER POND	-85.09	32.32667	J M SMITH	L
PARKMAN POND	-85.15167	32.37833	CLAUDE PARKMAN	L
CROUCH POND	-85.12667	32.38833	GEORGE CROUCH	L
MOON LAKE	-85.007066	32.498571	PHENIX CITY,ALABAMA	H
TORBERTS LAKE	-85.35833	32.37167	H A TORBERT	L
DEEP SOUTH	-85.38333	32.24166	ROY C TORBERT	L
BURKES LAKE	-85.13167	32.22	N AND L FARMS	L
B B BURTS	-85.185	32.19667	B B BURTS	L
LAKE LENORA	-85.23333	32.345	C J DUDLEY	L
MARGLOBA	-85.34333	32.29167	FELIX WALKER	L
WILLOW LAKE	-85.01	32.40333	N BICKERSTAFF	S
BALFORE LAKE	-85.13	32.17833	BALFORE DAIRY	L
SHEPPARD POND	-85.04333	32.38	G D DAVIS	L
KNOWELS POND	-85.041457	32.423822	F PORTER KNOWELS	H
EDWARDS POND	-85.09333	32.42167	JOHN DUDLEY	L
TALBERT	-85.395	32.39	BIG SWAMP DEER CLUB	L
GREENE NO 2	-85.14667	32.34833	ROY GREENE	L
MATTHEWS	-85.145	32.33167	MRS ESTHER MATTHEWS	S

ASBURY	-85.014314	32.42914	ARROWHEAD DEVEL CO	LAND H
JAMES MILLS	-85.26667	32.42167	JAMES MILLS	L
BOBBY JONES	-85.125	32.25	BOBBY JONES	L
TANNER	-85.295	32.25	R A TANNER	L

Source: National Inventory of Dams, 2020

3.3.4 Previous Occurrences and Impact

The historical record does not show any dam failures in the planning area, but this might not include failures for small private dams.

Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: the City of Auburn, City of Opelika, Phenix City, Unincorporated Lee County, and Unincorporated Russell County. Lee and Russell counties do not have a reported history of dam failures. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk.

A Dam failure near/in built-up areas in the City of Auburn or Phenix City is concerning due to the potential loss of life, injury, and damage to property downstream that could result. All persons living in a manufactured home near a high-risk dam are vulnerable in their homes if the dams fail in the jurisdictions that follow: Phenix City, City of Auburn, City of Opelika, unincorporated Lee County, and unincorporated Russell County. If one of the larger dams on the Chattahoochee River failed such as West Point Dam, Bartlett's Ferry Dam, or Goat Rock Dam everyone downstream would be at risk due to a large amount of water these dams hold. This is particularly concerning for all retirement communities, assisted living facilities, workers, and patients at Jack Hughston Memorial Hospitals, staff and students at schools, elderly living near the Chattahoochee river in places like Phenix City, eastern portions unincorporated Lee and Russel counties. These specific groups would have a difficultly evacuating quickly in an emergency event such as a dam failure.

In a jurisdiction such as the City of Auburn, City of Opelika, Phenix City, Unincorporated Lee County, and Unincorporated Russell County the following types of assets would be vulnerable if a nearby high-risk dam was to fail: manufactured homes, structures, bridges, power lines, livestock /animals, crops, trees/timber, roads, buildings (made of wood, vinyl, or metal).
People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any jurisdiction in Lee or Russell counties. This information will be provided in the next Hazard Mitigation Plan in five years.

3.3.5 Probability of Future Occurrences

Due to the lack of data on dam failures, it is not possible to calculate risk losses from dam failure based on the historical record. There is not any documentation of dam failure in the planning

region. Dated and incomplete information pertaining to dam classification in Alabama makes it difficult to predict what dams are susceptible in the planning region. It is unlike that that a dam failure will occur in the region and will be considered to have a low probability.

3.4 Drought

3.4.1 Description

Drought occurs when there is below-average precipitation over an extended period of time, gradually affecting hydrological, agricultural, and social concerns. Occurrences of drought are typically classified as follows:

Table 3.6: Drought Classifications

Drought Type	Description/Definition
Meteorological Drought	Defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales
Hydrologic Drought	Related to the effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Defined principally in terms of soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic Drought	Associates the supply and demand of economic goods or services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of a weather-related supply shortfall. This type of drought may also be called a water management drought.

Source: FEMA's Multi-Hazard Identification and Risk Assessment, published January 1997. Also cited in the State of Alabama Hazard Mitigation Plan, 2018.

The long-term dangers of drought can have a serious economic impact on a community. Agricultural production can be damaged or destroyed by the loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these resources. Water supply that is drawn from groundwater sources could also be negatively impacted by prolonged drought. Drought can also be a contributing factor to wildfires in the forested areas of the region.

3.4.3 Extent by Jurisdiction

For the extent of drought, the United States Drought Monitor classifies drought in five levels of severity, based on multiple indicators including soil moisture, streamflow levels, precipitation levels, and local observations. These classifications are listed in the table below:

Table 3.7: United States Drought Monitor Classification

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops, or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested.
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies.

Source: US Drought Monitor Classifications

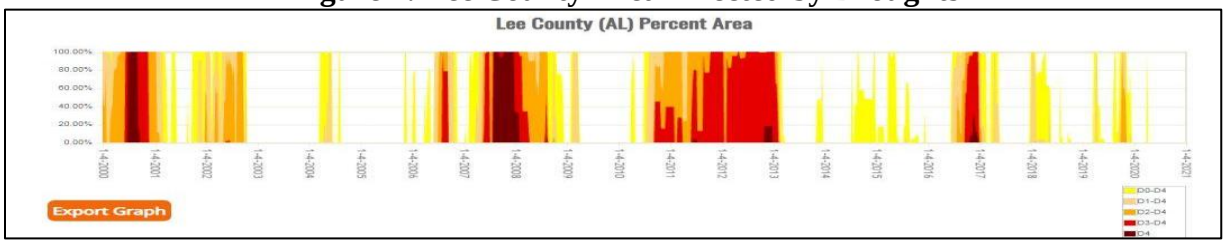
Table 10 describes the extent of drought in Lee and Russell counties. Extent is used to define how severe or how intense drought can be, which provides a foundation for implementing mitigation strategies to reduce damages from a drought. The extent of the potential for damages across Lee and Russell counties are equal.

Table 3.8: United States Drought Monitor Classification

Hazard	Extent (All Jurisdictions)
Drought	A D4: Exceptional Drought corresponds to an area experiencing exceptional and widespread crop and pasture losses, fire risk, and water shortages that result in water emergencies.

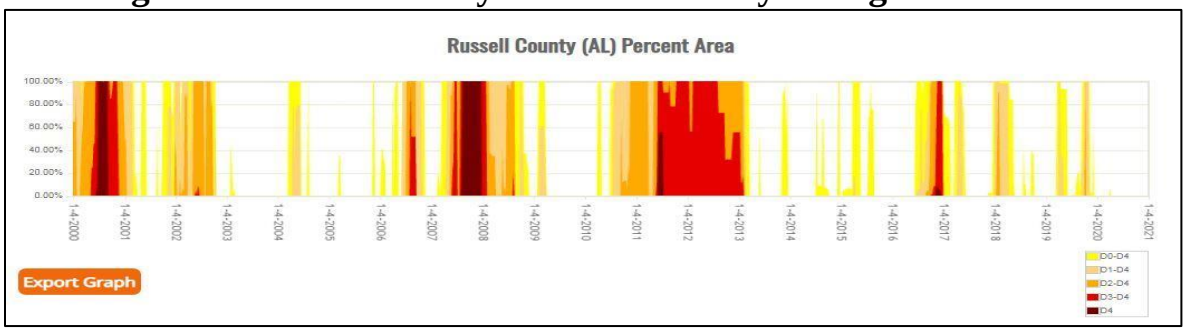
The two figures below show the percent of the area in Lee and Russell counties that have suffered from droughts, as well as how bad the drought was in the county.

Figure 7: Lee County Area Affected by Droughts



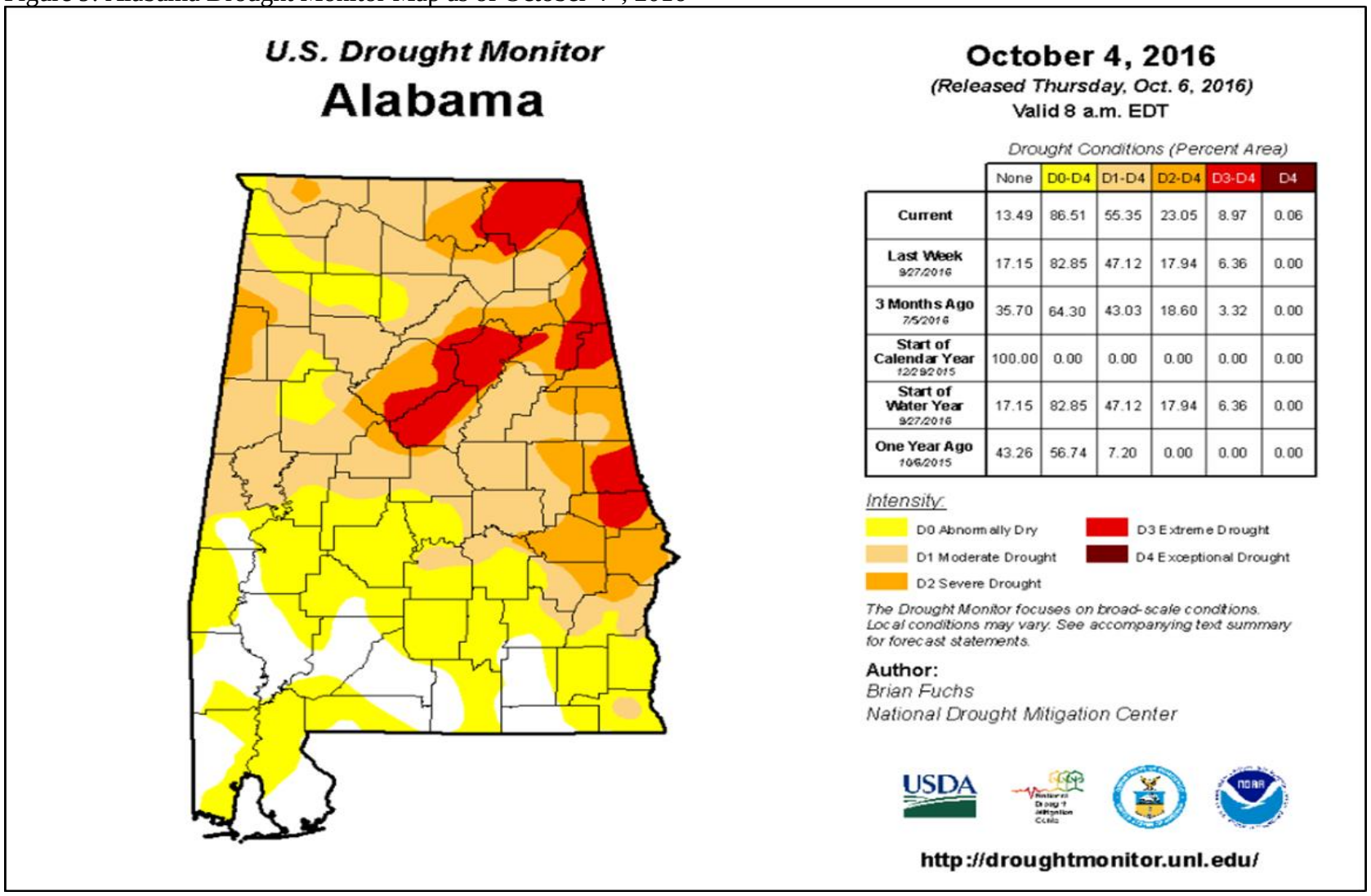
Source: *the United States Drought Monitor, 2020*

Figure 8: Russell County Area Affected by Droughts



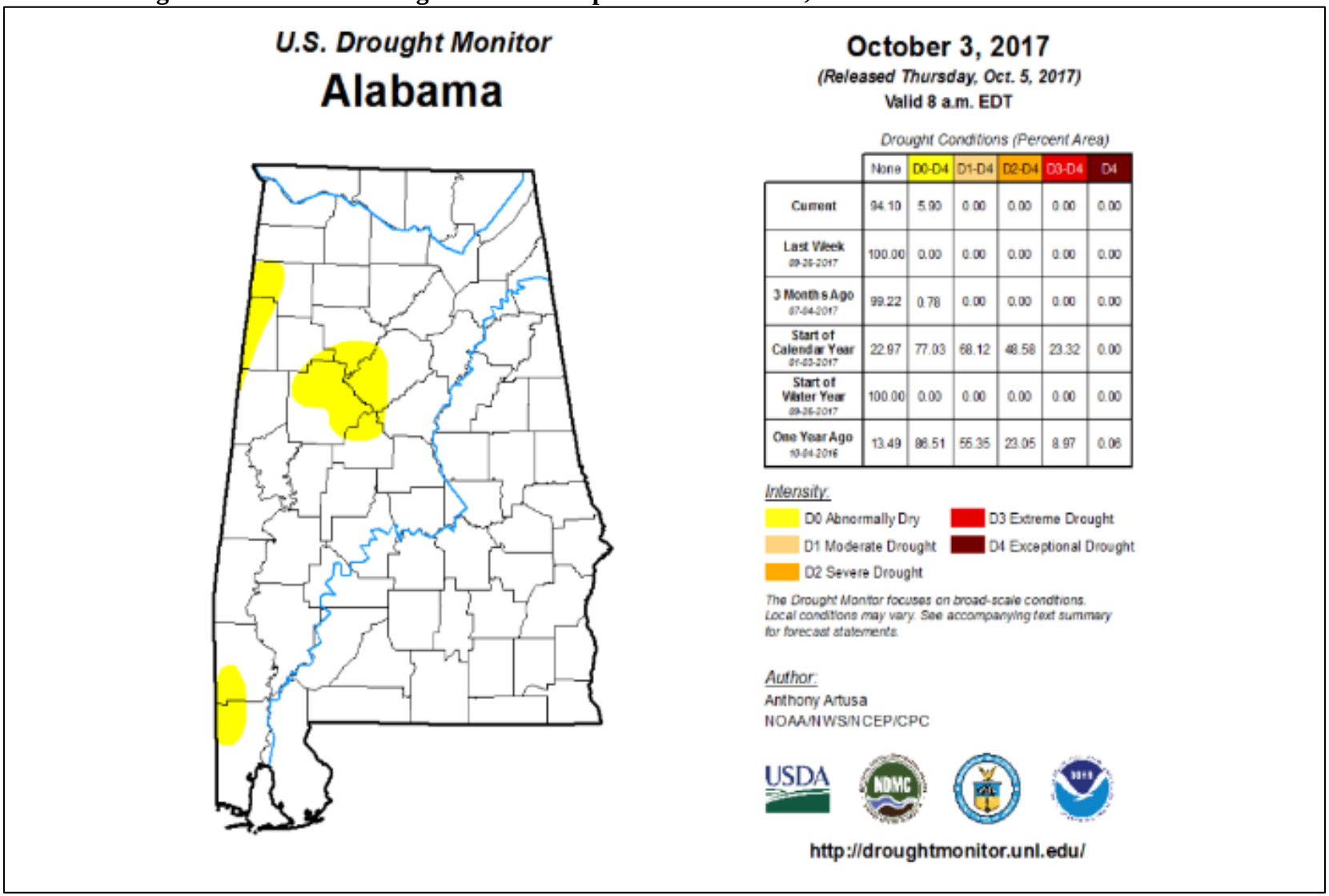
Source: *the United States Drought Monitor, 2020*

Figure 9: Alabama Drought Monitor Map as of October 4th, 2016



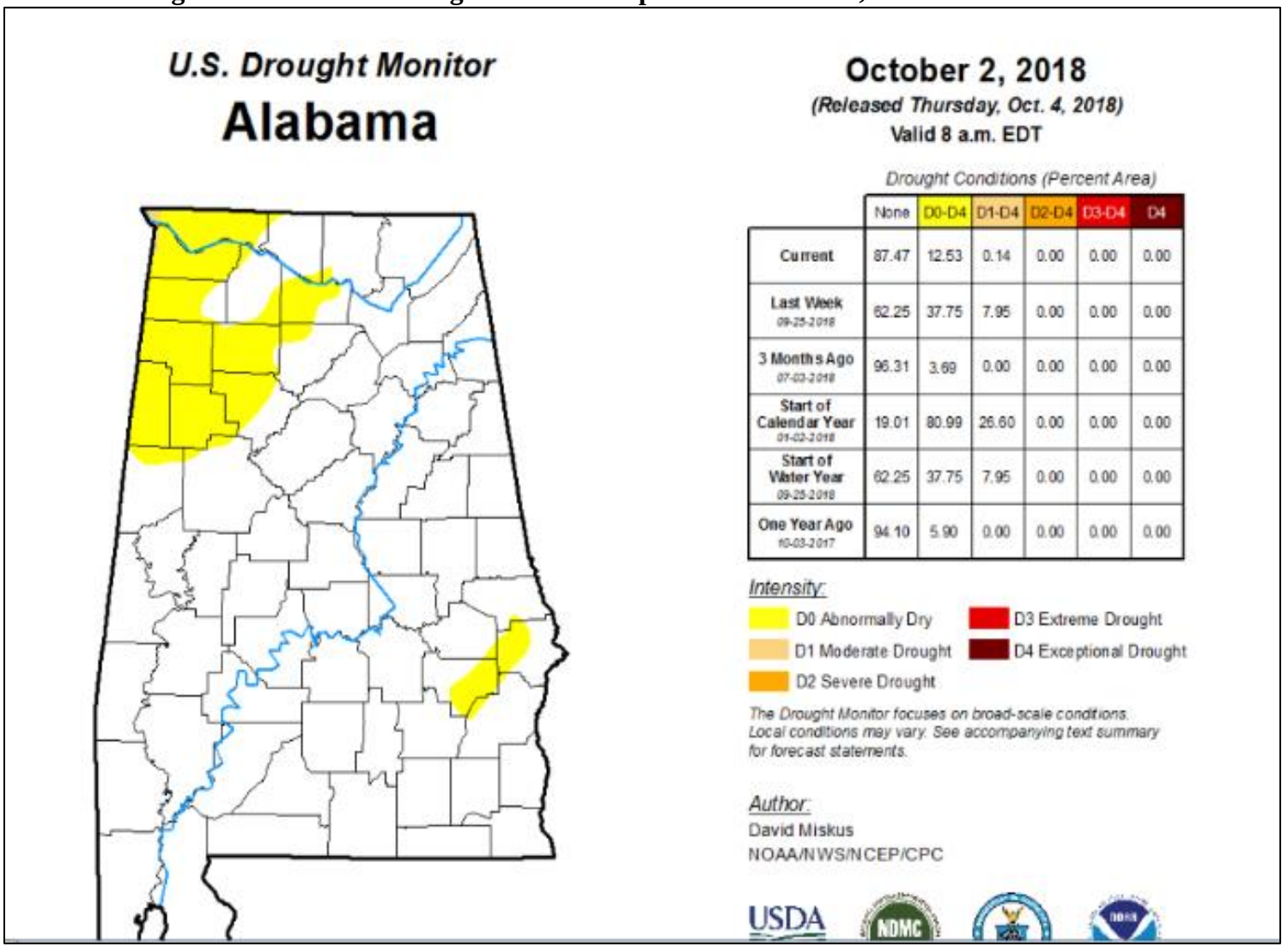
Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2016

Figure 10: Alabama Drought Monitor Map as of October 3rd, 2017



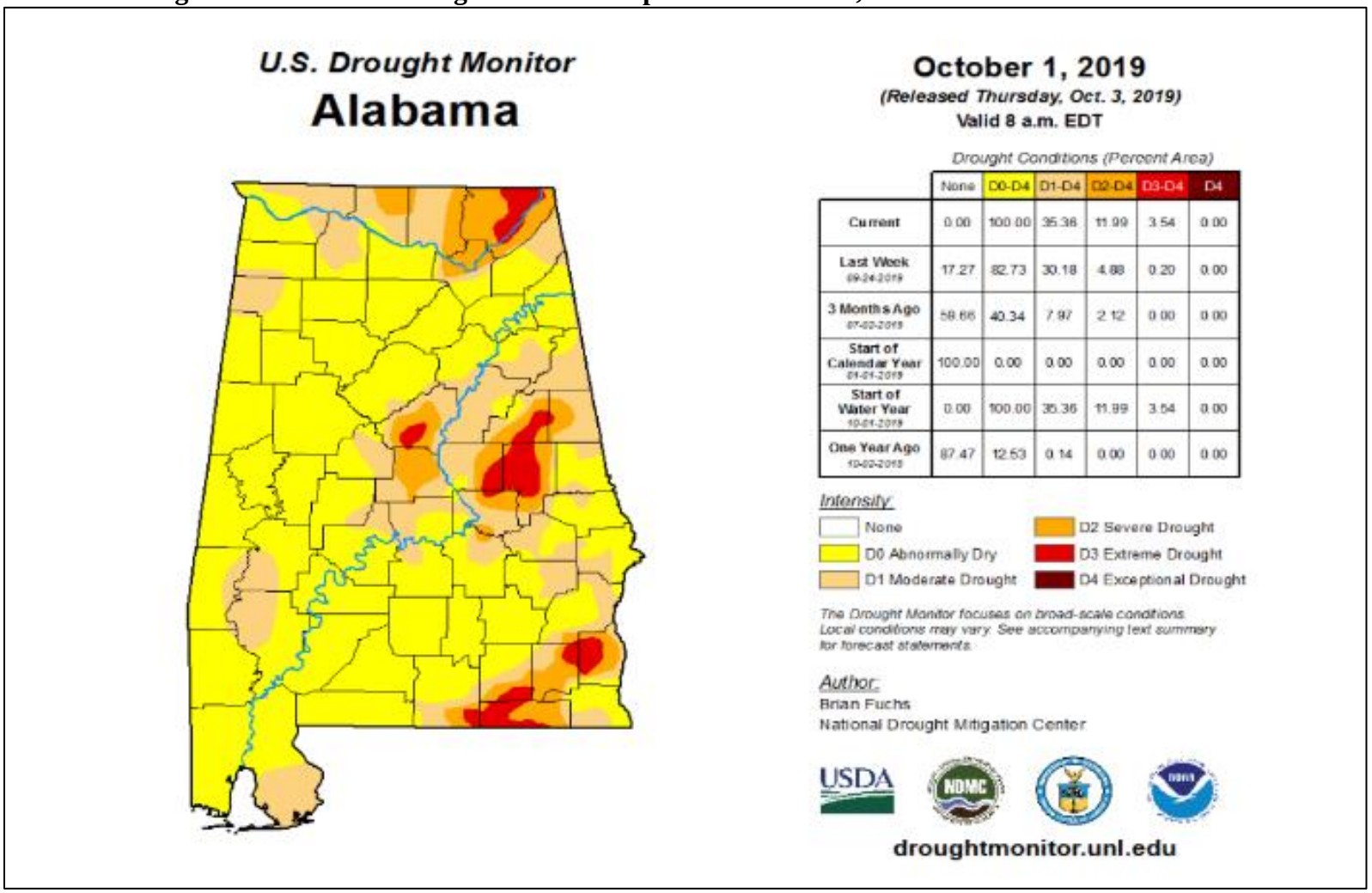
Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

Figure 11: Alabama Drought Monitor Map as of October 2nd, 2018



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

Figure 12: Alabama Drought Monitor Map as of October 1st, 2019



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

3.4.4 Previous Occurrences and Impact

The Lee-Russell county region has had 54 drought events reported between 2006 and 2019. In 1977 and 2000, a federal disaster declaration was made due to droughts that occurred in Russell County. In 2006, the Lee-Russell County region experienced a D2 to a D3 level of severe to extreme drought. A D4, Exceptional Drought event occurred in 2007. Most of Alabama was affected during this event as well as this region. In 2007 Lee and Russell counties, along with the rest of Alabama, experienced a severe drought that lasted from July to December. In August of 2007, NOAA reported, "Agricultural, hydrologic, and sociological impacts continued to be widely felt. Around 80 percent of the corn and soybean crop, 70 percent of the cotton crop, and 40 percent of the peanut crop, was considered to be in poor or very poor condition by month's end. In addition, about 60 percent of the livestock, and 75 percent of pasture lands, were also considered to be poor or very poor, and hay yields for the summer were less than half of normal." By December NOAA reported "roughly three-quarters of Central Alabama remained in Exceptional Drought (D4), with the remainder in Moderate (D1) to Extreme (D3) Drought. Most stream and river levels across Central Alabama continued to be much below normal with serious negative impacts continuing. The threat of water shortages for municipal water systems persisted, and most water restriction plans already in place continued."

In 2011, the Lee and Russell Planning Region experienced and sustained extreme exceptional drought conditions, spanning from January of that year to December 2012. Water restrictions were necessary across the jurisdictions. The United States Department of Agriculture declared all of Lee and Russell County a natural drought disaster area in both 2012 and 2013 for crop disaster losses.

The USDA issued a Secretarial Drought Designation for the planning area in 2014, 2016, 2017, and 2019, which made emergency loans available to producers suffering losses. In 2016, the Lee-Russell county region experienced a D2 to a D3 level of severe to extreme drought. According to NOAA, "sites across east-central Alabama were 10-15 inches below normal for 2016."

According to NOAA, a drought is "is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people." Droughts become dangerous when it impacts economic prosperity, agricultural productivity, and human health and welfare. "Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region," according to NOAA. Lee and Russell counties are susceptible to long periods without any perception which results in drought conditions. When an extreme drought arises water shortages will impact the local jurisdictions, which can lead to water rationing for communities. Unfortunately, droughts are not easily predicted, and the impacts felt from a prolonged drought are not readily quantifiable. The moderate drought condition experienced in Lee and Russell counties have promoted concern about the areas vulnerable to prolonged and extreme droughts.

3.4.5 Probability of Future Occurrences

The probability that drought conditions will occur annually in Lee and Russell counties are between 10%-100% (medium). The potential impacts on the region will range between minor impacts critical due to possible stress on agricultural and forestry interests in some areas of the region.

Table 3.9 Drought Probability

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Drought	Auburn	NA	13	NA**
Drought	Opelika	NA	13	NA**
Drought	Loachapoka	NA	13	NA**
Drought	Smiths Station	NA	13	NA**
Drought	Unincorporated Lee County	NA	13	NA**
Drought	All of Lee County	63	13	4.853
Drought	Hurtsboro	NA	13	NA**
Drought	Phenix City	NA	13	NA**
Drought	Unincorporated Russell County	NA	13	NA**
Drought	All of Russell County	54	13	4.15

****Data is only offered at the county level**

3.5 Earthquakes

3.5.1 Description

According to NOAA, an earthquake is "anything that causes seismic waves to radiate throughout the Earth is an earthquake. There are two main types of earthquakes, tectonic and caused by humans." Earthquakes occur along the fault line or when tectonic plates move. Lee and Russell counties are susceptible to earthquakes due to proximity to two major seismic zones. The Southern Appalachian Seismic Zone, the New Madrid Seismic Zone, or the South Carolina Seismic Zone. The Southern Appalachian Seismic Zone extends into northern and central Alabama, and the South Carolina Seismic Zone is in South Carolina. These seismic zones typically create infrequent earthquakes of small intensity and moderate earthquakes every few hundred years. The New Madrid Seismic Zone lies within the central Mississippi Valley but has produced some of the strongest earthquakes in North America that were felt in Alabama. The New Madrid Seismic Zone lies north and west of the region Earthquakes in 1811-1812 had limited damage in the due to the low-density settlements, but it created Reel foot Lake in Tennessee and Kentucky. While large earthquakes (magnitude 7 or higher) can be created from these seismic zones, but according to the USGS, the probability of a moderate or large earthquake in Lee or Russell counties is low. The impact of an earthquake could produce minor damage in the Central Alabama Region such as cracked windows, but there are zero of the seismic zones are located in Lee or Russell County. However, this region does have some faults.

3.5.2 Extent by Jurisdiction

The USGS defines the Mercalli Intensity Scale as a method to "value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. The lower numbers of the intensity scale generally deal with the manner in which the earthquake is felt by people. The higher numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above."

Table 3.10: Earthquake Extent All Jurisdictions

Hazard	Extent (All Jurisdictions)
Earthquakes	. The epicenter of an earthquake has not originated in Autauga, Elmore, and Montgomery counties. A large earthquake of 7.0 or higher on the Richter Scale from the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, or the South Carolina Seismic Zone could be felt by a few people in Lee and Russell counties. The impact would be felt by a few people but.resulting in no damages or injuries.

Potentially causing serious damage to buildings, structure, and infrastructure as well as injury and loss of life. Figure 13 describes each magnitude and the potential damage each magnitude can create.

Figure 13: Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Modified Mercalli Intensity Scale, 2020.

3.5.3 Previous Occurrences and Impact

While there are no reported instances of earthquakes centered in the Lee-Russell county region, Figure 4 displays rare instances of tremors/quakes that happened hundreds of miles away that may have been felt in the area. Table 3.11 reflects previous earthquakes in Alabama/Southeast which the Geological Survey of Alabama feels may have been felt in this region.

Table 3.11 Previous Earthquake Events that could be felt in this region

Epicenter	Date	Magnitude at Epicenter	Mercalli Intensity in the Region	Shaking	Damage	Inj/Dth
Memphis, TN	02/07/1812	>7.0	IV	Light	None	None
Charleston, SC	08/13/1886	7.3	IV	Light	None	None
Irondale, AL	10/18/1916	5.1	III	Weak	None	None
Fort Payne, AL	04/29/2003	4.9	III/IV	Weak/Light	None	None

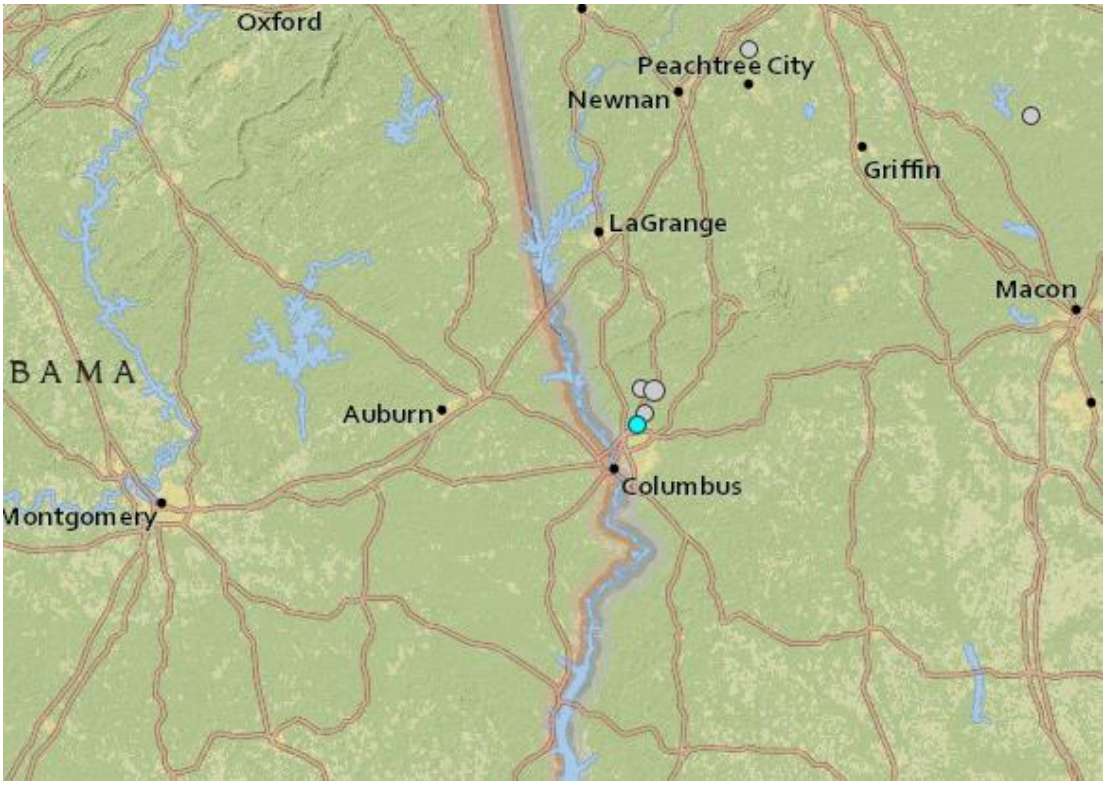
Source: USGS, Earthquake Hazards Program, Muscogee/Harris County, Georgia
If a strong earthquake occurred in the southeast the impact on Lee and Russell counties would look similar to earthquakes from the past.

Two earthquakes reported on February 4th 1886, and on February 13th, 1886 in Sumter and Marengo. While residents felt the trimmers from the earthquakes no damages were reported. In August of 1886 a destructive earthquake near Charleston, South Carolina, was felt and caused minimal damage in Alabama's northeast.

In 1916 a strong earthquake shook east of Birmingham causing damage near Easonville. The damages reported were as followed: chimneys were knocked down, windows were broken, and frame buildings "badly shaken."

The USGS Earthquake Hazards Program also identified four earthquakes that occurred across the state line in Muscogee/Harris County, Georgia in the early 1980s, please refer to Figure 14 for details.

Figure 14: USGS Earthquake Hazards for Muscogee County and Harris County, Georgia



Source: USGS Earthquake Hazard Muscogee/Harris Count, Georgia, 1980's

Figure 15: Lee County and Earthquake Epicenter as of March 2019

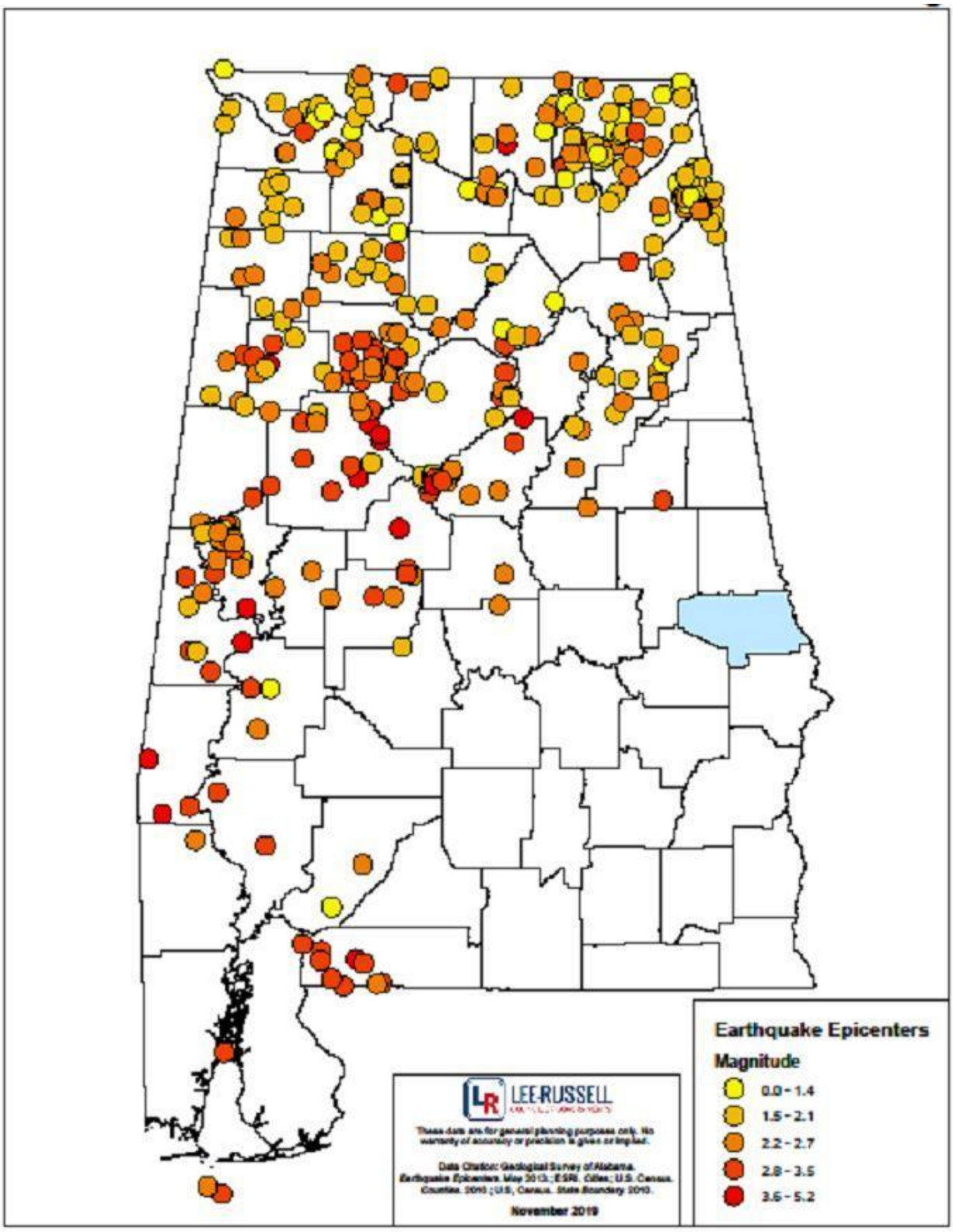


Figure 16: Lee County Geologic Fault Lines

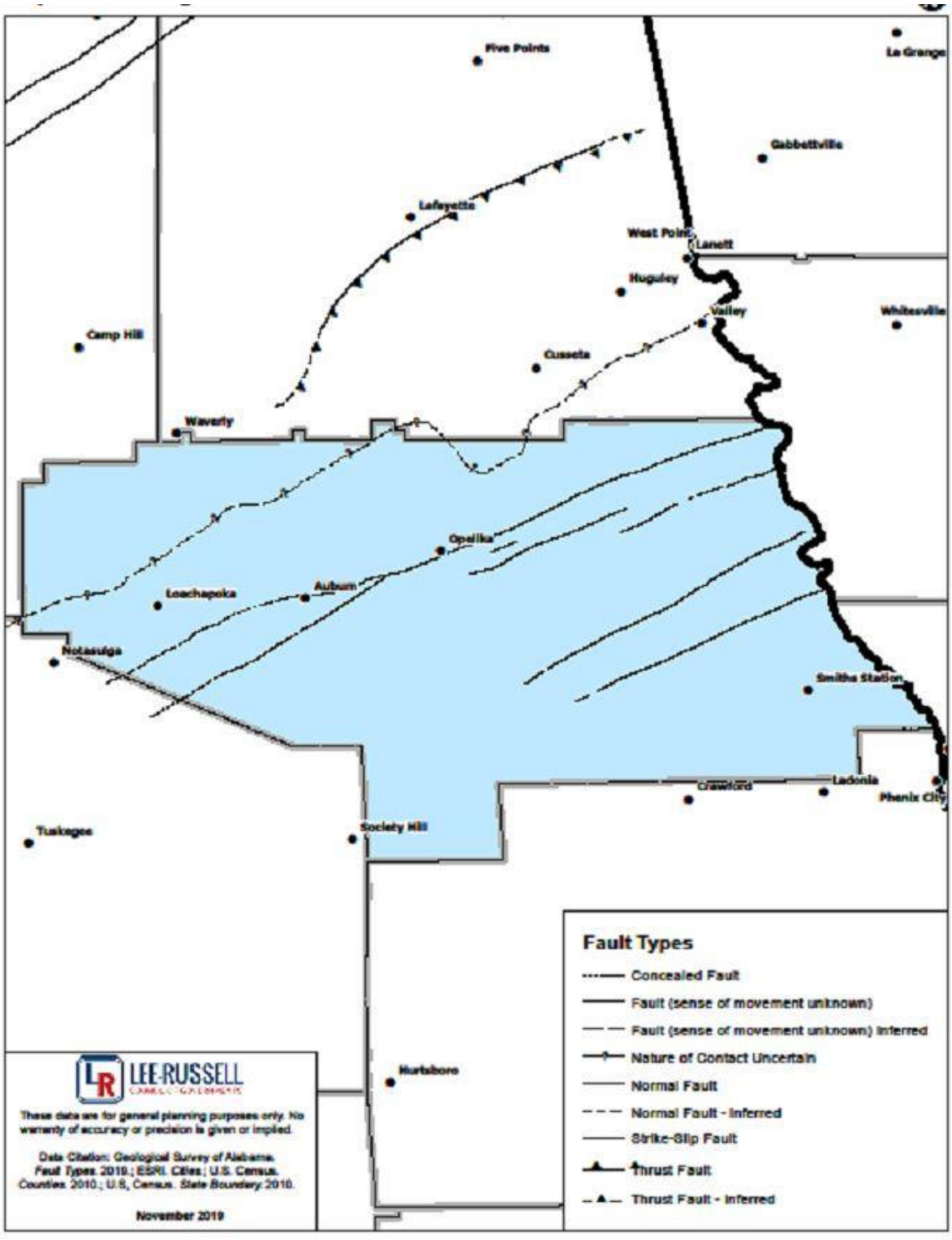


Figure 17: Russell County and Earthquake Epicenter as of March 2019

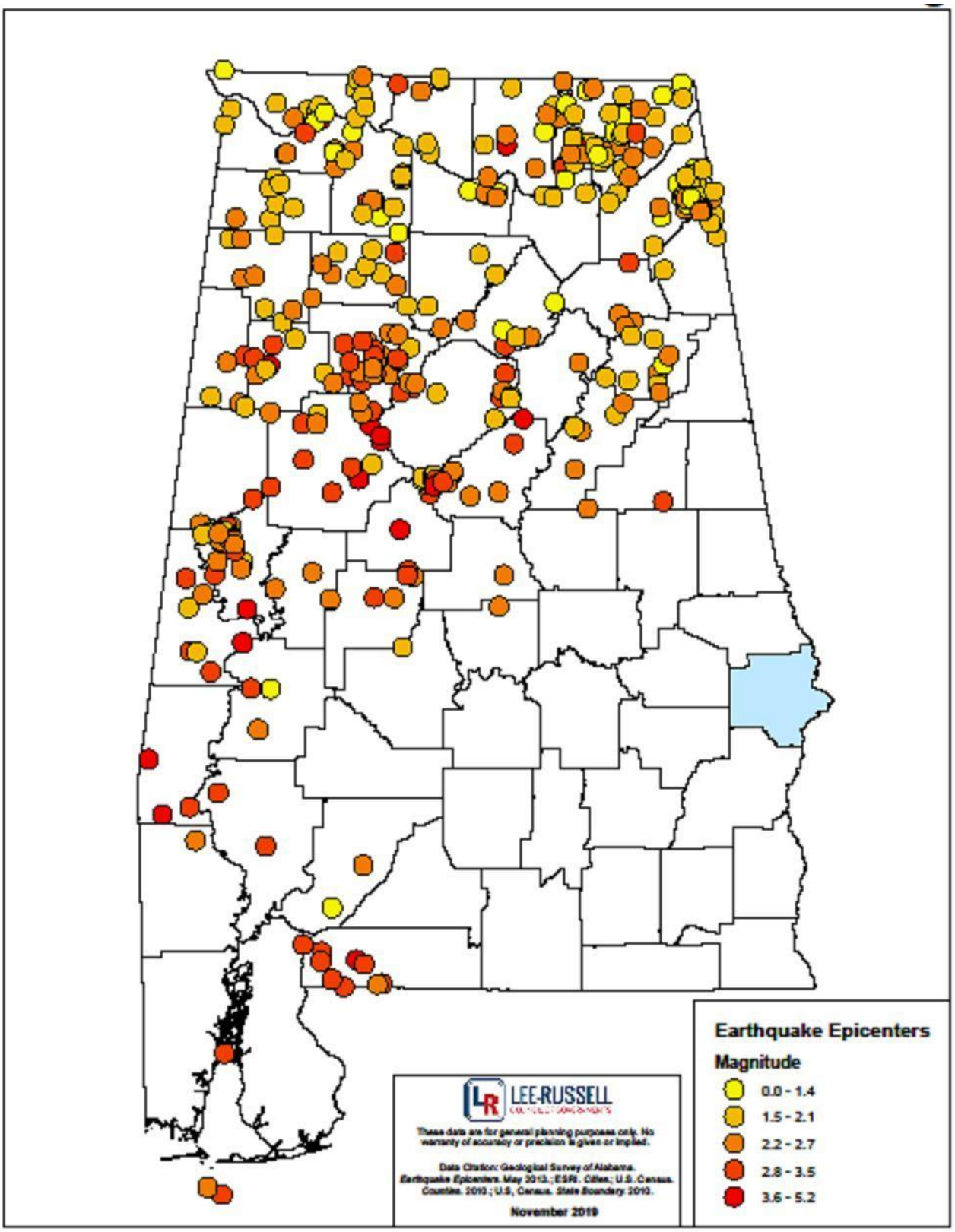
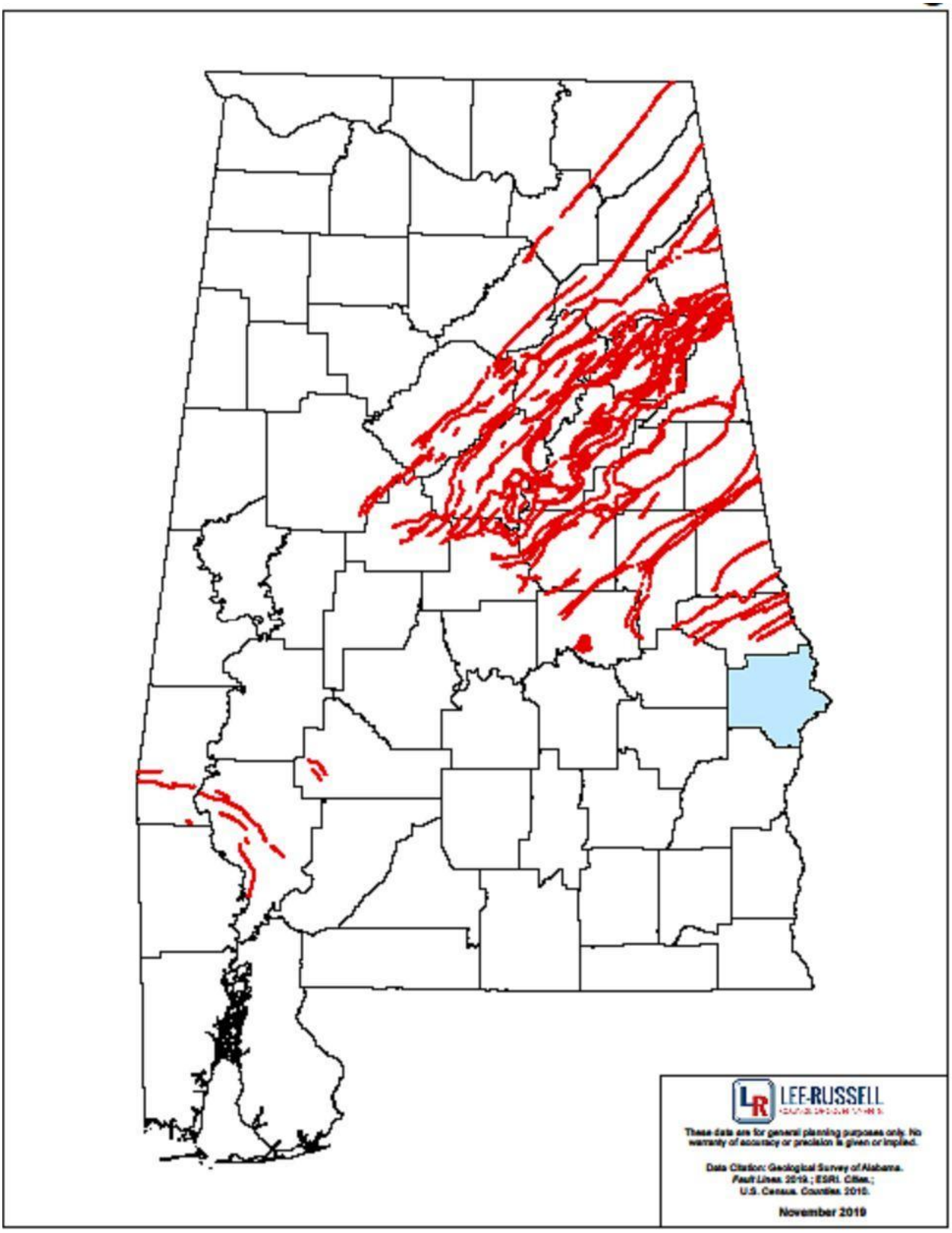


Figure 18: Russell County and Geologic Fault Lines

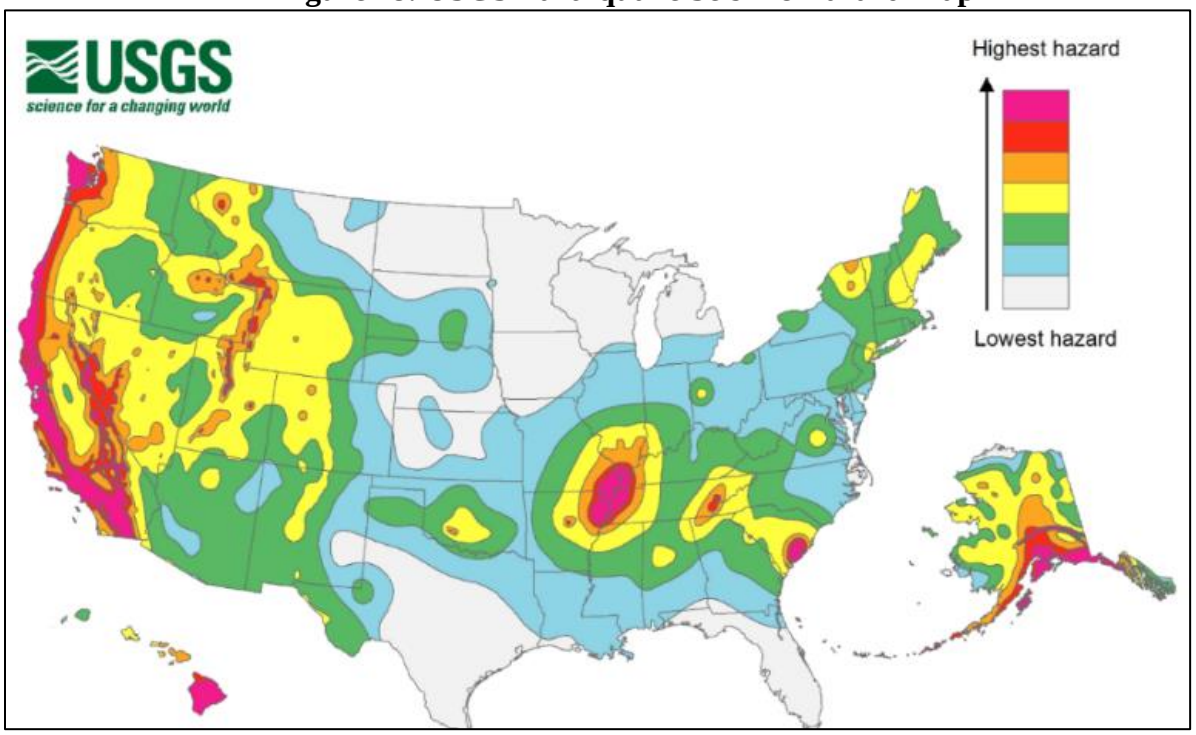


3.5.4 Probability of Future Occurrences

The probability of an earthquake occurring in this region was determined to be very low with less than a 1% annual probability with a very minor impact if one was to occur. Therefore, the probability of an impactful earthquake in the region is very low and will not be profiled any further.

The United States Geological Survey (USGS) publishes simplified earthquake seismic hazard maps that quickly give earthquake hazard probabilities, which can be seen in Figure 18.

Figure 18: USGS Earthquake Seismic Hazard Map



Source: USGS Earthquake Hazard Probability, 2019

3.6 Extreme Temperatures

3.6.1 Description

Extreme temperature is a hazard that encompasses instances of both extreme heat and extreme cold. Both extremes are profiled in this section.

Extreme Heat

Extreme heat is abnormally high temperatures that disproportionately affect the elderly, very young, and those with health concerns if exposed to the conditions, especially those without effective climate control systems. The State of Alabama Hazard Mitigation Plan, 2018, discusses extreme heat as temperatures above 100 F. Heat stress can be indexed by combining the effects of temperature and humidity, as shown in Table 3.12. The heat index estimates the relationship between dry bulb temperatures (at different humidity) and the skin's resistance to heat and moisture transfer. The higher the temperature or humidity, the higher the apparent temperature. The major human risks associated with extreme heat are:

- Heat/Sun Stroke: Considered a medical emergency, heat/sunstroke is often fatal. It occurs when the body's responses to heat stress are insufficient to prevent a substantial rise in the body's core temperature. While no standard diagnosis exists, a medical condition is usually diagnosed when the body's temperature exceeds 105 F due to environmental temperatures. Rapid cooling is necessary to prevent death, with an average fatality rate of 15 percent even with treatment.
- Heat Exhaustion: While much less serious than heatstroke, heat exhaustion can cause victims to complain of dizziness, weakness, or fatigue. Body temperatures may be normal or slightly too moderately elevated. The prognosis is usually good with fluid treatment.
- Heat Syncope: This refers to a sudden loss of consciousness and is typically associated with people exercising who are not acclimated to warm temperatures. It causes little or no harm to the individual.
- Heat Cramps: May occur in people unaccustomed to exercising in the heat and generally ceases to be a problem after acclimatization.

Table 3.13: Heat Index and Disorders

Danger Category	Heat Disorders	Apparent Temperatures (F)
I Caution	Fatigue possible with prolonged exposure and physical activity	89-90
II Extreme Caution	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity	90-105
III Danger	Sunstroke, heat cramps, or heat exhaustion likely, heatstroke possible with prolonged exposure and physical activity.	105-130
IV Extreme Danger	Heatstroke or sunstroke imminent	>130

Source: FEMA, 1997, NWS, 1997, State of Alabama HMP, 2018

In addition to affecting people, severe heat places significant stress on plants and livestock. The effects of severe heat on agricultural products may include reduced yields and loss of crops, State of Alabama HMP, 2018.

Extreme Cold

From the State of Alabama Hazard Mitigation Plan, 2018, extreme cold temperatures also impact Alabama weather, although not as likely. Prolonged exposure to the cold can cause frostbite or hypothermia and become life-threatening. Frostbite occurs when the extremities become excessively cold, and hypothermia is a serious health condition where a person's body temperature falls below 90 F. Both conditions are influenced by wind conditions. Various wind chill indices have been developed to predict cold temperature's effect on humans. For instance, a temperature of 5 F will have a wind chill of -19F if the wind is blowing 30 mph. Cold weather can also impact crops and livestock. Cold air has the potential to freeze produce, which can damage or kill it.

Older adults are more prone to being impacted by extreme heat and extreme cold events. This is because they do not adjust well as other demographics to drastic changes in temperature, they are more likely to have a medical condition that changes normal body responses to heat and cold, and they are more likely to take prescription medications that impact the body's ability to react to changes in temperatures. Access to climate control, such as air conditioning and heating systems, provides protection from the impacts of extreme heat and cold events and is one way to mitigate against the potential impacts of an extreme temperature event.

3.6.2 Extent by Jurisdiction

Table 3.14: Extreme Temperatures Extent

Hazard	Extent (All Jurisdictions)
Extreme Temperatures	Extreme highs above 100 deg. F increases the risk of injury from exposure and drought risk. Low-temperature extremes around 0 deg. F for several days at a time causing water shortages and injury.

3.6.3 Previous Occurrences and Impacts

The planning area had three instances of extreme cold since 1996 according to the National Centers for Environmental Information. No attributed injuries or deaths were reported due to extreme cold in the Lee-Russell region.

Typically, daytime high temperatures reached can reach upper 90's to low 100's during the summer months, In combination with humid air, heat index can climb to 105 to 110 degrees across Lee and Russell counties. In 2007 temperature reach between 100 to 109 degrees from August 8th to August 23rd, which resulted in 1 death of a 77-year-old man who suffered from a heat stroke, and 60 people required medical treatment, according to NOAA.

3.6.4 Probability of Future Occurrences

The probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of an extreme heat/cold event is rated as low to critical largely based on duration. The events in the region have been short-lived, according to the NOAA datasets.

3.15: Future Probability of Extreme Temperatures

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Extreme Temperature	Auburn	NA	13	NA**
Extreme Temperature	Opelika	NA	13	0.85
Extreme Temperature	Loachapoka	NA	13	0
Extreme Temperature	Smiths Station	NA	13	0.69
Extreme Temperature	Unincorporated Lee County	NA	13	0.38
Extreme Temperature	All of Lee County	4	13	0.31
Extreme Temperature	Hurtsboro	NA	13	NA**
Extreme Temperature	Phenix City	NA	13	NA**
Extreme Temperature	Unincorporated Russell County	NA	13	NA**
Extreme Temperature	All of Russell County	3	13	0.23

Source: National Weather Service, Storm Event Database, 2020)
** (Extreme Temperatures are not recorded in every jurisdiction)

3.7 Flooding

3.7.1 Description

Flooding is considered one of the most frequent and costly natural hazards that occurs in the United States. Most communities in the United States have experienced some kind of flooding, including those in the Lee and Russell counties. Flooding normally occurs due to excessive precipitation, but many factors can have an impact on flooding such as drainage basin characteristics, antecedent soil moisture conditions, weather patterns, and land cover. There are two primary types of flooding that affect this planning area: riverine flooding and flash flooding.

Riverine flooding occurs when substantial levels of precipitation ensue over a long period of time, causing rivers and streams to flow outside of their natural channels and negatively affecting surrounding areas. Flash flooding is normally instigated by intense amounts of precipitation over a short time period in a localized area. Both Lee and Russell counties experience both types of flood events. Flash floods are generally more prevalent in the urbanized areas with abundant impervious surfaces and other areas of obstructions to water runoff. The Chattahoochee River, which forms the eastern boundary of Lee and Russell counties, is a primary factor in riverine flooding in the region.

The City of Auburn, City of Opelika, Town of Smiths Station, Town of Hurtsboro, City of Phenix City, Lee County, and Russell County have mapped Flood Hazard Areas, with the exception of those jurisdictions that are not located in the flood hazard area. Figures 19 to Figure 25 show the areas of susceptibility to riverine flooding events, and nearly every area can be affected by flash flooding of enough rainfall occurs. Figures show the location of currently mapped special flood hazard areas for the Lee-Russell Planning Area, based on the most recent FEMA National Flood Hazard Layer Available. This map includes areas designated Zone A (one-percent annual chance flood) and Zone AE (one percent annual chance flood with elevation). The data made available by FEMA is not without error, therefore, and some flooding may occur outside of these mapped areas. The following maps show where the floodplain goes in each jurisdiction.

Figure 19: Flood Zones in Auburn, Alabama

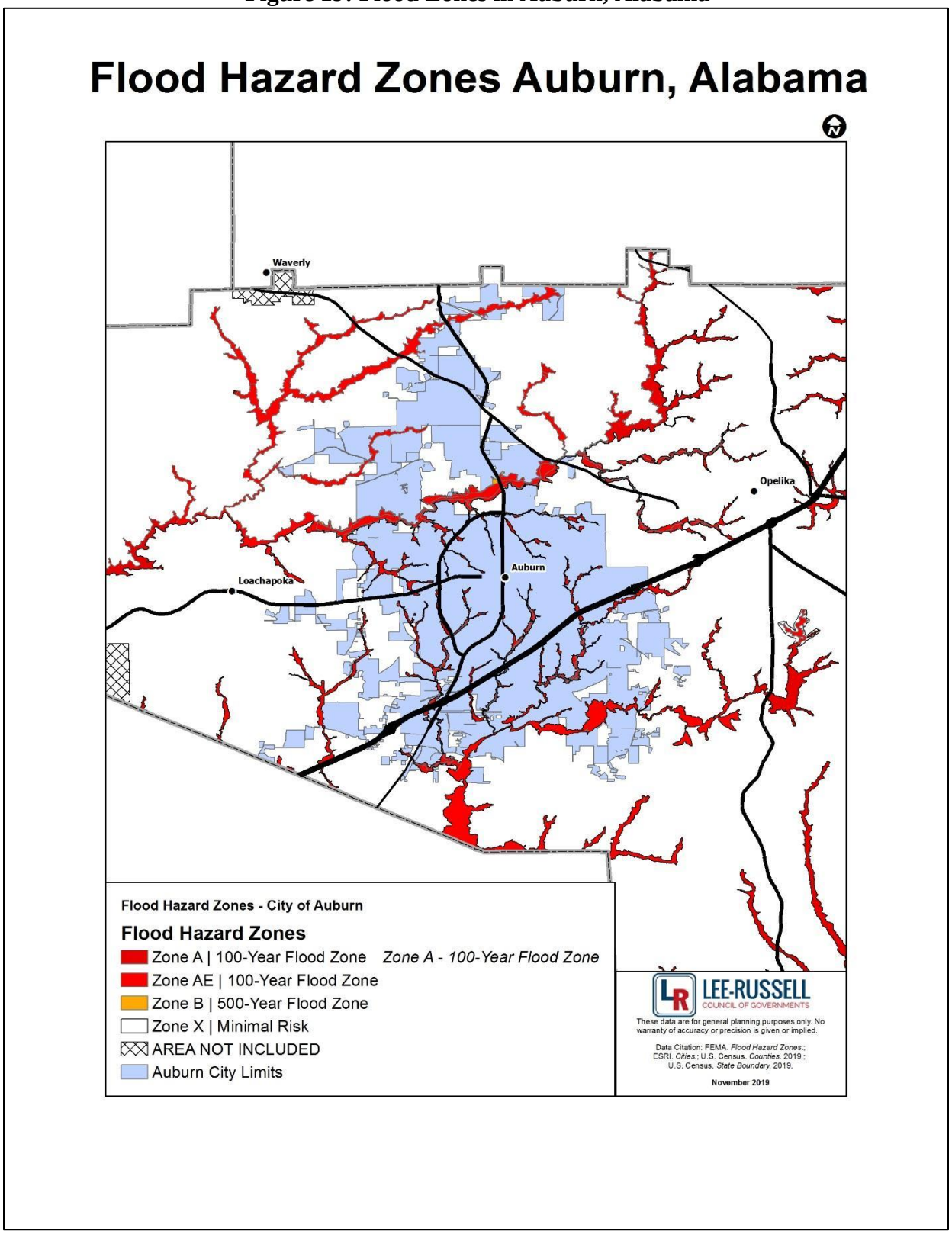


Figure 20. City of Opelika Flood Zones

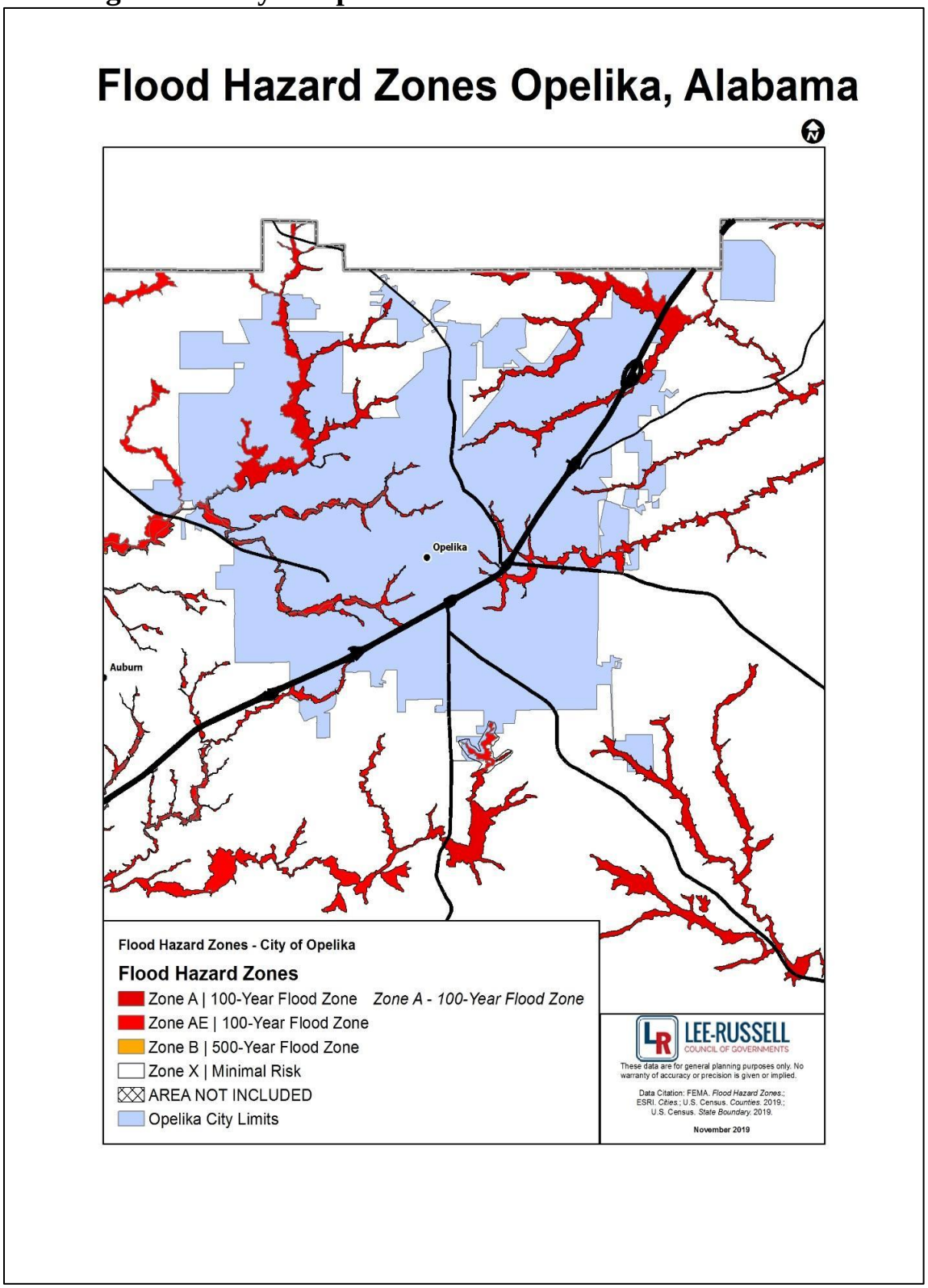


Figure 21 Flood Zones in Town of Smiths Station

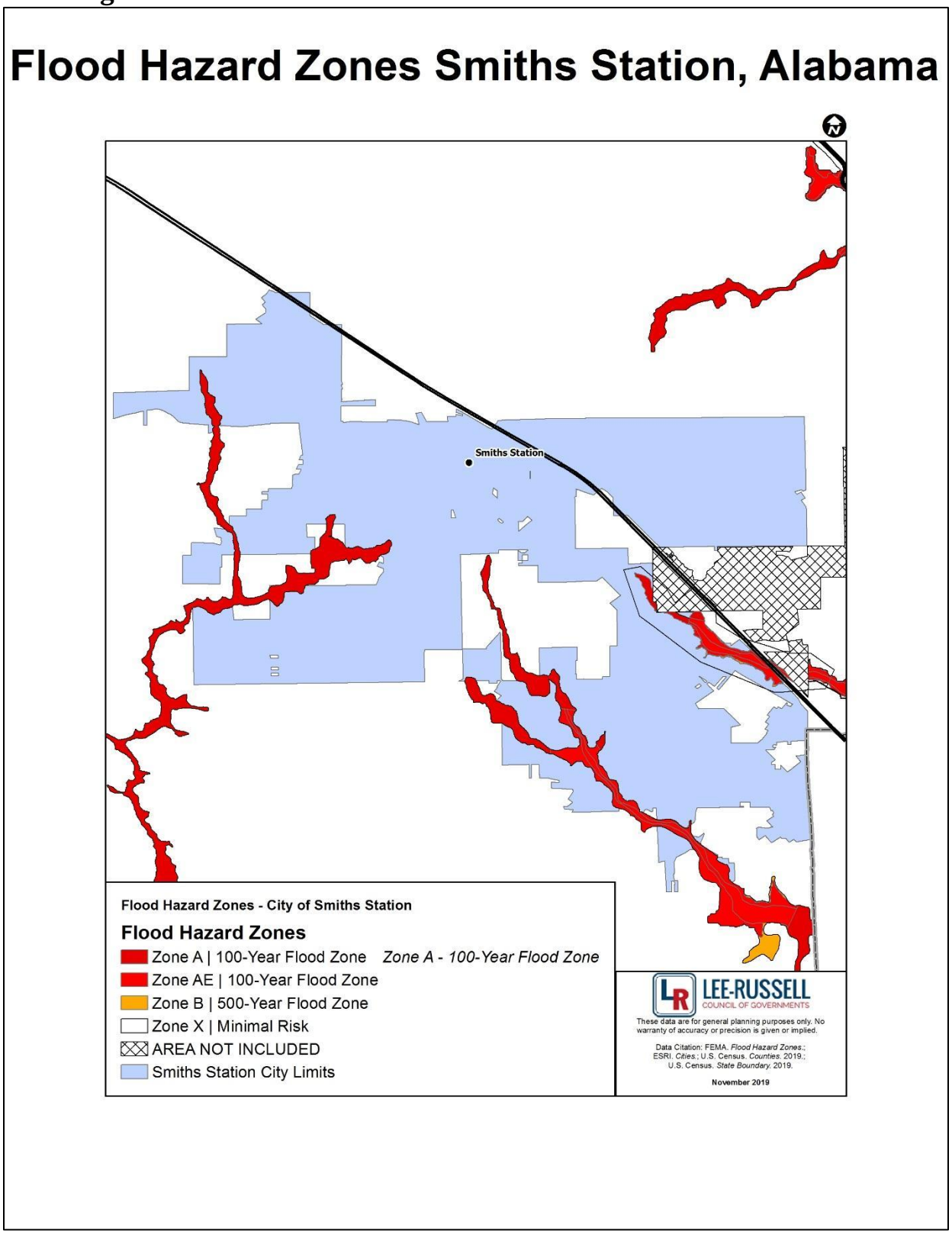


Figure 22 Flood Zones in Lee County

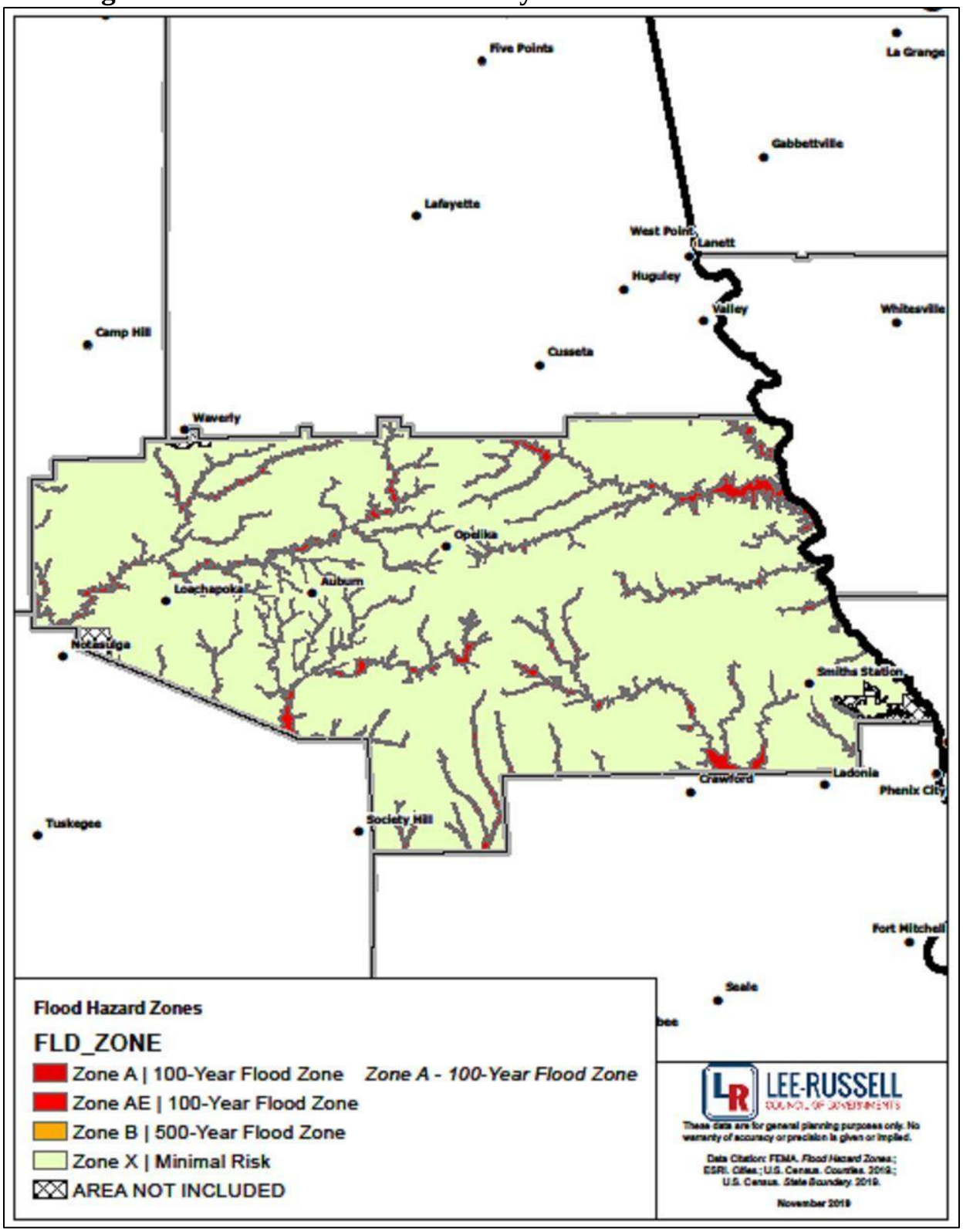


Figure 23 Flood Zones in Town of Hurtsboro

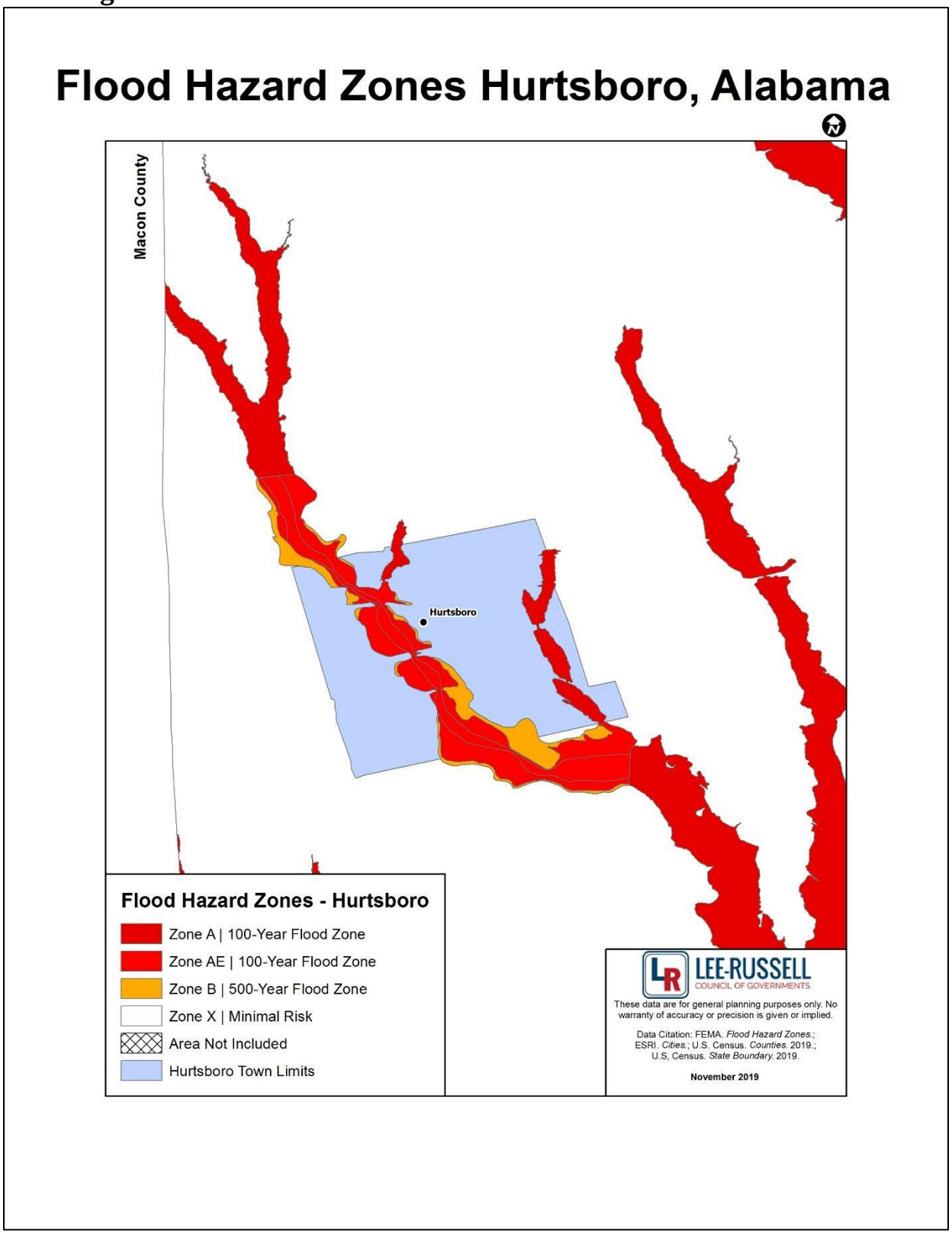


Figure 24 Flood Zones in Phenix City

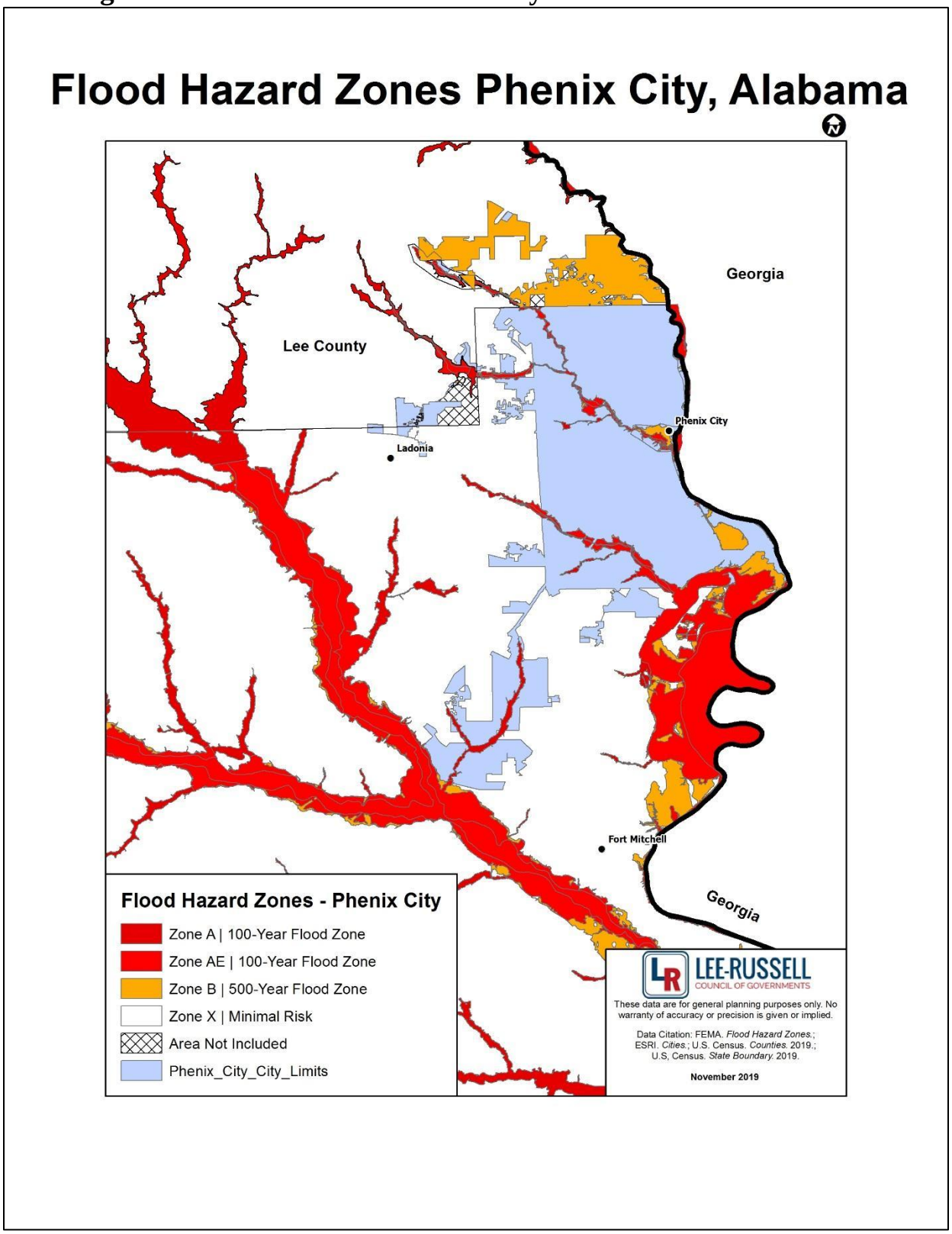
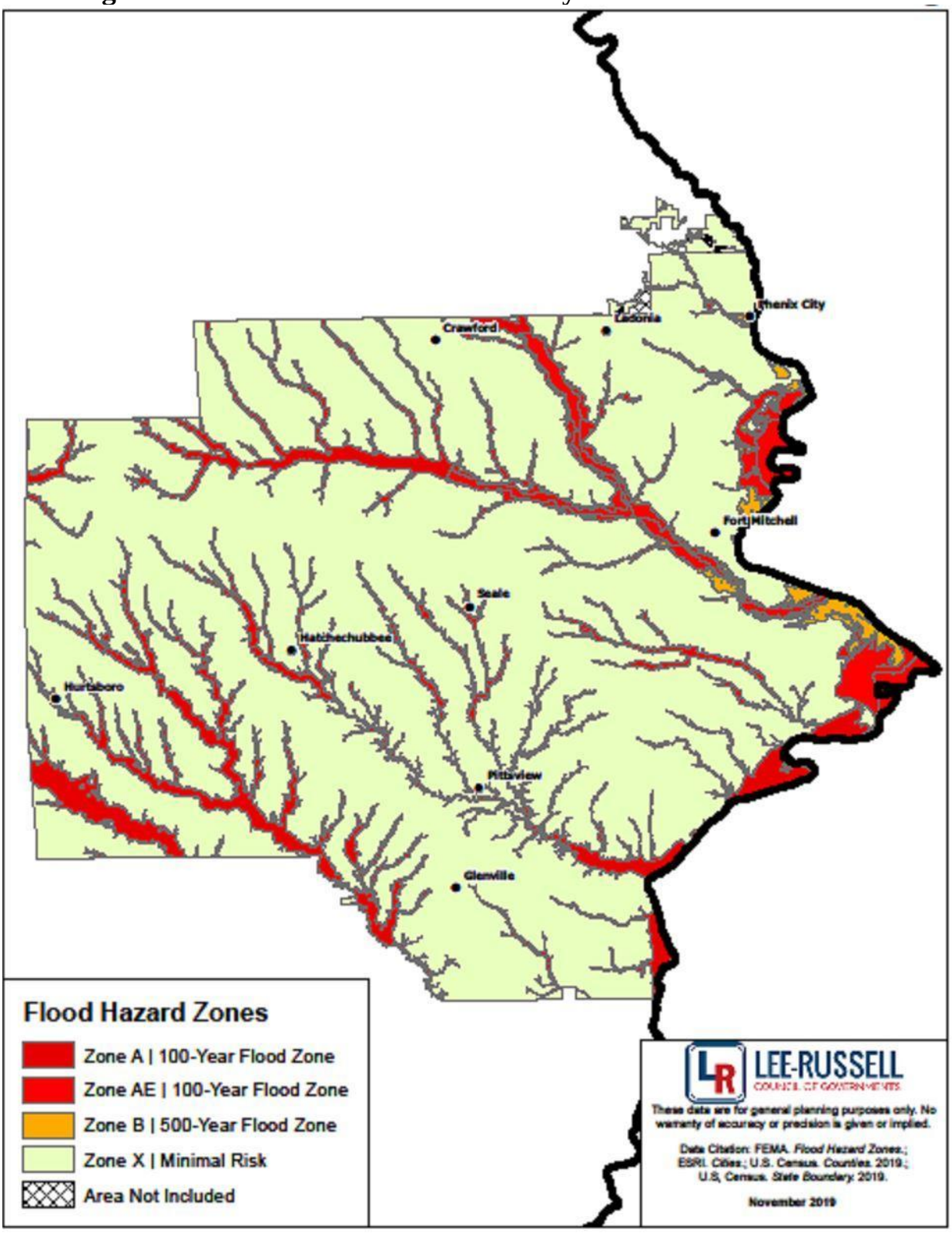


Figure 25 Flood Zones in Russell County



3.7.2 Extent by Jurisdiction

The severity of a riverine flood event is typically dependent on several factors, including drainage basin topography, recent precipitation and weather occurrences, and land surface. Periodic riverine flooding on adjacent lands is a natural occurrence. The most common method used to express flood frequency is a percent chance of occurrence in a giver year, or annual probability with a FEMA identified floodplain. A 100-year flood event has a one percent (1%) chance of occurring in any year within that floodplain. However, these type floods can occur multiple times during a 100-year period.

The extent of a flash flooding event varies depending on the local geography, rainfall intensity, and duration. Typically, flash flooding does not have as widespread of an impact on communities as a riverine floorings event. Due to the lack of advance warning before a flashflood event many streets and properties can become damage during these events.

Table 4.12 Flooding Extent by Jurisdiction

Jurisdiction	Flooding
Lee County	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
City of Auburn	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Loachapoka	No potential damage
City of Opelika	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Smiths Station	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Russell County	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure
Town of Hurtsboro	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure
Phenix City	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure

3.7.3 Previous Occurrences and Impact

The Lee-Russell Planning Area has experienced several major flooding events. There have been three federal disaster declarations due to extensive flooding in Russell County while flash flooding is very common in Lee County. Typically, the flash floods recede very quickly without significant disruption to the public but there have been instances of flash flooding that were registered with the National Climatic Data Center (at the time) and caused property and crop damage. In 2003, heavy rains forced the Chattahoochee River to flood eastern sections of Lee County. Several homes sustained damage.

Severe flooding in the town of Hurtsboro, Russell County, in 2005 required emergency responders to assist in evacuating residents from their homes. Since this event, Russell County Commission and Russell County EMA received HMP grant assistance for acquisition and relocation efforts.

Since 1996, the Lee-Russell Planning Region experienced thirty-two floods, which resulted in $2,558,000 in damages. Of those thirty-two floods, seven were federally-declared disasters.

On June 26th, 2011 scatted storms and thunderstorms produced heavy rains in Opelika near Roanoke Junction, just north of Opelika High School, which resulted in flash flooding. NOAA reported that were cars flooded up to the roofs, and several swift water rescues took place. The damages reported were around $50,000 from the flooding.

On September 21, 2011 six homes in Phenix City were flooding by at least six inches of water after a slow moving thunderstorm dumped massive amounts of rain on to Central Alabama. According to NOAA there was at least $20,000 worth of damages.

On December 24th, 2015 a flooding incident occurred in Russell County which accumulated an estimated total of $1,631,721.47 in damage to multiple roadways, several washed out roadway culverts and water mains. Also, On January 2, 2017 multiple houses received water damage from flooding in Russell County located in the following areas: 13th Ave South – 3 Houses, 9th Street South – 2 Houses, 8th Street South – 2 Houses, 14th Ave – 1 House, Lexington Circle – 5 Houses, Jackson Drive – 1 House, Brentwood Drive – 1 House, and the Phenix City Riverwalk.

The town of Hurtsboro and Phenix City experienced heavy rains on January 2nd, 2017, which produced flash flooding. Although no monetary damages were reported by NOAA, there were reports of cars flooded in Phenix City as well as flood damage to homes and business in Hurtsboro. NOAA did not report the exact location of these damages.

A slow-moving summer thunderstorm caused localized flooding, at least six inches, at the intersection of University Drive and Opelika Road in Auburn on August 14th, 2018. NOAA did not report any monetary damages.

In unincorporated Russell County a strong summer thunderstorm dropped at least eight inches of water resulting in localized flooding. The flood made Huguley Road, Pitts Road, McCart Road, and Herring Road impassible to the flooding. No damage of any sort were report.
No flooding detail/events have been recorded by NOAA or local officials for Smiths Station.

3.7.4 Probability of Future Occurrences

Since 2006, NOAA has recorded 18 flooding events in Lee and Russell Counties. It is estimated that these flood events caused at least $1,726,721 in damages in the Lee and Russell counties, but this number could be much higher since some flood events did not report monetary values of damages despite recorded damages. The event frequency for flooding is 1.38 events per year, which is based on the eighteen events that occurred in thirteen years. The annual risk of losses for floods based on the historical record was $132,824 of damages per year.

Table 4.13 Probability of Future Occurrences of Flooding

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flooding	Auburn	5	13	0.38
Flooding	Opelika	1	13	0.08
Flooding	Loachapoka	0	13	0
Flooding	Smiths Station	1	13	0.08
Flooding	Unincorporated Lee County	5	13	0.38
Flooding	All of Lee County	12	13	0.92
Flooding	Hurtsboro	2	13	0.15
Flooding	Phenix City	5	13	0.45
Flooding	Unincorporated Russell County	4	13	0.15
Flooding	All of Russell County	11	13	0.85

Source: National Weather Service, Storm Event Database, 2020)

3.8 Hail

3.8.1 Description

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.

Annually, hail causes over 1 billion dollars in damage to crops and property nationwide. The entire Lee-Russell County Region is susceptible to the occurrence of hail and numerous instances reported according to NOAA.

3.8.2 Extent by Jurisdiction

The size of hailstones is related to the intensity of the thunderstorms that produce them, and to the temperature at the surface. The average size of hailstone that falls to earth is 6.36 mm. 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.

Table 4.14: Hail Extent of All Jurisdictions

Hazard	Extent (All Jurisdictions)
Hail	Hail larger than 50-76 mm diameter resulting in property damage

The TORRO Hailstorm Intensity Scale, table 4.14, relates the size of hailstones to the probable crop and property damage. The damage caused by hail is often compounded by the other hazards that tend to accompany hailstorms, tornadoes or thunderstorms. It is common to have large hail north of a tornado track.

Table 4.15: TORRO Hail Intensity Scale

Intensity	Typical Hail Diameter (mm)	Intensity Category	Probable Damage
H0	5	Hard Hail	No damage
H1	5-15	Potentially Damaging	Slight general damage to plants, crops
H2	10-20	Significant	Significant damage to fruit, crops, vegetation
H3	20-30	Severe	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	25-40	Severe	Widespread glass damage, vehicle bodywork damage
H5	30-50	Destructive	Wholesale destruction of glass, damage to tiled roofs, significant risk

			of injuries
H6	40-60	Destructive	Bodywork of grounded aircraft dented, brick walls pitted
H7	50-75	Destructive	Severe roof damage, risk of serious injuries
H8	60-90	Destructive	Severe damage to aircraft bodywork
H9	75-100	Super Hailstorms	Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open
H10	Greater than 100	Super Hailstorms	Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open

Source: State of Alabama HMP, 2018

3.8.3 Previous Occurrences and Impact

Hail events are very common in the Lee-Russell Region. Area with multiple events occurring. Since 1967, there have been 150 recorded instances of hailstorms. The hailstorms have caused significant damage to property, homes and automobiles. No injuries or deaths were reported as a result of these events.

On April 11th, 2007 a supercell thunderstorm hit the region and resulted in $100,000 worth of hail damages in unincorporated Russell County. Hail up to 4-inches in diameter, about the size of the grapefruit, damage four homes and fifteen cars.

3.8.5 Probability of Future Occurrences

The probability of future hail events has been determined to be high for the planning area signifying 100% annual probability for occurrence. The impact to the planning area was deemed to be Minor to Limited with minimal disruption.

Table 15: Probability of Future Occurrences Hail

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Hail	Auburn	9	13	0.69
Hail	Opelika	11	13	0.85
Hail	Loachapoka	0	13	0
Hail	Smiths Station	9	13	0.69
Hail	Unincorporated Lee County	5	13	0.38
Hail	All of Lee County	41	13	3.15
Hail	Hurtsboro	3	13	0.23
Hail	Phenix City	5	13	0.38
Hail	Unincorporated Russell County	22	13	1.69
Hail	All of Russell County	30	13	2.31

Source: National Weather Service, Storm Event Database, 2020)

3.9 High Winds & Thunderstorms

3.9.1 Description

The Lee-Russell Region Area is highly susceptible to high winds and thunderstorms. High wind events may occur any time of year but occur more often in spring, summer, and fall seasons. Thunderstorms are weather events that form through the clash of different air masses, which may cause storms that occur singularly, in lines, or in cluster – sometimes with very little warning. The effects of thunderstorms may impact a small area or multiple jurisdictions. Thunderstorm events may cause straight-line winds, hail, and lightning, and if long-lasting or severe cause flooding or tornadic activity. Severe thunderstorms may produce damage equivalent to tornadoes over a larger spatial area. Severe thunderstorm events may occur year-round in the region, but the peak of severe thunderstorm events is in spring with a smaller peak in fall.

The Division D Emergency Management Directors chose to address tornadoes as a separate hazard event.

3.9.2 Extent by Jurisdiction

Severe thunderstorms are defined by the National Weather Service as having wind speeds of 58 miles per hour or higher, producing hail at least ¾" in diameter, or possessing tornadic capabilities. The effects of severe thunderstorms will have varying spatial effects throughout the region area from widespread to localized impacts.

Table 16: High Winds and Thunderstorms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
High Winds & Thunderstorms	The National Weather Service defines high winds as "Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration." The National Weather Service defines a severe thunderstorm as "A thunderstorm that produces a tornado, winds of at least 58 mph **(**50 knots or ~93 km/h), and/or hail at least 1" in diameter**.** Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots or ~64 km/h) and/or hail of at least ½" is defined as approaching severe."

3.9.3 Previous Occurrences

Each jurisdiction in the Lee-Russell Region is vulnerable to the effects of high winds/thunderstorms and experience multiple occurrences of this hazard every year. There have been 40 documented severe Thunderstorm/Wind events between autumn 2014 and 2019. During these events, there were no documented property or crop damage or death/injuries although there has been significant damage in the past. Due to the isolated nature of these events, it is probable

that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.

3.9.4 Impact

The entire Lee-Russell Region is uniformly susceptible to the occurrence of severe thunderstorms and high winds. High winds/severe thunderstorms can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific areas of storm effects. The following events are examples of impacts felt by various jurisdictions in Lee and Russell due to high winds and thunderstorm events.

On July 7th, 2007 a strong storm hit the Smiths Station community in Lee County resulting in $50,000 worth of damages, and trapped two people when a tree fell onto a manufactured home.
On May 3rd, 2009 a severe thunderstorm stuck Auburn in Lee County causing $50,000 in damages from winds of about 50mph. The strong winds blew down trees, power lines, damaged roofs, and Lee County Property.

The Fort Mitchell community received significant tree damage and roads closed due to downed trees. The recorded wind speeds were around 89 mph this particular storm in Fort Mitchell on August 6th, 2015.

On February 15th, 2016, a supercell struck the southeast bringing dangerous straight-line winds, tornadoes, and strong thunderstorms. In the northwest region of Russell County, straight-line winds of around 80 mph destroyed a barn, blew down trees, and power lines.
One person who injured when straight-line winds from a severe thunderstorm blew the roof off a car wash on Marvyn Parkway in Opelika.

3.9.5 Probability of Future Occurrences

Severe thunderstorm/high wind events that cause property damage and potential injuries/death may affect the planning area throughout the year and have averaged multiple occurrences a year in recent history. The probability of these events has been identified as High, with a 100% annual probability. The impact has been determined to be Limited.

Table 3.16 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
High Winds/Thunderstorm	Auburn	13	13	1.08
High Winds/Thunderstorm	Opelika	9	13	1.08
High Winds/Thunderstorm	Loachapoka	1	13	0.78
High Winds/Thunderstorm	Smiths Station	2	13	0.15
High Winds/Thunderstorm	Unincorporated Lee County	31	13	2.38
High Winds/Thunderstorm	All of Lee County	71	13	5.46
High Winds/Thunderstorm	Hurtsboro	3	13	0.23
High Winds/Thunderstorm	Phenix City	14	13	1.08
High Winds/Thunderstorm	Unincorporated Russell County	37	13	2.80

High Winds/Thunderstorm	All of Russell County	54	13	4.15

3.10 Landslides

Lee and Russell counties are not impacted by or at risk to landslides, therefore, this hazard will be addressed in Phase 2 and Phase 3 of the Division D Hazard Mitigation Plan.

3.11 Lightning

3.11.1 Description

Lightning is a discharge of electrical energy that creates a "bolt" that may stretch from clouds to the ground. An actual lightning strike only affects a small area, though many storms have thousands of lightning strikes that occur during an event. According to the National Weather Service, lightning will follow a path of least resistance, typically striking the tallest object in a given area, which could include a person, a power pole, or trees. Lightning may cause building damage due to starting a fire, deaths through striking a person directly or in the immediate vicinity, and may cause wildfire in some cases.

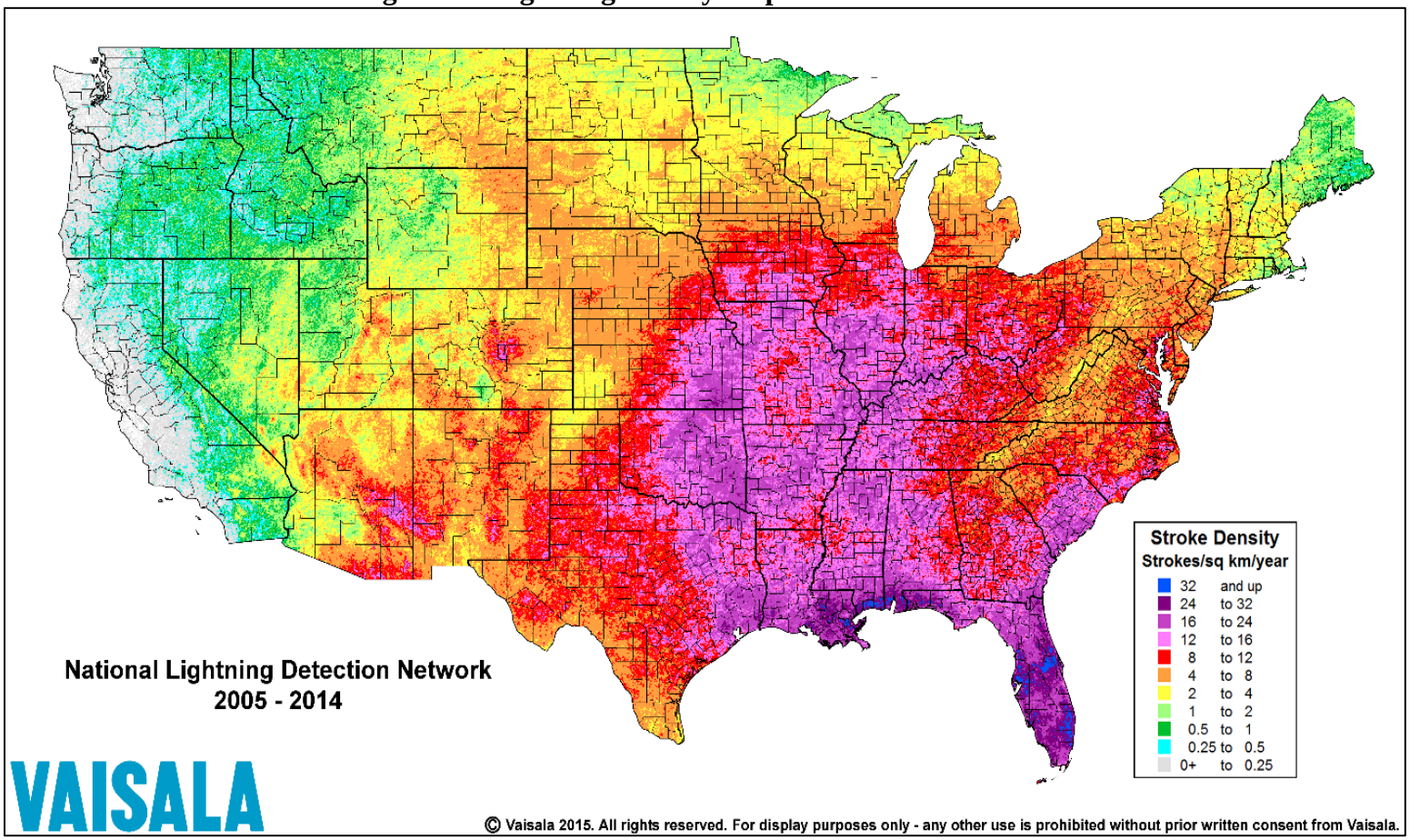
3.11.2 Extent by Jurisdiction

There are some 16 million lightning storms in the world every year. The rapid heating and cooling of air near the lightning cause thunder. Lightning is a major threat during a thunderstorm. In the atmospheric electrical discharge, a leader of a bolt of lightning can travel at speeds of 130,000 mph and can reach temperatures approaching 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. The table below shows the extent to which all jurisdictions in Lee and Russell counties are susceptible to frequent lightning. Figure 33 is a lightning density map, which showcases that Lee and Russell counties receive 8 to 12 strikes of lightning per km per year.

Table 3.17: Lightning Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Lightning	Lightning considered frequent when 4 to11 flashes take place per square km

Figure 26: Lightning Density Map



3.11.3 Previous Occurrences

The Lee-Russell Region has been subjected to lightning storms and strikes. Since the mid-1990's $383,500 in property damage and one in 2017 were reported as a result of lightning.

3.11.4 Impact

All jurisdictions in Lee and Russell are uniformly susceptible to the occurrence of lightning, which can result in injury to a person, damage or destruction to a home, damage to electronics, and start fires. The following examples show how lightning could impact each jurisdiction in Lee and Russell counties.

Lighting from thunderstorms on July 11th, 2008 resulted in a house fire after it was struck by lightning in central Russell County, and caused $50,000 in damages.

In Lee County, west of the City of Auburn, afternoon thunderstorms produced lighting which struck a house and burned the entire roof. About $100,000 worth of damage occurred due to the lightning strike.

An entire home, on Lee County Road 390, burned to the ground on May 10th, 2009 when it was struck by lightning during an afternoon thunderstorm

One man was killed after being struck by lightning while boating on Lake Harding, in Lee County on July 21st, 2017.

3.11.5 Probability of Future Occurrences

Lightning events that have the potential to cause property damage and potential injury/casualty may affect the planning area throughout the year. The probability of these events is high for the entire planning area, however, the impact ranges between minor and limited.

Table 3:18 Probability of Future Occurrences for Lightning

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Lightning	Auburn	1	13	0.08
Lightning	Opelika	0	13	0
Lightning	Loachapoka	0	13	0
Lightning	Smiths Station	0	13	0
Lightning	Unincorporated Lee County	3	13	0.23
Lightning	All of Lee County	4	13	0.31
Lightning	Hurtsboro	0	13	0
Lightning	Phenix City	0	13	0
Lightning	Unincorporated Russell County	1	13	0.08
Lightning	All of Russell County	1	13	0.08

Source: National Weather Service, Storm Event Database, 2020)

3.12 Sinkholes

3.12.1 Description

According to the Geological Survey of Alabama (GSA), the most common cause of land subsidence in Alabama is the development of sinkholes in areas that have underlying soluble limestone, dolomite, or salt rocks, such as karst terrain. Activities that can cause land subsidence, or sinkholes, include a change in the water table level, change in groundwater flow characteristic, and surface loading that puts pressure on the land surface, including human-induced causes.

3.12.2 Extent by Jurisdiction

The Alabama State Hazard Mitigation Plan states that the GSA considers sinkholes to be more prevalent in northern Alabama due to geology. The state plan also indicates that groundwater withdrawal is an important driver of sinkhole development in Alabama. A previous study estimated that more than 4,000 human-induced sinkholes and areas of subsidence have occurred in Alabama since 1900. Most have occurred since 1950, and most have resulted from a decline in the water table associated with groundwater withdrawals. Sinkholes related to wells tend to be located within 150 meters of the site of the withdrawal, while sinkholes related to quarry operations tend to be located within 600 meters of the site of withdrawal. According to the Alabama State Hazard Mitigation Plan, recent sinkholes associated with groundwater withdrawal have ranged from 1 to 90 meters in diameter, and from 0.3 to 30 meters in depth.

There is no magnitude scale for land subsidence or sinkholes. Therefore, defining the extent of these hazards is subjective and difficult to predict.

Table 3.19 Sinkhole Extent by Jurisdiction

Jurisdiction	Sinkholes
Lee County	Movement of land beneath less than one acre affecting multiple homes and businesses
City of Auburn	No potential damage
Town of Loachapoka	No potential damage
City of Opelika	Movement of land beneath less than one acre affecting multiple homes and businesses
Town of Smiths Station	No potential damage
Russell County	Movement of land beneath less than one acre affecting multiple homes and businesses
Town of Hurtsboro	Movement of land beneath less than one acre affecting multiple homes and businesses
Phenix City	Movement of land beneath less than one acre affecting multiple homes and businesses

3.12.3 Previous Occurrences and Impact

Incidents of manmade sinkholes were reported in the Lee and Russell counties, primarily since the early 2000s. The sinkholes are suspected to have been caused by drainage issues and past mining

operations (rock quarry). There were damages related to structures, septic systems, vehicles, and injuries involved.

The following examples show how landslides could impact each jurisdiction in Lee and Russell counties. Since the sinkholes are considered to be manmade the jurisdictions do not keep records not are official measurements of sinkholes are not recorded by any jurisdiction. In certain cases, the media may have estimated the size of the sinkholes.

Several manmade sinkholes have been reported in Lee County 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. While the majority of the sinkholes occurred on private property, one incident did require extensive structural work on a county road, which cost the County Highway Department $1,000,000, to prevent further deterioration. Due to the sinkholes, roads have closed to all through traffic since residents' vehicles fell into sinkholes in the road. Residents reported injuries to animals and persons due to rock cracking, septic tanks condemned, and disruption in water services.

Two sinkholes occurred in Lee County during 2014. 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 (30 feet long, 12 feet deep, and 12 feet wide) developed due to a drainage issue of an unoccupied home.

A sinkhole occurred due to an old storm drainage failure in Auburn at West Glenn Avenue from Thomas Street to North College Street in July 2019.

Figure 27: Sinkholes Lee County

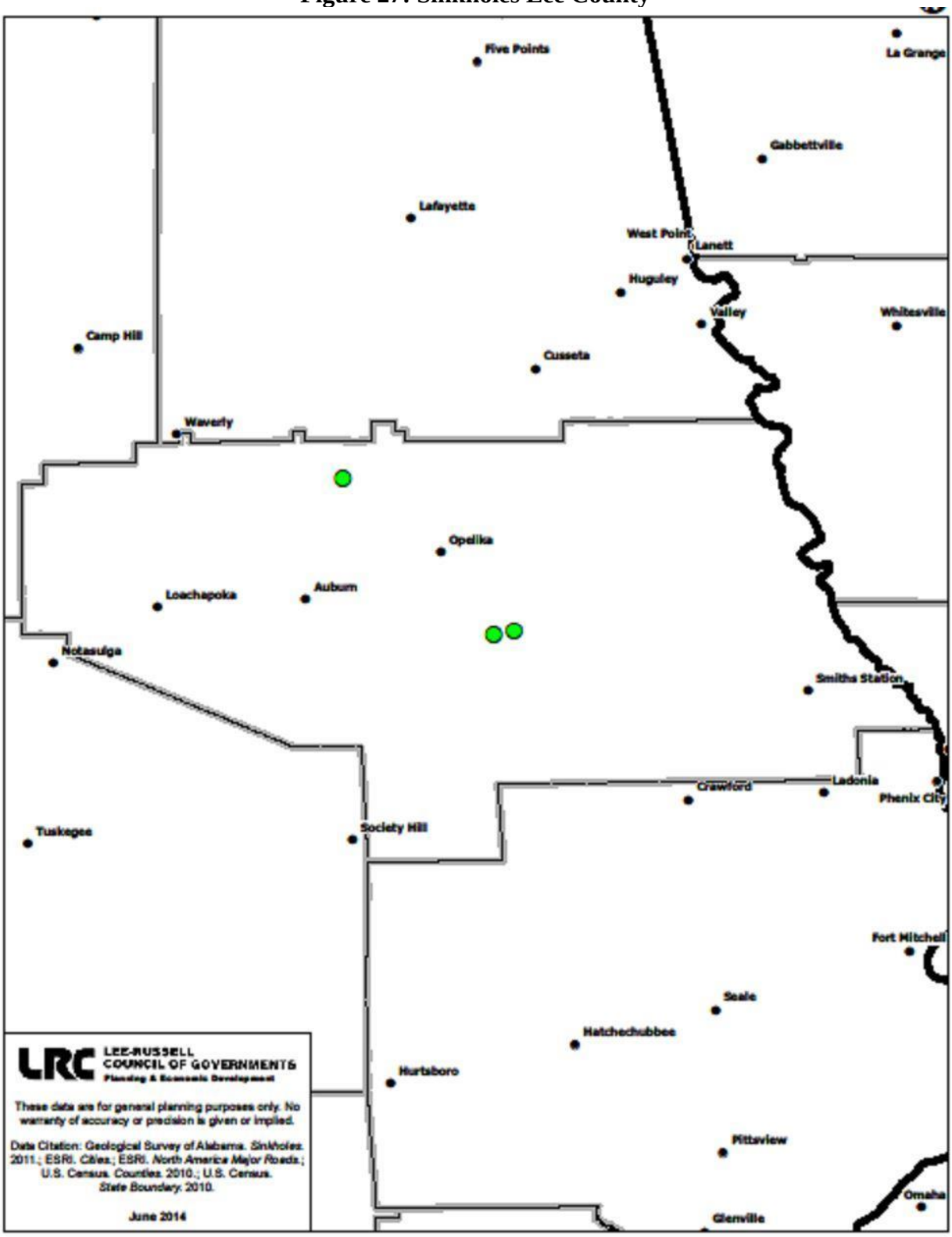
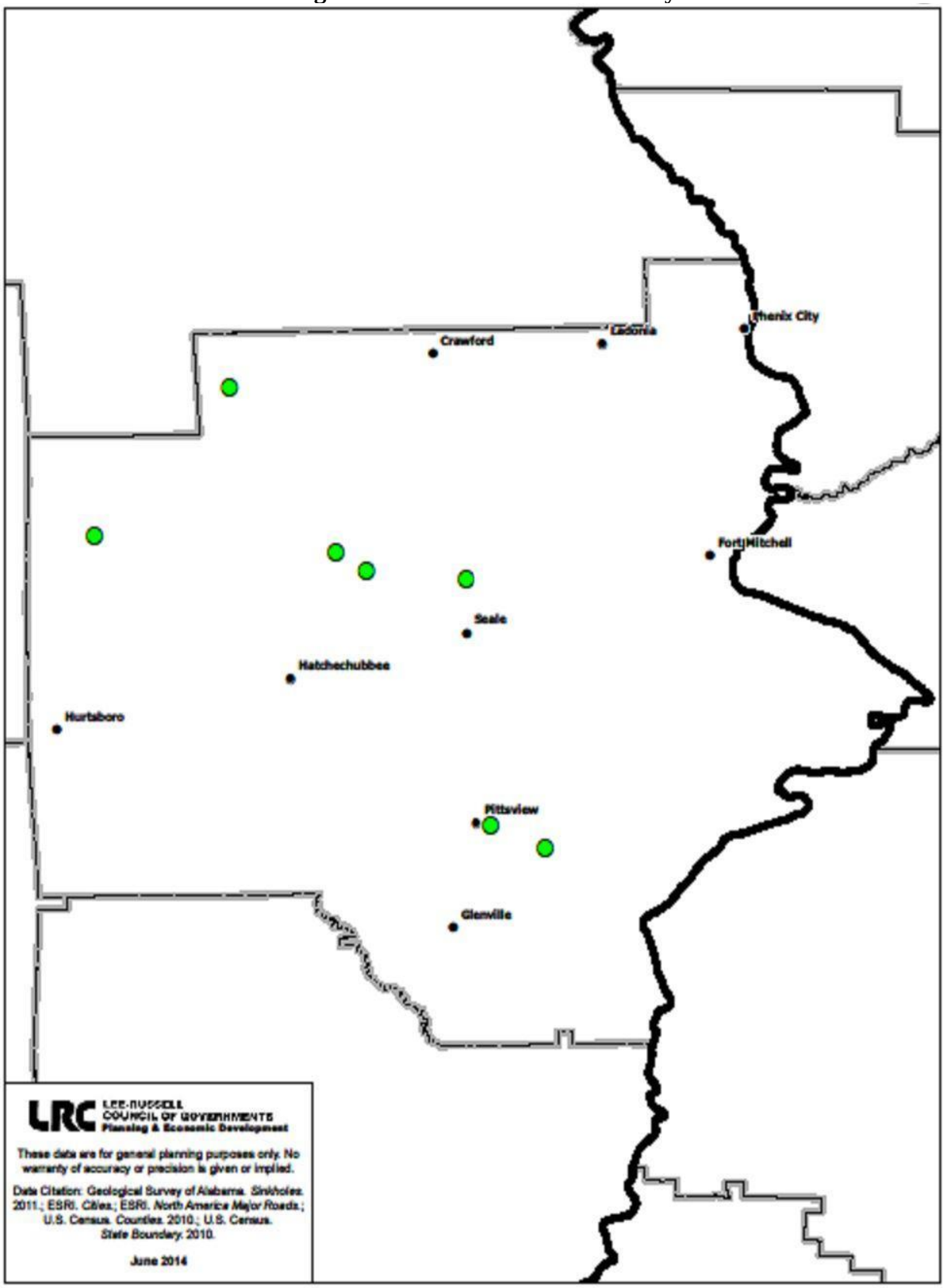


Figure 28: Sinkholes Russell County



3.12.45 Probability of Future Occurrences

Although sinkholes in the planning area are possible, they have been rated as a very low probability of occurrence. The impact has been determined to be minor.

Table 3.20: Probability of Future Occuances Sinkholes

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Sinkholes	Auburn	0	13	0*
Sinkholes	Opelika	0	13	0*
Sinkholes	Loachapoka	0	13	0*
Sinkholes	Smiths Station	0	13	0*
Sinkholes	Unincorporated Lee County	0	13	0*
Sinkholes	All of Lee County	0*	13	0*
Sinkholes	Hurtsboro	0	13	0*
Sinkholes	Phenix City	0	13	0*
Sinkholes	Unincorporated Russell County	0	13	0*
Sinkholes	All of Russell County	0*	13	0*

*There are no record of naturally made sinkholes

3.13 Tornadoes

3.13.1 Description

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 the year.

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 weather event. According to NOAA, 13 minutes is the average amount of time a person has to find a safe place from a tornado.

Tornadoes are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks 4th nationally for the number of killer tornadoes experienced, and 5th for the number of fatalities as a result of a tornado. The entire state and the Lee and Russell counties are susceptible to tornadoes. Tornadoes can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific area of tornado strikes.

3.13.2 Extent by Jurisdiction

Tornado intensity is classified using the Enhanced Fujita (EF) Scale, which is an update to the original Fujita Scale, implemented in February 2007. The EF Scale is still primarily a wind estimate indicator that is based on three-second gust derived by the levels of damage that occur during a tornado event. Table 3.21 shows the breakdown of the Enhanced Fujita Scale, and Table 3.20 shows the extent of damage all jurisdictions can receive.

Table 3.20 Tornado Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tornado	All jurisdictions can be impacted by tornadoes. Tornadoes can be as minor as EF0, which would product limited damage such as broken branches, minor roof damage, small or trees were blown down. These events can be as deadly and dangerous as a EF5, which would produce total destruction of foundational homes, trees snapped/uprooted, or total destruction of vehicles.

Table 3.21: Enhanced Fujita Scale

F Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	Damage Description
0	45-78	0	65-85	Light Damage: Some damage to chimneys; tree branches broken off; shallow-rooted trees pushed over; sign boards damaged.

1	79-117	1	86-110	Moderate Damage: The lower limit is the beginning of hurricane wind speed. Roof surfaces peeled off; mobile homes pushed off foundations or overturned; moving autos pushed off roads.
2	118-161	2	111-135	Considerable Damage: Roofs torn off from houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
3	162-209	3	136-165	Severe Damage: Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown; large missiles generated.
4	210-261	4	166-200	Devastating Damage: Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown; large missiles generated.
5	262-317	5	Over 200	Incredible Damage: Strong framed houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through air in excess of 100 yards; trees debarked.

Source: NOAA, NWS, Weather Forecast Office Norman, Oklahoma, Enhanced Fujita Scale

3.13.3 Previous Occurrences and Impact

According to the National Centers for Environmental Information, Storm Events Database, since 1996 there have been 51 documented tornado events in the Lee and Russell counties, resulting in 23 fatalities and 116 injuries. Over $13 million were reported in estimated property damage; this monetary figure does include the most recent tornado event which occurred on March 3, 2019. There have been 16 F2/EF2 tornadoes, 6 F3/EF3 tornadoes, and the March 3, 2019 tornado was classified as an EF4. Please refer to Table 3.23 to see how Lee and Russell counties were impacted by tornadoes. The following are examples of how tornadoes can impact Lee and Russell counties when a tornado hits based on previous occurrences.

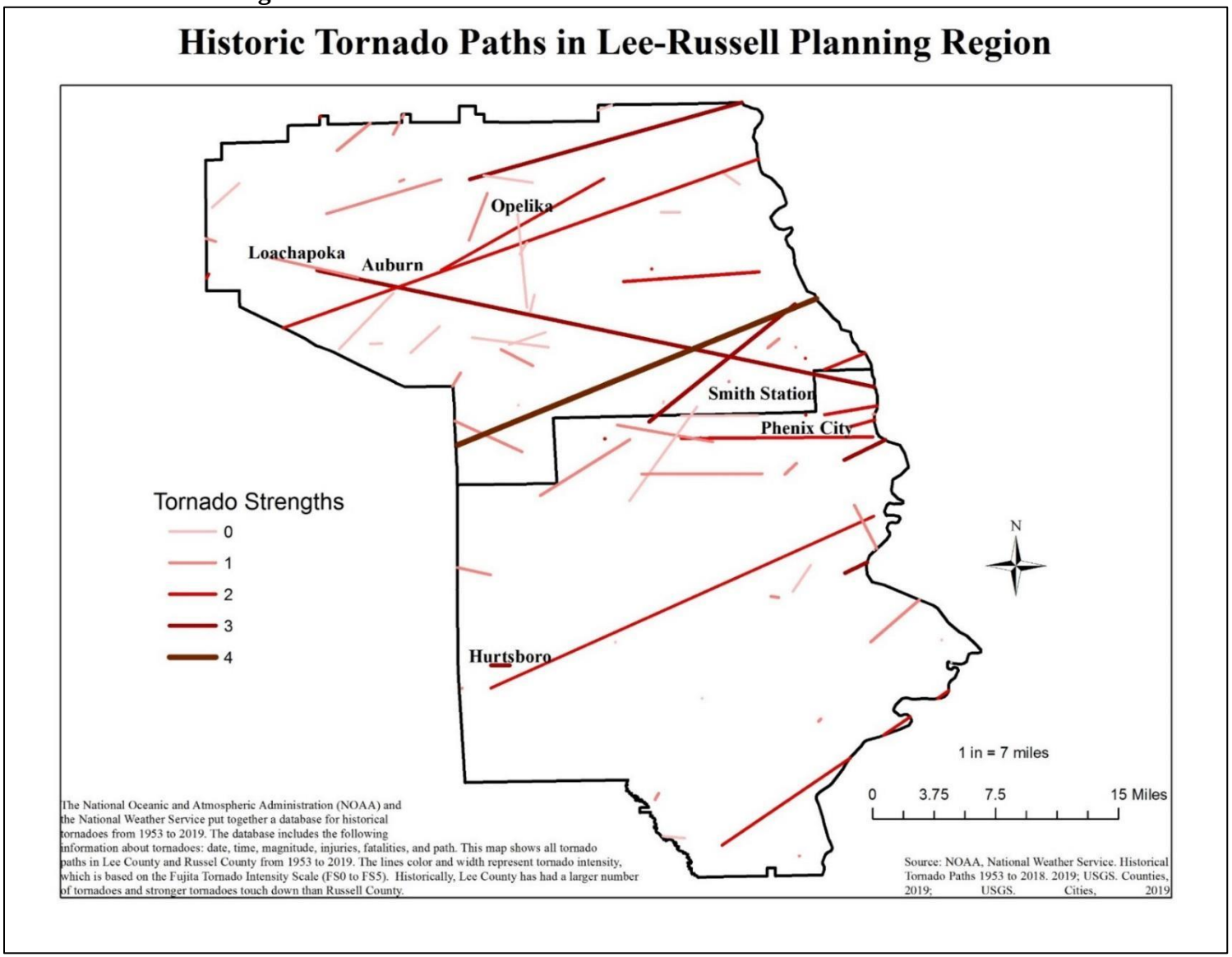
On February 28th, 2009 an EF/2 tornado touched down in unincorporated Lee County that caused a path of destruction that was 8.29 miles long and 500 yards wide. The tornadoes started in Southwest of Lee County with winds up 130 mph. While the tornado was on the move it would destroy 6 manufactured homes, 4 built homes, and 2 businesses, as well as damage 17 homes and 1 school. By the end of this storm, 3 injuries would be reported with one person needing hospitalization, and create $1,000,000 in property damages.

On April 10th, 2009 an EF/2 tornado touched down in Phenix City near 22nd Ave and 17th street and would continue to towards the southern portion of the city until it crossed the Chattahoochee River. When this tornado was finished it would minor roof damage was reported along the 1.47-mile path.

A long traveling EF/1 tornado crossed over into Lee County on 11/16/2011 near Lee County Road 3 and moved northwest toward the city of Auburn resulting in extensive damage to homes, manufactured homes on the west side of the city. As the tornado moved through the city damage to the Auburn High School baseball complex was reported and to homes through along the 31.38 miles path towards Lake Hardin. Two injuries were reported, one woman and one child, after a tree fell on their trailer. The tornado caused $4,000,000 in damages in Lee County.

EF/3 tornado on April 29th, 2014 touched down by County Line Road in Lee County. The tornado traveled 11.43 miles with max winds of 140 mph and destroyed 6 manufactured homes, 3 wooden framed homes, and over 20 homes sustained minor damages. Sadly thirteen people would be injured by the time the tornado was finished with its destruction. On March 3rd, 2019 Lee County would hit by the largest and deadliest tornado to hit the county. This tornado was classified as an EF/4 by National Weather Service in Birmingham with maximum winds of 170 mph. The deadly tornado started in Macon County and crossed into Lee County near Lee County Road 812 and would travel on a northeast track. The storm would collapse the cinder block walls of a church as it continued to intensify. Once it reached peak intensity, south of Lee County Road 36 and Lee County Road 39, the tornado destroyed homes, manufactured homes, snapped and uprooted trees, overturned automobiles, stripped exterior walls of homes. The tornado moved through the town Smiths Station and would cross over the Chattahoochee River into Georgia. The Red Cross would report at least 225 homes were completely destroyed and 133 had sustained major damage. By the end of this horrible tornado, twenty-three persons would lose their lives due to this tornado, four of whom were children.

Figure 29: Tornadoes in Lee and Russell Counties



3.13.4 Probability of Future Occurrences

All jurisdictions in the Lee-Russell Planning Area are vulnerable to tornadoes. Based on historical data, the annual probability of a tornado event has been deemed high. The impact of tornadoes in this region is identified as Catastrophic.

Table 3.22 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Tornado	Auburn	3	13	0.23
Tornado	Opelika	4	13	0.307
Tornado	Loachapoka	2	13	0.15
Tornado	Smiths Station	4	13	0.307
Tornado	Unincorporated Lee County	22	13	1.69
Tornado	All of Lee County	30	13	2.3
Tornado	Hurtsboro	0	13	0
Tornado	Phenix City	0	13	0
Tornado	Unincorporated Russell County	13	13	1.00
Tornado	All of Russell County	17	13	1.31

Source: National Weather Service, Storm Event Database, 2020)

Table 3.23: Annual Tornado Summary – Lee-Russell Planning Area

Year	Tornado	Fatatilitie	Injuries	Property Damage	Crop Damages	F0/EF0	F1/EF1	F2/EF2	F3/EF3	F4/EF4	F5/EF5
1996	0	0	0	$ -	$ -	0	0	0	0	0	0
1997	1	0	0	$ 12,000	$ -	1	0	0	0	0	0
1998	2	0	0	$ -	$ 2,000	2	0	0	0	0	0
1999	0	0	0	$ -	$ -	0	0	0	0	0	0
2000	0	0	0	$ -	$ -	0	0	0	0	0	0
2001	0	0	0	$ -	$ -	0	0	0	0	0	0
2002	0	0	0	$ -	$ -	0	0	0	0	0	0
2003	0	0	0	$ -	$ -	0	0	0	0	0	0
2004	1	0	0	$ 28,000	$ -	1	0	0	0	0	0
2005	2	0	0	$ 35,000	$ -	2	0	0	0	0	0
2006	0	0	0	$ -	$ -	0	0	0	0	0	0
2007	3	0	0	$ 108,000	$ -	1	2	0	0	0	0
2008	1	0	4	$ 120,000	$ -	0	0	1	0	0	0
2009	11	0	6	$ 2,132,000	$ -	2	7	3	0	0	0
2010	0	0	0	$ -	$ -	0	0	0	0	0	0
2011	1	0	2	$ 4,000,000	$ -	0	1	0	0	0	0
2012	1	0	0	$ -	$ -	1	0	0	0	0	0
2013	1	0	0	$ -	$ -	1	0	0	0	0	0
2014	3	0	13	$ -	$ -	0	2	0	1	0	0
2015	3	0	0	$ -	$ -	1	2	0	0	0	0
2016	10	0	0	$ -	$ -	7	3	0	0	0	0
2017	8	0	0	$ -	$ -	5	3	0	0	0	0
2018	2	0	0	$ -	$ -	2	0	0	0	0	0
2019	1	23	91	$ 4,600,000	$ -	1	1	0	0	1	0
Total	51	23	116	$ 11,035,000	$ 2,000	27	21	4	1	1	0

Source: NOAA, National Centers for Environmental Information, Storm Events Database, Lee & Russell County, 1996-2019.

3.14 Tropical Depression/ Tropical Storm / Hurricane

3.14.1 Description

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 Strom: A tropical cyclone with maximum sustained winds of 39-73 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 are 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 rotating low-pressure weather system that has organized thunderstorms with constant wind speeds of 74 mph. At the center of a hurricane is an eye, which is a peaceful break from the storm. As a hurricane approaches shores, the sky will darken, winds will pick up, and the water will be pushed inland. Once a hurricane moves onto land it will quickly weaken due to the lack of access to warm water, which is the energy source of the storm. Since Lee and Russell counties are hundreds of miles from the Atlantic Ocean or the Gulf of Mexico, these jurisdiction are not at have only expired tropical storms or tropical depressions because hurricanes cannot maintain their strength this far inland.

Historically Lee and Russell counties have never been hit by a hurricane, only the degraded remnants of a hurricane, tropical storm, or tropical depression, have hit both Lee and Russell counties. All jurisdictions in Lee and Russell are susceptible to the occurrence of sustained high heavy rainfall, and tornadoes that are associated with a tropical storm, or tropical depression.

3.14.2 Extent by Jurisdiction

Hurricane Intensity is classified using the Saffir-Simpson Hurricane Wind Scale, which categorizes hurricane events primarily using maximum sustained winds, but also examining barometric pressure readings and potential storm surge. This gives an estimate of the potential damage that will occur from a hurricane. The Saffir-Simpson Scale is shown in Table 3.24.

Table 3.24: Saffir-Simpson Hurricane Wind Scale

Category	Sustained Wind Speed	Type of Damage Due to Hurricane Winds
1	74-95	Very dangerous winds will produce some damage: 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	Extremely dangerous winds will cause extensive damage: 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	Devastating damage will occur: Well-build framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156	Catastrophic damage will occur: 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.
5	157 or higher	Catastrophic damage will occur: 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.

Source: National Weather Service National Hurricane Center (2014)

The following table demonstrates the extent of damage all jurisdictions in Lee and Russell counties could expect if a tropical event like a tropical storm or tropical depression was to hit.

Table 3.25: Tropical Depression and Tropical Storm Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tropical Depressions/ Tropical Storms/ Hurricanes	A tropical storm with the maximum sustained surface winds ranging from 39-73 mph or a Category 1 (or higher) hurricane with maximum sustained winds 74 mph (up to +157 mph) will produce damage to homes, persons, utilities, close roads/bridges, structures, crops, and timber. These events can also bring localized flooding.

3.14.3 Previous Occurrences and Impact

According to NCDC/NOAA historical records, there have been six documented Tropical Depressions/Tropical Storms that have impacted the Lee-Russell Region, not including Hurricane Opal which resulted in the State of Alabama being a presidential disaster declaration. This declaration included Lee and Russell County.

The Tropical Depressions/Storms that have impacted the area resulted in property damage of $142,000 as of the 2009 reporting. The property damage has not been listed for the 2017 and 2018 Tropical Storms that affected the area.

Tropical Depression Fay arrived in Lee and Russell counties on August 25th, 2008 bringing heavy rains, sustained winds of 35mph, wind gust up to 49 mph. Downed trees, loss of power, and downed power lines were reported alongside $15,000 in damages for Russell County and $5,000 in damages in Lee County.

Tropical Depression Ida arrived in Lee and Russell counties on September 11th, 2009, resulting in $2,000 worth of damages in each county. Winds up to 40 mph, heavy rains, and uprooted trees were reported.
Hurricane Irma brought sustained winds of 30 to 45mph with strong wind gust and heavy rain on September 10th, 2012. While Lee and Russell counties report $0 in damages there were reports of downed trees, loss of power, downed power line, and roads blocked.
Hurricane Michael hit Russell County as degraded to a Tropical Storm on October 10th, 2018. This storm brought heavy rains and winds up to 45mph. Zero monetary or structural damages were reported in Russell County, but many downed trees and power lines were reported.

3.14.4 Probability of Future Occurrences

The Lee-Russell Region is vulnerable to the effects of any tropical events as the storm moves inland. Typically, tropical events will be downgraded to tropical storms and tropical depressions by the time the storm arrives in the region. Tropical Depressions and Tropical Storms have a low to medium probability of occurring, however, the impact in the region has been deemed to be Critical.

Table 3.25: Probability of Future Occurrences Hurricanes

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Tropical Depressions/ Tropical Storms/ Hurricanes	Auburn	3	13	0.23**
Tropical Depressions/ Tropical Storms/ Hurricanes	Opelika	3	13	0.23**
Tropical Depressions/ Tropical Storms/ Hurricanes	Loachapoka	3	13	0.23**
Tropical Depressions/ Tropical Storms/ Hurricanes	Smiths Station	3	13	0.23**
Tropical Depressions/ Tropical Storms/ Hurricanes	Unincorporated Lee County	3	13	0.23**

Tropical Depressions/ Tropical Storms/ Hurricanes	All of Lee County	3	13	0.23**
Tropical Depressions/ Tropical Storms/ Hurricanes	Hurtsboro	4	13	0.307**
Tropical Depressions/ Tropical Storms/ Hurricanes	Phenix City	4	13	0.307**
Tropical Depressions/ Tropical Storms/ Hurricanes	Unincorporated Russell County	4	13	0.307**
Tropical Depressions/ Tropical Storms/ Hurricanes	All of Russell County	4	13	0.307**

Source: National Weather Service, Storm Event Database, 2020)
** (Tropical Storms/ Tropical Depressions are only recorded at the county level)

3.15 Wildfires

3.15.1 Description

According to the Alabama State Hazard Mitigation Plan, 2018, a wildfire can be defined as any non-structural fire that occurs in the wild. Wildfires are uncontrolled blazes fueled by weather, wind, and dry underbrush that have the ability to burn a significant amount of land in a very short period of time. Three conditions need to be present for a wildfire to burn: fuel, oxygen, and a heat source.

A Wildland-Urban Interface fire is a fire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

Wildfires have a significant impact on the United States. Over 100,000 wildfires clear up to 5 million acres of US land every year. Wildfires have the ability to destroy everything in their path. Three distinct types of wildland fires have been defined and include: naturally occurring wildfire, human-caused wildfire, and prescribed fire. Wildfires are typically human-caused, which distinguishes them from other natural disasters.

Based on an analysis by the Alabama Forestry Commission, there are 1,350 potential wildland-urban interface communities at risk of wildfire damage in Alabama, and the number of these communities is projected to increase with time, according to the Alabama HMP. According to the Wildland-Urban Interface Map in Alabama, almost the entirety of Lee County and a significant portion of Russell County are located in the identified areas.

3.15.2 Extent by Jurisdiction

The magnitude of wildfire events is often classified as total number of acres burned and destructive impacts to people and property, including house fires and casualties. These elements are greatly dependent on other factors, such as weather conditions, available fuel, topography, and existing wildfire mitigation capabilities.

Table 3.26: Wildfire Extent by Jurisdiction

Jurisdiction	Wildfire
Lee County	Property and timber damage over large acreage (100+)
City of Auburn	Property and timber damage over very small acreage (5+)

Town of Loachapoka	Property and timber damage over very small acreage (5+)
City of Opelika	Property and timber damage over very small acreage (5+)
Town of Smiths Station	Property and timber damage over very small acreage (5+)
Russell County	Property and timber damage over large acreage (100+)
Town of Hurtsboro	Property and timber damage over very small acreage (5+)
Phenix City	Property and timber damage over very small acreage (5+)

3.15.3 Previous Occurrences and Impact

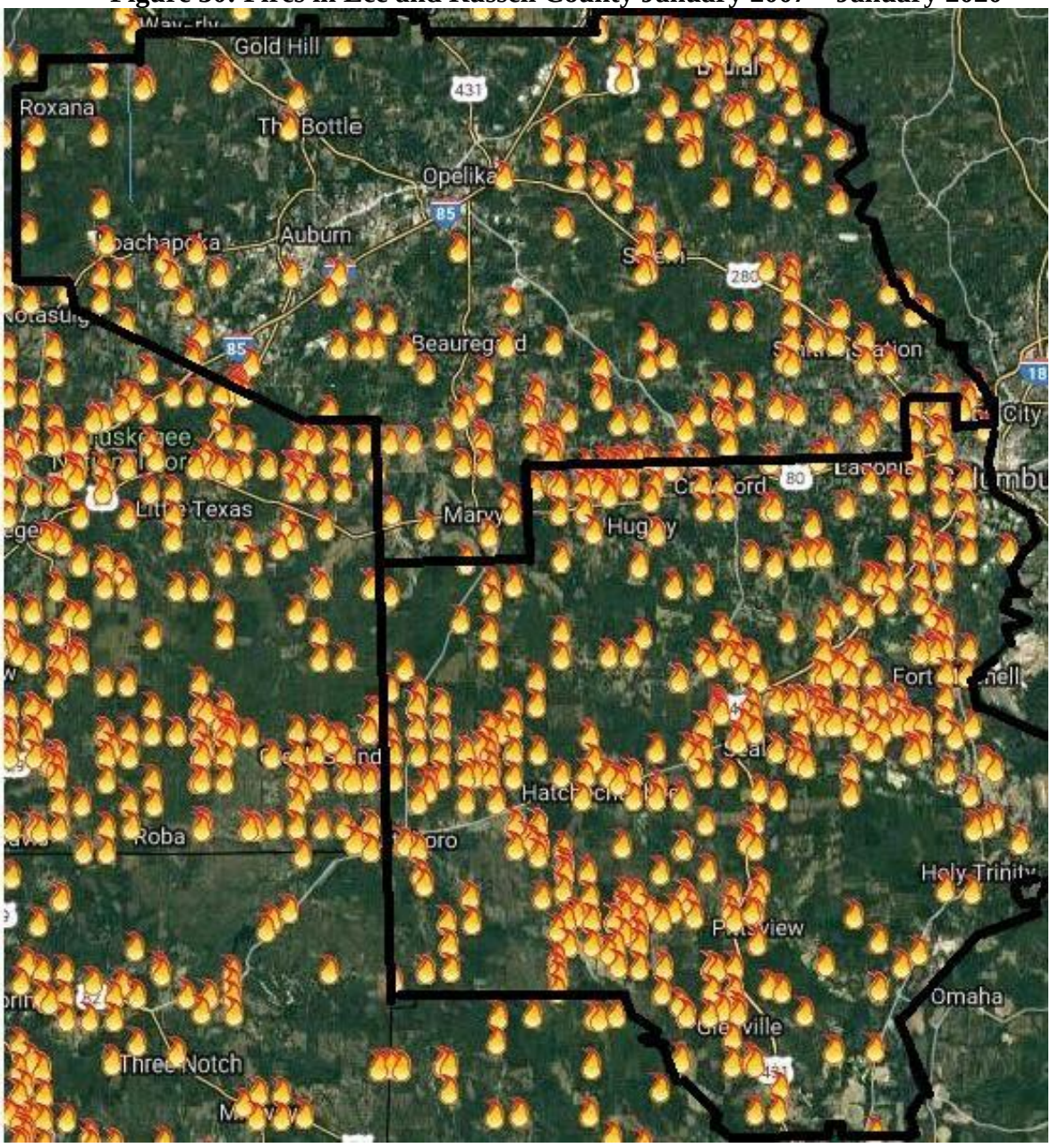
Over the past 13 years, Lee County has recorded 225 fires, affecting 3,700 acres and Russell County has had 502 fires affecting 10,280 acres. Statistics from the Alabama Forestry Commission indicate there are 66 wildfires annually in this region with an average of 1,075 acres burned per fire. The most common cause of wildfires in this region is debris burning by residents.

228 acres burned in Lee County after a fire broke out on April 11th, 2018, which burned until it was contained on April 16th, 2018. This was the largest fire reported in Lee County since 2006.

On March 24th, 2011 a large fire was reported in Russell County. This fire burned through 809 acres and was contained on March 24th, 2011. This is the largest fire reported in Russell County since 2006.

Due to the lack of data collection on fires, the details of these fires are not available.

Figure 30: Fires in Lee and Russell County January 2007 – January 2020



Source: Alabama Forestry Commission, 2019

3.15.4 Probability of Future Occurrences

The jurisdictions in the Lee-Russell Region are vulnerable to this hazard. The Alabama Forestry Commission classifies the planning area as a range of low fire occurrence to Extreme as indicated on the map. The overall probability of this hazard risk has been determined to be very low to medium depending upon the amount of urbanization. Although the Wildland-Urban Interface is high at these same locations. The impact has been deemed to be minor/limited.

Table 2.26: Probability of Future Occurrences Wildfires

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Wild Fires	Auburn	NA	13	NA**
Wild Fires	Opelika	NA	13	NA**
Wild Fires	Loachapoka	NA	13	NA**
Wild Fires	Smiths Station	NA	13	NA**
Wild Fires	Unincorporated Lee County	NA	13	NA**
Wild Fires	All of Lee County	227	13	17.54
Wild Fires	Hurtsboro	NA	13	NA**
Wild Fires	Phenix City	NA	13	NA**
Wild Fires	Unincorporated Russell County	NA	13	NA**
Wild Fires	All of Russell County	508	13	38.69

Source:(**Alabama Forestry** Commission, Lee and Russell Counties, 2020)

** (This data is not recorded by the Alabama Forestry Commission by jurisdiction, but only at the county level)

3.16 Winter Storms

3.16.1 Description

Winter storms normally cause heavy amounts of frozen precipitation (snow, freezing rain, and ice), windy conditions, and extreme cold. The effect of winter storms on a community depends on how equipped the community is to handle the storm, as winter storms can cause owner outages, transportation problems, and collapsed roofs on structures. These events may make roads impassable and disrupt power. Loss of communications is a common occurrence during a severe winter storm. In Alabama, a snowfall of two inches or more is considered heavy snow, especially the further south you get in the state at the storm southern end of the state.

The related emergencies include hypothermia and other cold-related maladies. Fire duet to improvised heating apparatuses is common, as is carbon monoxide poisoning. There usually is sufficient warning for the public to take protective steps. The facilitation of emergency heating and food is critical, with emergency heating centers and the rescuing of stranded motorists becoming priorities. These events are typically short-lived in the Lee-Russell Planning Area.
The immediate threat from a winter storm, heavy snow or ice storm is traffic accidents, people trapped in their homes without supplies or hear, power outages, frozen water lines, and physical overexertion. The long-term damages of a multiple-day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages.

Areas in central Alabama receive winter storms infrequently and have only minor recorded damages. The entire Lee-Russell Region is susceptible to a winter storm if a storm was to develop in the region.

3.16.2 Extent by Jurisdiction

Winter storms may have varying effects on the planning area dependent upon the severity and length of time. There is limited documentation on winter storms in the Lee-Russell Planning Area because these events do not take place annually.
Table 3.27: Winter Storms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Winter Storms	Snow (six or more inches) and ice cause damage to homes, utilities, car accidents, close roads/bridges, and down trees.

3.16.3 Previous Occurrences and Impact

Since 1996, there have been four documented heavy snow events, two ice storm events, four winter storm events, two winter weather events. The property damage estimated at $55,000, and crop damage at $40,000. The heaviest snowfall recorded in the region was in 1973 when 8.5 inches of snow fell in Lee County.

On January 27th 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 a one-quarter inch were reported

countywide. 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.

On January 17th, 2018 a 2 to 3.5 inches of snow fell on Russell and Lee County. No damages or injuries were reported.

3.16.4 Probability of Future Occurrences

Based on previous episodes of winter storms in the Lee-Russell Region, the probability of future storms is relatively low/medium. However, the impact can be critical based on historical events.

Table 3.28: Probability of Future Occurrences Winter Storms

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Winter Storms	Auburn	4	13	0.31**
Winter Storms	Opelika	4	13	0.31**
Winter Storms	Loachapoka	4	13	0.31**
Winter Storms	Smiths Station	4	13	0.31**
Winter Storms	Unincorporated Lee County	4	13	0.31**
Winter Storms	All of Lee County	4	13	0.31**
Winter Storms	Hurtsboro	4	13	0.31**
Winter Storms	Phenix City	4	13	0.31**
Winter Storms	Unincrporated Russell County	4	13	0.31**
Winter Storms	All of Russell County	4	13	0.31**

Source: National Weather Service, Storm Event Database, 2020)
** (Winter storms are only recorded at the county level)

3.17 TECHNOLOGICAL AND HUMAN-CAUSED HAZARDS

The Lee and Russell counties have a susceptibility to technological and human-caused hazards. General discussions of hazards that may affect the area are described in the subsections below.

3.17.1 Structural Fire

The building codes and zoning ordinances prevent and control structures in most jurisdictions. Structures in commercial districts are the most vulnerable to fire separate from wildfires. This vulnerability can be attributed to more urban building patterns where these structures are located. Rural jurisdictions are typically served by volunteer fire departments, which continuously improve the services to the community. Larger jurisdictions in the planning area are better equipped to deal with responding to structural fires.

3.17.2 Hazardous Material

A hazardous material is handled at some industrial and commercial businesses located in the planning area, which is an ongoing hazard due to the transportation of material. An accident with hazardous material could have negative impacts on the nearby areas. This section will be updated when more information regarding hazardous material is received

3.17.3 Terrorism

FEMA classifies terrorism as using illegal force or violence against persons or property for the purpose of intimidation or ransom, performed by a domestic or international group. The threat of terrorism places certain facilities at greater risk, including government facilities, high profile areas, and utility infrastructure. Please refer to the examples below about different types of terror acts.

Biological or Chemical Attack: Liquid or other containments that can be dispersed to cause causalities and negative psychological impact

Conventional Attacks: Active shooter, an individual or small group, which actively engaged in killing or attempting to kill people in a populated area.

Cyber Attacks: Normally used to gain information or negatively affect operations fuel to intrusion into a computer system or server.

Hostage Situation: Holding people against their will in order to achieve demands, which can be on the realm from international political situations to local domestic situations.

State and local agencies regularly conduct exercises and plan for these hazards.

3.17.4 All Hazard-All Emergency Mutual Aid Assistant Memorandum of Agreement

The agreement purpose was the "create a systematic approach to expedite local and regional mutual aid assistance, share information, and rapidly share and sustain emergency aid and resources between U.S. Army Fort Benning, local governmental bodies, and regional energy responders when organic resources and capabilities are exceeded by the emergent situation, or when non-exigent circumstances have developed requiring pre-coordinated assistant."

The agreement was made between U.S. Army Installation Management Command, Fort Benning, GA; U.S. Army Medical Command, Fort Benning, GA; City of Auburn, AL; City of Columbus, GA; City of Opelika, AL; City of Phenix City, AL; County Commissions of Chattahoochee County, GA; County Commissions of Harris County, GA; County Commissions of Marion County, GA; County Commissions of Talbot County, GA; County Commissions of Troup County, GA; County Commissions of Lee County, AL; County Commissions of Russell County, AL; Chattahoochee County Sherriff, GA; Harris County Sherriff, GA; Marion County Sherriff, GA; Muscogee County Sherriff, GA; Talbot County Sherriff, GA; Taylor County Sherriff, GA; Troup

County Sherriff, GA; Lee County Sherriff, AL; Russell County Sherriff, AL; East Alabama Medical Center, Opelika, AL; Columbus Airport, GA; and Department of Public Health, Columbus, GA.

4. Vulnerability

The stakeholders for both Lee and Russell counties considered all the natural hazards that could affect the citizens and property in Lee and Russell counties. The stakeholders used personal and professional experience, internet information, and risk assessment reports, past occurrences, public input, and other resources to identify hazards that are most likely to affect each jurisdiction in Lee and Russell counties.

4.1 Jurisdictional Vulnerability by Hazard

This section focuses on 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.

4.1.1 Dams

In Lee County, six dams' hazard potential is classified as high, Ogletree Lake Number 1 Dam, Sougahatchee Lake dam, Wilmore Lake dam, Kinnett Dam, Prather Dam, and Mitchell Dam. In the event that one of these dams failed the areas, persons, infrastructure, and buildings /could be impacted: Southeastern portion City of Auburn, Northern Opelika, Eastern Phenix City, Eastern portion of City of Auburn near Duck Samford Park, portions of Southern and Western Unincorporated Lee County.

In Russell County, four dams' hazard potential is classified as high, Wilson Pond Dam, Moon Lake Dam, Knowls Pond Dam, and Asbury Dam. In the event that one of these dams failed the areas, persons, infrastructure, and buildings /structures could be impacted: Southern Phenix City, Southwest Phenix City, Central Phenix City below Highway 80, and Eastern unincorporated Russell County.

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any jurisdiction in Lee or Russell counties. This information will be provided in the next Hazard Mitigation Plan in five years.

4.1.2 Drought

There is not a risk of losses for droughts based on a calculation from the historical record because zero damages have been reported for Lee or Russell counties. The lack of evidence does not dismiss the risk associated with drought since qualitative records exist to show evidence of significant crop losses and risk to public water supply during drought. Drought could be potentially damaging to local agriculture and could place the public at risk through water shortages in all jurisdictions in northwest Alabama. A significant drought could impact the drinking water supply from the following sources: Lake Ogletree, well water/groundwater, Saugahatchee Lake, Halawakee Creek, and Chattahoochee River. The sources serve the following jurisdictions: the City of Auburn, the City of Opelika, Town of Loachapoka, Town of Hurtsboro, Town of Smiths

Station, Phenix City, Unincorporated Lee County, and Unincorporated Russell County. A drought can potentially deplete water levels for any of the jurisdiction (public water system or private well) resulting in a water shortage for the communities, which would impact all 221,722 person water supply or private wells. If agricultural lands and crops fail due to drought it would impact 0.6% of Lee County's and 0.7% of Russell County's Industry defined as Agriculture, Forestry, Fishing and Hunting by the NAICS. The livestock and agricultural lands are mostly in unincorporated portions of Lee and Russell counties.

A Drought can potentially impact all 221,722 residents, living in any jurisdiction in Lee and Russell counties. The impacts felt by the communities would be as followed: diminished ground and surface water; loss of crops; decrease in drinking water supply; private and public wells dry up. A drought can lead to shortages of water, strain public utilities, and major agriculture losses. The risk of drought is low to medium.

4.1.3 Earthquakes

While damage from a major earthquake could be catastrophic, the risks are very low in Lee and Russell counties. According to the USGS historical records, zero earthquakes have been reported in Lee or Russell counties.

Earthquakes can potentially impact all 221,721 residents and 84,065 structures in Lee and Russell counties. A significant earthquake is highly unlikely, but despite being improbable one could result in widespread damage and destruction. Since the overall risk of an earthquake is very low, the risk to lives and buildings minimal. While the risk is very low, it is important that the mitigation practices for earthquakes compliment other mitigation strategies and should be reviewed and incorporated into the mitigation plan.

The losses from earthquakes cannot be calculated based on the historical recorder since there have been zero earthquakes recorded in Lee and Russell counties. This evidence does not dismiss the risk associated with earthquakes. The probability of any type of losses from an earthquake in any jurisdiction in Lee and Russell counties is very low.

4.1.4 Extreme Temperature

Extreme temperatures in Lee and Russell counties can impact all 221,722 residents. Prolonged periods of high or low temperatures are not likely to impact the structures and facilities. However, these events might work in tandem with droughts or winter storm events. The probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of a cold event is rated as low to critical largely based on duration these events in the region have been short-lived. The following persons, industry, and assets are vulnerable to extreme temperatures in the City of Auburn, the City of Opelika, Town of Smiths Station, Town of Loachapoka, the City of Phenix City, Town of Hurtsboro, and unincorporated Lee and Russell counties: elderly population (75+), children, water sources (public and private), livestock/animals, agricultural products, persons living in manufactured homes, a person under the poverty line, bridges (extreme cold), fisheries, forestry, as well as utilities such as power lines and water lines/pipes (extreme cold.). It necessitates a review of mitigation planning techniques to avoid injury to vulnerable populations, in particular the elderly population.

4.1.5 Flooding

Flooding is localized to areas close to surface water such as along the Chattahoochee River, any major tributaries, or any additional areas with poor drainage. Flood hazard areas are most readily identifiable when they appear on a flood hazard map produced by FEMA. However, flooding can impact a larger area than the properties shown of the FEMA Flood maps when unpredictable weather patterns occur or changes to drainage features take place In Lee County, there are 480 National Flood Policies. Therefore, at least 480 parcels (141 Auburn, 181 unincorporated Lee County, 32 Opelika, and 12 Smiths Station) are at risk in Lee County to flooding, but this number does not reflect those parcels and persons that are vulnerable to flooding but are not a part of the NFIP. There are 115 NFIP policies in Russell County. Based on the FEMA Flood Map persons living in flood zones in Phenix City, Hurtsboro, and Unincorporated Lee and Russell counties are the most at risk compared to those living in the flood zones in the City of Auburn, City of Opelika, and the town of Smiths Station.

Table: 4.1 Repetitive Loss Properties Lee and Russell Counties

State	County Name	Comm Nbr	Community Name	Occupancy	FMA RL Properties	Insured FMA RL Properties	Total Paid in Claims on FMA RL Properties	NFIP RL Properties	Insured NFIP RL Properties	Total Paid in Claims on NFIP RL Properties
AL	LEE COUN	LEE COUN	SINGLE FM	-	-	-	$ -	5	1	$ 50,229
AL	LEE COUN	10144	AUBURN, (	SINGLE FM	-	-	$ -	3	1	$ 25,827
AL	LEE COUN	10184	PHENIX CI	SINGLE FM	-	-	$ -	2	-	$ 24,403

In the City of Auburn, the floodplains are located throughout the entire city along creek and streams. These floodplains are near residential homes, commercial areas, and roads (Donahue Drive, Burke Place Boykin Street, East Glenn East University Marion Circle, Samford Ave Sanders Street, White Street, and Bragg Street). The flooding that occurs in Auburn is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain in an urban area with lots of impervious surfaces. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat the flood. The City of Auburn's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or stormwater management. There are no known critical facilities located in a floodplain.

In the City of Opelika, the floodplains are located towards the western and southeast portions of the cities along creek and streams. These floodplains are near residential homes, commercial areas, and roads (Columbus Pkwy, North Uniroyal Rd Magazine Ave., Pepperall Pkwy, 20th St., Saugahatchee Lake Road). The flooding that occurs in Opelika is associated with creeks and streams overflowing their banks. When flooding occurs residential homes, businesses, roads, utilities, and bridges are vulnerable. Particularly those people in poverty manufactured homes, and

the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The City of Opelika's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or stormwater management. There are no known critical facilities located in a floodplain.

Smiths Station has a very small little floodplain compared to other jurisdictions in Lee County. The floodplain is towards the western and southern portions of town. The flooding that occurs in Smiths Station is associated with creeks and streams overflowing their banks. When flooding occurs residential homes, businesses, roads, utilities, bridges, and recreational facilities are vulnerable. Particularly those persons in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Smiths Station's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or stormwater management, which can place a financial strain on the town and the local economy.

The unincorporated areas of Lee and Russell counties do have potions of each county that are located in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and the Chattahoochee River. When flooding occurs residential homes, businesses, roads (Lee County roads: Lee Road 325, Lee Road 298, Lee Road 500, and Mallard Creek Subdivision Russell County road: Carson Drive), utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development stormwater management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Lee and Russell counties can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process.

In Hurtsboro the floodplain goes right through the heart of the town. Persons, commercial buildings, structures, roads (Long Street and Lower Main Street), utilities, post office, Town Hall, senior center, and some residential housing are all vulnerable to flooding. This flooding is associated with poor stormwater management and creeks that run through the town. A flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Hurtsboro's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town has to continuously fund projects that focus on fixing roads, fixing stormwater management, and bridges that have been damaged from flooding.

Phenix City floodplain goes through a portion of the city, but the majority of it goes along the eastern border at the Chattahoochee River. When flooding occurs residential homes, businesses, roads (Railroad Street, Riverfront Area, 9th Place, 8th Street, 7th Street, and Lake Subdivision), structures, such as the river walk, located near low lying areas near creeks, rivers, and tributaries are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to

recover, to relocate, or to evacuation. Phenix City's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or stormwater management, and could create unforeseen financial issues for the city and economy.

The risk associated with flooding was assessed to be medium for Lee County due to the limited damage reported in each jurisdiction and high for Russell County due to the extensive damages reported in Hurtsboro and Phenix City. Since floods cause significant damage to large numbers of structures, it is necessary to improve and continue the mitigation action plan to address potential losses.

Loachapoka does not participate in the NFIP because there are zero floodplains in the town, which means there are not any special flood hazard areas.

4.1.6 Hail

Hail can impact all 221,722 residents living and all 76,040 structures in Lee and Russell counties. The following persons, industry, and assets are vulnerable to hail in the City of Auburn, the City of Opelika, Town of Smiths Station, Town of Loachapoka, the City of Phenix City, Town of Hurtsboro, and unincorporated Lee and Russell counties: vehicles (damage), home roofs (damage/destruction), windows (break/crack), person (injury or kill), livestock/animals (injury or kill), damage to crops and timber, manufactured homes, buildings walls (not brick), and power lines. The vulnerability to hail is sporadic due to the nature of damages incurred from hail, such as roofs, windows, homes, and automobiles. The overall risk from hail is low to medium, but due to the community's capacity to implement mitigation strategies against hail is nearly impossible. Protection is largely limited to property design, maintenance, and insurance, which are individual responsibilities. Unfortunately, due to the isolation of hail events, it is not feasible to conduct through public education and community investments. Therefore, it is recommended that no mitigation strategies are presented for hail events.

4.1.7 Landslides

Are not covered in Phase 1 of the AEMA Division D Hazard Mitigation Plan.

4.1.8 Lightning

Lightning strikes can impact all 221,722 residents living, all 76,040 structures in Lee and Russell counties. Vulnerability to lightning is limited to scattered injury or death to persons, and damages to properties such as homes, electronics, structures, and data losses. The following persons, industry, and assets are vulnerable to lightning in the City of Auburn, the City of Opelika, Town of Smiths Station, Town of Loachapoka, the City of Phenix City, Town of Hurtsboro, and unincorporated Lee and Russell counties: elderly persons, children, persons outside during lightning events, power lines, timber/trees, manufactured homes, crops, homes, structures, data not backed up, livestock/animals, electronics plugged into an outlet (computers, household appliances, or data servers), and any person in or on water (pool or boat). The overall risk from lightening is medium, it is necessary to review potential and current mitigation strategies due to how common and highly destructive lightning can be to a community.

4.1.9 Sinkholes

Sinkholes are a minor threat to all jurisdictions Lee County and Russell because these sinkholes are typically manmade. Since sinkhole events are sporadic and rare, these events can potentially cause damage to life or property on a small scale. Homes, manufactured homes, structures, roads, utilities, persons, livestock /animals, and vehicles in all jurisdictions could be vulnerable to a manmade sinkhole. Due to the lack of data on sinkholes in the Lee and Russell counties at this time, it is not possible to know how many persons, structures, buildings, and infrastructure are vulnerable to sinkholes in each jurisdiction. However, a mitigation plan is provided for sinkholes based on the ability of local jurisdictions to encourage thoughtful land use regulation and good infrastructure design.

4.1.10 Tornadoes

All 221,722 residents living and all 76,040 structures in Lee and Russell counties are vulnerable to tornadoes. Although the location of where tornadoes take place is sporadic, losses from these tornado events can impact a wide variety of persons, assets, and infrastructure in each jurisdiction. The following persons, assets, and industry in the City of Auburn, City of Opelika, Town of Lochapoka, Town of Smiths Station, Phenix City, Town of Hurtsboro, and Unincorporated Lee and Russell counties: elderly person, children, education institutions, medical facilities, persons in vehicles, vehicles, group homes, apartment complexes, manufactured homes, power lines, timber/trees, livestock/ animals, manufacturing facilities, residential homes, dilapidated homes, buildings, structures, roofs, and Frank Plant (Power Plant in Smiths Station).

All 15,865 manufactured homes in Lee and Russell counties are at risk of tornado depression because these homes are not built to withstand winds greater than 70 mph. These homes can be toppled, walls roofs can be ripped, or the home can be completed destroyed in a tornado. Persons living in manufactured homes, elderly persons, persons living in apartment complexes, persons living in poverty, and children at home alone may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a tornado event, which can put their lives at risk. These persons are found in every jurisdiction in Lee and Russell counties. The economy is also vulnerable to tornadoes if jurisdiction is hit hard enough destroying major retail stores, residential areas, schools, major employers, or utilities. Losing these assets will take a community year to recover and lots of money, which puts negative strains on the economy and causes the local jurisdiction to lose tax revenue. The overall risk from tornadoes is high, it is necessary to review potential and current mitigation strategies due to how sudden and destructive tornadoes can be to a community.

4.1.11 Tropical Depression / Tropical Storm/ Hurricane

A tropical depression, tropical storm, or hurricane can impact all 221,722 residents living and all 76,040 structures in Lee and Russell counties. Losses from high winds, heavy rains, and tornadoes from a tropical depression, tropical storm, or hurricane can impact homes, crops, timber, and infrastructure in all jurisdictions in Lee and Russell counties. Risk tropical depression, tropical storm, or hurricane are high and require mitigating responses from all levels of government and from individuals throughout the region.

The potential areas of vulnerability during a tropical depression or tropical storm would be similar to those felt during a severe thunderstorm, flash flooding, or a tornado. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to high winds/thunderstorms in the City of Auburn, City of Opelika, Town of Smiths Station, Town of Loachapoka, the City of Phenix City, Town of Hurtsboro, and unincorporated Lee and Russell counties: elderly persons, persons driving vehicles, vehicles, manufactured homes, power lines, power, crops and timber, injury to a person, buildings constructed of wooden or vinyl, dilapidated homes/structures, vehicles, persons living below the poverty line, and windows. Each jurisdiction can have issues due to the damages that high winds and thunderstorms can cause such as roads may be closed due to debris blocking the roads, downed "live" power lines can cause injury or death to persons, loss of power, loss of working traffic signals, disrupted utilities from uprooted trees, and communication issues due to loss of power.

All 15,865 manufactured homes in Lee and Russell counties are at risk during a tropical depression or tropical storm because the building materials can suffer from severe damage due to a strong straight line. These homes can be toppled as well as walls and roofs can be ripped off if the straight-line winds are strong enough. Those people may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a high wind and thunderstorm event, which can put their lives at risk.

4.1.12 Wildfire

Wildfires are a potentially damaging hazard that is experienced in Lee and Russell counties. The areas that are closest to fuel sources such as uncleared forestland and timberland can be impacted negatively if a wildfire breaks out. While wildfires can impact all 221,722 residents living and all 76,040 structures in Lee and Russell counties. All persons living in rural areas, 25,093 homes in unincorporated Lee County and 10,347 homes in unincorporated Russell County, are at a greater risk to wildfires than those living in urban areas because of the long emergency response times and longer report times. The elderly living in each jurisdiction are vulnerable to wildfire because these persons may not be able to evacuate, or they may start the fire on accident. Timber, property, wildlife, and injury or loss of human life are all vulnerable to wildfires in each jurisdiction.

4.1.13 Winter Storm

Although winter storms are infrequent, these storms threaten all 221,722 residents living and all 76,040 structures in Lee and Russell counties. Although a catastrophic loss is unlikely, all of the jurisdictions in Lee and Russell counties are at risk from winter storms. These storms can damage structures that cannot properly bear the weight of ice and snow and can cause injury and loss of life where extended power outages and poor heating conditions may lead to exposure to the elements. The potential areas of vulnerability during the winter storm would be similar to those felt during extremely cold temperatures. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to winter storms in the City of Auburn, City of Opelika, Town of Smiths Station, Town of Loachapoka, the City of Phenix City, Town of Hurtsboro, and unincorporated Lee and Russell counties: elderly persons, utilities (water lines, power, power lines), persons driving vehicles, animals/ livestock, and trees/timber. Each jurisdiction's roads, bridges, traffic signals, and utilities can be vulnerable to winter storms if ice and/or snow accumulated in the jurisdictions. Persons living in poverty are more vulnerable to winter storms because they may not have the means to keep themselves and family members warm with or

without power. The City of Auburn has the largest population living in poverty (57,965), unincorporated Russell County has 57,108 persons, Phenix City has 35,804, unincorporated Lee County has 32,815, Opelika has 29,135, Smiths Station has 5,349, Hurtsboro has 551, and Loachapoka has 251 people in poverty according to the 2018 5year ACS estimates. Winter storms are rated as a high-risk natural hazard due to the infrequent events, which necessitates a mitigation plan.

4.2 Risk Index

The result of this process was the creation of a risk index, which established numeric ratings for each hazard relative to one another at the end of this section. Based on this analysis, the Stakeholder identified the following Tables 4.2 and 4.3 show the natural hazards as ones that continuously impact the jurisdictions of Lee and Russell Counties:

Table 4.2: Risk Index for Lee-Russell Planning Area

2020 Lee and Russell County

NATURAL HAZARDS PROFILE AND RISK INDEX RATING KEY

Frequency Highly Likely Possible Unlikely	**How often the event will occur;** Near 100% probability in the next year Between 10% and 100% in the next year, or 1 chance in every 10 years Between 1% and 10% in the next year, or 1 chance in every 100 years Less than 1% probability in the next 100 years
Magnitude: Large Moderate ~~Small Very.~~ Small	**The percentage of the jurisdiction affected by the hazard;** More than 50% affected 25%-50% affected 10%-25% affected Less than 10% affected
Severity Level:	**How much damage to safety, property and function can be from the ~~event;~~**

	Safety	Property	Function
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: Long Medium Short	**The length of time the hazard event lasts;** Days Hours 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 4.3: LEE COUNTY 2014 NATURAL HAZARDS PROFILE AND RISK INDEX RESULTS

Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)			Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable to This Threat
			Health	Property	Function			
Drought Heat Wave	Highly Likely	Large	N	L	L	Long	7.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to drought/heat wave.
Earthquake	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.

Flood	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 Annalue 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 & 20th St. (Opelika) Samford Ave (Auburn) Sanders Street (Auburn) Saugahatchee Lake Road (Opelika) White Street & Bragg (Auburn)
Hail	Highly Likely	Small	N	L	N	Short	6.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to hail.

Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)			Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable to This Threat
			Health	Property	Function			
Lightning	Highly Likely	Very Small	N	L/N	N	Short	6	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to lightning.
Sinkhole	Possible	Very Small	N	N	N	Long	1	Lee Road 166 (Opelika) Lee Road 148 (Opelika) Spring Villa Community (Lee County)
Thunderstorm	Highly Likely	Large	C	L	L	Medium	10	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to thunderstorms
Tornado	Highly Likely	Moderate	C	CR	CR	Short	9	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to tornadoes.
Tropical Storm	Likely	Large	N	N	N	Medium	4.5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to the effects of tropical storms.

Wildfire	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;
Winter Storm	Likely	Large	N	N	L	Long	5	Auburn, Loachapoka, Opelika, Smiths Station, Lee County are all vulnerable to winter storms.

TABLE 4.4: RESULTS OF RUSSELL COUNTY NATURAL HAZARDS PROFILE AND RISK INDEX

Hazard	Frequency • Highly Likely • Likely • Possible • Unlikely	Magnitude • Large • Moderate • Small • Very Small	Severity • Catastrophic (C) • Critical (CR) • Limited (L) • Negligible (N)			Duration • Long • Medium • Short	Vulnerability Rank From 1-10 10=High 1=Low (Median Used)	Geographic Areas Vulnerable to this Hazard
			Health	Property	Function			
Drought/Heat Wave	Likely	Large	N	L	N	Long	4	All of Phenix City, Hurtsboro, Russell County are vulnerable; Effects could be more devastating in rural areas with agricultural interests;

Earthquake	Unlikely	Very Small	N	N	N	Short	1	No jurisdictions have experienced this hazard, however all would be vulnerable should an earthquake occur;
Flood	Highly Likely	Small	N	L	L	Medium	5	All of Phenix City, Hurtsboro, Russell County are vulnerable; Specific repetitive flooding areas: Carson Drive (County) Long Street (Hurtsboro) Lower Main Street (Hurtsboro) Cochgalechee Creek Railroad Street (Phenix City) Riverfront Street (Phenix City) 8th, 9th, Place (Phenix City) 7th Street (Phenix City) Riverwalk (Phenix City) 13th Street (Phenix City) Lake Subdivision (Phenix City) All structures near creeks, rivers, and tributaries are vulnerable to flood;
Hail	Highly Likely	Moderate	N	L	N	Short	4	All of Phenix City, Hurtsboro, Russell County are vulnerable;

Hazard	Frequency • Highly Likely • Likely • Possible • Unlikely	Magnitude • Large • Moderate • Small • Very Small	Severity • Catastrophic (C) • Critical (CR) • Limited (L) • Negligible (N)			Duration • Long • Medium • Short	Vulnerability Rank From 1-10 10=High 1=Low (Median Used)	Geographic Areas Vulnerable to this Hazard
Sinkhole	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but have been documented near Seale, Pittsview, Crawford and Hatchechubbee; Phenix City has experienced sinkholes in the Lake Subdivision due to drainage issues;
Thunderstorm Lightning High Wind	Highly Likely	Large	L	L	N	Medium	8	All of Phenix City, Hurtsboro, Russell County are vulnerable;
Tornado	Likely	Moderate	CR	CR	L	Short	7	All of Phenix City, Hurtsboro, Russell County are vulnerable;
Tropical Depression/ Tropical Storm/ Hurricane	Possible	Large	N	L	L	Medium	4	All of Phenix City, Hurtsboro, Russell County are vulnerable;
Wildfire	Likely	Small	N	N	N	Medium	4	Hurtsboro and Russell County are vulnerable to this hazard; Phenix City is not vulnerable;

Winter Storm	Likely	Large	N	L	L	Long	3	All of Phenix City, Hurtsboro, Russell County are vulnerable;

4.3 Probability of Future Occurrences and Damage Estimates

Table 4.5 estimates hazard event frequency of occurrence cumulatively for the Lee-Russell Planning Area. These estimates were calculated from events recorded over approximately a 30-year time period, 1990-Fall 2019 based on data from the National Centers for Environmental Information and local EMA. There is no guarantee the recorded level of hazard events will continue into the future at the same rate. However, the figures below will provide at least a possible estimate of potential damages.

Table 4.5 Natural Hazard Probability and Damage Estimates

Hazard	Occurrences	Time (Years) 1990-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information		No Information		
Drought	10 years in this time frame have been associated with a drought event	30	N/A	33%	N/A
Earthquakes	0	30	0	Less than 1%	N/A
Extreme Temperatures	6 event days (Cold/Freeze)	30	$2,000,000	20%	$66,666
Flooding	38 event days	30	$5,535,000	1.2 events per year	***$146,963
Hail	113 events	30	$688,000	3.8 events per year	$22,933
High Winds/Thunderstorms	171	30	$2,566,300	5.7 events per year	$85,543
Landslides					
Lightning	13 Lightning events resulting in damage/injury/death	30	$384,000	43% annual chance of lightning event resulting in damage/injury/death	$12,800
Sinkholes/Land Subsidence	Approximately 8	30	$1,000,000	*	*
Tropical Storms/Tropical Depressions/Hurricanes	6 events	30	$142,000	20%	$4,733
Tornadoes	38 events	30	$13,587,000	1.3 events per year	**$299,567

Wildfire	727 events	13	N/A**	55.92% events per year	N/A***
Winter Storms	7 event days	30	$70,000	23%	$2,333

*The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision.
**Due to the historical record on monitory figures for wildfires in Alabama this information was left blank.
***Flooding figures may not be accurate due to information available.

Dam Failure: The risk of losses from dam failure cannot be calculated based on historic records due to a lack of data. Even though dam failure is a rare occurrence and is mostly unprecedented in the Lee-Russell Planning Area, the impact of a dam failure on the Chattahoochee River which borders the planning area would be catastrophic. There are a series of dams that begin in Troup County, Georgia with West Point Dam, continue south with Bartlett's Ferry Dam, Goat Rock Dam, and Lake Oliver Dam. The damages incurred from a failure at any of these dams would be catastrophic to the planning region.

Drought: The risk of losses from drought cannot be calculated based on historic records due to a lack of data. Qualitative documentation shows evidence that prolonged drought conditions cause agricultural losses (farm crops and cattle farmers) and water quantity issues, but it is difficult to define the exact impact of this hazard. In 1977 and 2000 a federal disaster declaration was made due to droughts that occurred in this planning area. The United States Department of Agriculture declared a natural disaster area in 2012, 2013, 214, 2016, 2017, and 2019 due to drought for the Lee-Russell Planning Area.

Earthquake: The risk of losses from earthquakes cannot be calculated based on historic records due to a lack of data/occurrence.

Extreme Temperatures: The Lee-Russell Planning Area has experienced significant extreme temperatures (in this discussion, cold/freezing) that has occurred on 6 occasions over the last 30 years. The losses incurred were due to crop loss estimated at $2,000,000.

Flooding: The planning area has recorded at least 37 flooding events since 1990 causing an estimated $4,408,000 in damages. The amount of losses for flooding makes it the highest damage hazard in the planning area.

The total potential loss can be calculated for the region using FEMA's HAZUS-MH software in ArcGIS. As mentioned in a previous section, Russell County experienced three extensive flooding events, which required federal assistance resulting in approximately $5 million in damages. Lee County has experienced fourteen incidents since 1998 that cost approximately $4 million in damages. Overall the region had approximately $4 million in total damages. Information pertaining to historical insured flood losses and repetitively flooded parcels is included to provide additional detail.

FEMA released the RISK Map for the region. This data includes a Flood Risk Report, Flood Risk Map, and Flood Risk Database that provides details of flood data. Data for Lee County and Russell County is available online.

The main area that would be affected by riverine flooding in the planning area is along the Chattahoochee River and any major tributaries. Additional flooding can occur inside the floodplain along streams or creeks in the region. The NFIP has identified flood zones in each jurisdiction in the Lee County and Russell County.

Flash flooding can occur anywhere in the planning area, particularly in urban areas with abundant surfaces or additional areas of obstruction to water runoff. Normally flash flooding is a quick onset hazard with little warning, unlike riverine flooding. Both flash flooding and riverine flooding can occur year-round.

Historical Insured Flood Losses
According to FEMA flood insurance policy records as 2015, the Lee-Russell region reported flooded losses through the NFIP since 2015. A summary of these records are in Tables 4.6 and 4.7.

Table 4.6: Historical Insured Flood Losses

Jurisdiction	Auburn	Lee County	Loachapoka	Opelika	Smith Station
Number of NFIP Policies	142	181	NA	32	12

*This information is based on 2015 Hazard Mitigation plan due to backlog and information available.

Table 4.7 Damages from Flood

Jurisdication	Flood Losses	Damages
Lee Count (County Wide)	7	$ 1,970,000
City of Auburn	4	$ 75,000
City of Opelika	0	$ -
City of Smith Station	0	$ -
Town of Loachapoka	0	$ -
Unincorpoated	2	$ 55,000
Lee County (Totals)	**13**	**$ 2,100,000**
Russell County	6	$ 157,000
Phenix City	2	$ 42,000
Town of Hursboro	2	$ 10,000
Unicorporated	9	$ 249,000
Russell County (Totals)	**19**	**$ 458,000**
Lee-Russell (Total)	**32**	**$ 2,558,000**

Hail: There have been 113 occurrences of hail in the Lee-Russell Planning Area that were significant enough to cause property/crop losses in the last 30 years. These losses totaled $688.000.

High Winds/Thunderstorms: The Lee-Russell Planning Area has incurred 171 significant-high wind events/thunderstorm events over the past 30 years causing an estimated $2,566,300 in damages.

Landslides: The risk of losses from landslides cannot be calculated because this hazard does not impact Lee or Russell counties.

Lightning: There have been 13 recorded lightning events in the planning area that resulted in death/injury and damages.

Sinkholes/Land Subsidence: The Lee-Russell Planning Area has experienced a few sinkholes primarily attributed to a mining operation and drainage issues in an existing subdivision. Although, there were damages attributed to the homeowners there are no damage estimates. A county road did require extensive structural work.

Tropical Storms/Tropical Depressions/Hurricanes: The planning area has experienced 6 events over the last 30 years. These events resulted in $142,000 in property damages.

Tornadoes: The Lee-Russell Planning area has experienced 38 recorded tornado events since 1990. These events have caused an estimated $8,987,000 in damages. This estimate does include the tornados of March 2019, which according to the Lee County EMA, resulted in tremendous death (23) and injuries (90) as well as property damages $4.6 million.

Wildfire: Since 2006 the Lee-Russell Planning Area experienced 727 fire which affected 13,980 acres of land.

Winter Storms: The planning area has incurred 7 winter storm events, including snow and ice since 1990. These winter storm events resulted in an estimated loss of $70,000 in property and crop damage. These events normally have a short duration and have minor impacts, though the planning area is not prepared for a long duration event if it would occur.

4. 4 Total Population and Property Valuation Summary by Jurisdiction

This data in Table 4.8 is derived from local municipal government and tax valuation from the local revenue offices, as well as the 2010 Census population. This data is for Tax Year 2019. This data provides an estimate of total exposure in the planning area.

Table 4.8: Total Population and Property Information by Jurisdiction

Jurisdiction	2010 Population	Parcels	Number of Buildings	Tax Appraised Value of Improvements
Lee County (Unincorporated)	55,284	27,095	35,989	$441,841,460
City of Auburn	53,380	19,171	20,279	$939,939,040
City of Opelika	26,477	13,035	13,900	$386,677,600
Town of Loachapocka	180		*14	$3,825,052
City of Smiths Station	4,926	2,363	3,253	$38,315,080
Notasulga	843	60	59	$348,740
Russell County (Unincorporated)	19,592	20,093	**8,011	**$1,320,694,261
City of Phenix City	32,822	15,074	2,261	$73,600,480
Town of Hurtsboro	533	600	299	$16,805,750

**It is important to note that actual values may be somewhat higher than those values assigned for tax purposes. Also, these values do not include tax-exempt structures such as government buildings and churches.

4.5 Critical Facilities/Infrastructure by Jurisdiction

Critical facilities are defined as facilities that are essential to the community or may be crucial to the delivery of vital services, such as utilities and public safety. Critical facilities may also house or serve an at-risk population such as schools, hospitals, or nursing homes. Critical facilities would also likely result in catastrophic financial loss if severely damaged or destroyed, such as major industrial buildings, courthouses, and other government facilities. Critical facilities may vary from a transmission line that provides vital electricity to the community, to a hospital that provides medical care, or to the public safety facilities that serve a community.

A concerted effort was made using information from the public, EMA, local government officials, and industry stakeholders to identify the critical facilities. Such facilities were considered vital to transportation, energy, communication, health care, utility systems, food services, and the delivery of public safety. Structures that are occupied by at-risk populations such as schools are also included. They are listed with the most current estimated replacement cost, according to their insured values in Tables 4.9 through 4.33. The information listed below was provided by the individual jurisdictions.

Other critical facilities locations are the facilities that store Extremely Hazardous Substances (EPCRA Section 302-Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA, Section 313 Toxic Chemicals, CAA 122) Regulated Chemicals for Accidental Release Prevention and other facilities that are covered. Local EMA offices maintain these lists.

Tables 4.8 to Table 4.34 are a list of critical facilities summarized by type in the planning area. This list is not all-inclusive and includes facilities prioritized by specific jurisdictions. An

inventory of critical facilities will be reviewed periodically and continually updated to reflect any changes in each of the jurisdictions.

TABLE 4.9: POPULATIONS, ASSET INVENTORY AND ESTIMATED VALUES

A. Populations	Auburn		Lee County		Loachapoka		Opelika		Smiths Station	
Total People	65,737		39,114		251		29,798		5,349	
18 and under	11,508		34,795		49		6,555		1,096	
Senior Citizens	1,935		6,626		7		1,887		3,124	
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	

Some data is from 2015

Table 4.10 Auburn Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 1

A. Populations	Auburn		Drought/Heat		Earthquake		Flood		Hail	
Total People	65,738		65,737		0		65,737		6,5737	
18 and under	11,508		11,508		0		11,508		11,508	
Senior Citizens	1,935		1,935		0		1,935		1,935	
Group Quarters	3,825		3,825		0		3,825		3,825	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	18,156		0		0		18,156		18,156	
Total Estimated Value	$4,691,277,630		0		0		$4,691,277,630		$4,691,277,630	

Some data is from 2015

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

A. Populations	Auburn		Lightning		Sinkholes		Thunderstorms		Tornado	
Total People	65,737		65,737		0		65,737		65,737	
18 and under	11,508		11,508		0		11,508		11,508	
Senior Citizens	1,935		1,935		0		1,935		1,935	
Group Quarters	3,825		3,825		0		3,825		3,825	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	18,156		18,156		0		18,156		18,156	
Total Estimated Value	$4,691,277,630		$4,691,277,630		0		$4,691,277,630		$4,691,277,630	

Some data is from 2015

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

A. Populations	Auburn		All Tropical Storms		Wildfire		All Winter Storms	
Total People	65,737		65,737		0		65,737	
18 and under	11,508		11,508		0		11,508	
Senior Citizens	1,935		3,658		0		1,935	
Group Quarters	3,825		3,825		0		3,825	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	18,156		18,156		0		18,156	
Total Estimated Value	$4,691,277,630		$4,691,277,630		0		$4,691,277,630	

Some data is from 2015

Table 4.13: Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 1

A. Populations	Lee County		Drought/Heat		Earthquake		Flood		Hail	
Total People	39,114		39,114		0		39,114		39,114	
18 or under	34,795		34,795		0		34,795		12,252	
Senior Citizens	6,626		6,626		0		6,626		5,144	
Group Quarters	13		13		0		13		13	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	15,458		0		0		15,458		15,458	
Total Estimated Value	$2,357,130,836		0		0		$2,357,130,836		$2,357,130,836	

Some data is from 2015

Table 4.14 Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page2

A. Populations	Lee County		Lightning		Sinkholes		Thunderstorms		Tornado	
Total People	39,114		39,114		0		39,114		39,114	
18 and under	34,795		34,795		0		34,795		12,252	
Senior Citizens	6,626		6,626		0		6,626		5,144	
Group Quarters	13		13		0		13		13	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	15,458		15,458		0		15,458		15,458	
Total Estimated Value	$2,357,130,836		$2,357,130,836		0		$2,357,130,836		$2,357,130,836	

Some data is from 2015

Table 4.15 Lee County Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

A. Populations	Lee County		All Tropical Storms		Wildfire		All Winter Storms	
Total People	39,114		39,114		0		39,114	
18 and under	34,795		34,795		0		34,795	
Senior Citizens	6,626		6,626		0		6,626	
Group Quarters	13		13		0		13	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	15,458		15,458		0		15,458	
Total Estimated Value	$2,357,130,836		$2,357,130,836		0		$2,357,130,836	

Some data is from 2015

Table 4.16: Loachapoka Inventory and Potential Dollar Loss Estimate by Hazard; Page 1

A. Populations	Loachapoka		Drought/Heat		Earthquake		Flood		Hail	
Total People	251		251		0		0		251	
18 and under	49		49		0		0		49	
Senior Citizens	7		7		0		0		7	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	14		0		0		0		14	
Total Estimated Value	$3,825,052		0		0		0		$3,825,052	

Some data is from 2015

Table 4.17 Loachapoka Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

A. Populations	Loachapoka		Lightning		Sinkholes		Thunderstorms		Tornado	
Total People	251		251		0		251		251	
18 and under	49		49		0		49		49	
Senior Citizens	7		7		0		7		7	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	14		14		0		14		14	
Total Estimated Value	$3,825,052		$3,825,052		0		$3,825,052		$3,825,052	

Some data is from 2015

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

A. Populations	Loachapoka		All Tropical Storms		Wildfire		All Winter Storms	
Total People	251		251		0		251	
18 and under	49		49		0		49	
Senior Citizens	7		7		0		7	
Group Quarters	0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	14		14		0		14	
Total Estimated Value	$3,825,052		$3,825,052		0		$3,825,052	

Some data is from 2015

Table 4.19: Opelika Inventory and Potential Dollar Loss Estimate by Hazard; Page 1

A. Populations	Opelika		Drought/Heat		Earthquake		Flood		Hail	
Total People	29,798		29,798		0		29,798		29,798	
18 and under	6,555		6,555		0		6,555		6,555	
Senior Citizens	1,887		1,887		0		1,887		1,887	
Group Quarters	572		572		0		572		572	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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	*
Total Structures	9,204		0		0		9,204		9,204	
Total Estimated Value	$2,000,262,210		0		0		$2,000,262,210		$2,000,262,210	

Some data is from 2015

Table 4.20: Opelika Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

A. Populations	Opelika		Lightning		Sinkholes		Thunderstorms		Tornado	
Total People	29,798		29,798		0		29,798		29,798	
18 and under	6,555		6,555		0		6,555		6,555	
Senior Citizens	1,887		1,887		0		1,887		1,887	
Group Quarters	572		572		0		572		572	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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	*
Total Structures	9,204		9,204		0		9,204		9,204	
Total Estimated Value	$2,000,262,210		$2,000,262,210		0		$2,000,262,210		$2,000,262,210	

Some data is from 2015

Table 4.21: Opelika Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

A. Populations	Opelika		All Tropical Storms		Wildfire		All Winter Storms	
Total People	29,798		29,798		0		29,798	
18 and under	6,555		6,555		0		6,555	
Senior Citizens	1,887		1,887		0		1,887	
Group Quarters	572		572		0		572	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value
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	*
Total Structures	9,204		9,204		0		9,204	
Total Estimated Value	$2,000,262,210		$2,000,262,210		0		$2,000,262,210	

Some data is from 2015

Table 4.22: Smiths Station Inventory and Potential Dollar Loss Estimate by Hazard; Page 1

A. Populations	Smiths Station		Drought/Heat		Earthquake		Flood		Hail	
Total People	5,349		5,349		0		5,349		5,349	
18 and under	1,096		1,096		0		1,096		1,096	
Senior Citizens	423		423		0		423		423	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	1,622		0		0		1,622		1,622	
Total Estimated Value	$237,018,163		0		0		$237,018,163		$237,018,163	

Some data is from 2015

Table 4.23: Smiths Station Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 2

A. Populations	Smiths Station		Lightning		Sinkholes		Thunderstorms		Tornado	
Total People	5,349		5,349		0		5,349		5,349	
18 and under	1,096		1,096		0		1,096		1,096	
Senior Citizens	423		423		0		423		424	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	1,622		1,622		0		1,622		1,622	
Total Estimated Value	$237,018,163		$237,018,163		0		$237,018,163		$237,018,163	

Some data is from 2015

Table 4.24: Smiths Station Asset Inventory and Potential Dollar Loss Estimate by Hazard; Page 3

A. Populations	Smiths Station		All Tropical Storms		Wildfire		All Winter Storms	
Total People	5,349		5,349		0		5,349	
18 and under	1,096		1,096		0		1,096	
Senior Citizens	423		423		0		423	
Group Quarters	0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value
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
Total Structures	1,622		1,622		0		1,622	
Total Estimated Value	$237,018,163		$237,018,163		0		$237,018,163	

Some data is from 2015

TABLE 4.26: POPULATIONS, ASSET INVENTORY AND ESTIMATED VALUES

A. Populations	Hurtsboro		Phenix City		Russell County	
Total People	551		36,641		17,600	
18 and under	101		9,605		14,358	
Senior Citizens	52		1,898		3,124	
Institutionalized/Group Quarters	0		557		17	
Structural Assets	Number	Value	Number	Value	Number	Value

B. Residential	251	$8,069,000	13,243	$665,181,600	7,735	$858,060,600
C. Commercial	21	$7,080,800	736	$691,459,500	55	$357,509,700
D. Government	10	$455,950	105	$59,582,899	17	$39,872,124
E. Utilities						
APCO	0	0	*	*	*	*
TELC					6	$13,600,000
ALAGASCO	*	*	*	*	*	*
Phenix City Utilities			41	$43,234,621		
Russell Co Water Authority					15	$4,450,000
Fort Mitchell Water System					13	$3,710,537
Hurtsboro Water Works	6	$1,200,000				
F. Education	0	0	19	$89,908,754	17	$27,691,300
G. Agricultural					10	$14,800,000
H. Religious	11	*	110	*	143	*
I. Critical Facilities (Government + Utilities + Education)	10	$455,950	165	$192,726,274	68	$89,323,961
Total Structures (Sum of B-H)	299		14,254		8,011	
Total Estimated Value (Sum of B-H)	$16,805,750		$1,549,367,374		1,320,694,261	

***** **Some data is from 2015**

Table 4.26: Hurtsboro Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 1

A. Populations	Hurtsboro	Drought/Heat	Earthquake	Flood	Hail
Total People	551	551	0	551	551

18 and under	101		103		0		103		103	
Senior Citizens	52		103		0		103		103	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	251	$8,069,000	0	0	0	0	251	$8,069,000	251	$8,069,000
C. Commercial	21	$7,080,800	0	0	0	0	21	$7,080,800	21	$7,080,800
D. Government	10	$455,950	0	0	0	0	10	$455,950	10	$455,950
E. Utilities										
APCO										
TELC										
ALAGASCO	*	*			0	0	*	*	*	*
Phenix City Utilities										
Russell Co Water Authority										
Fort Mitchell Water System										
Hurtsboro Water Works	6	$1,200,000	0	0	0	0	6	$1,200,000	6	$1,200,000
F. Education	0	0	0	0	0	0	0	0	0	0
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religious	11	*	0	0	0	0	11	*	11	*
I. Critical Facilities (Government + Utilities + Education)	10	$455,950			0	0	10	$455,950	10	$455,950
Total Structures (Sum of B-H)	299		0		0		299		299	
Total Estimated Value (Sum of B-H)	$16,805,750		0		0		$16,805,750		$16,805,750	

Some data is from 2015

Table 4.27: Hurtsboro Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 2

A. Populations	Hurtsboro		Sinkholes		Thunderstorms		Tornado		All Tropical Storms	
Total People	551		0		551		551		551	
18 and under	101		0		103		103		103	
Senior Citizens	52		0		103		103		103	
Group Quarters	0		0		0		0		0	
Structural Assets	Number	Value	Number	Number	Number	Value	Number	Value	Number	Value
B. Residential	251	$8,069,000	0	0	251	$8,069,000	251	$8,069,000	251	$8,069,000
C. Commercial	21	$7,080,800	0	0	21	$7,080,800	21	$7,080,800	21	$7,080,800
D. Government	10	$455,950	0	0	10	$455,950	10	$455,950	10	$455,950
E. Utilities										
APCO										
TELC										
ALAGASCO	*	*	*	*	*	*	*	*	*	*
Phenix City Utilities										
Russell Co Water Authority										
Fort Mitchell Water System										
Hurtsboro Water Works	6	$1,200,000	0	0	6	$1,200,000	6	$1,200,000	6	$1,200,000
F. Education	0	0	0	0	0	0	0	0	0	0
G. Agricultural	0	0	0	0	0	0	0	0	0	0
H. Religious	11	*	0	0	11	*	11	*	11	*
I. Critical Facilities (Government + Utilities + Education)	10	$455,950	0	0	10	$455,950	10	$455,950	10	$455,950
Total Structures (Sum of B-H)	299		0		299		299		299	
Total Estimated Value (Sum of B-H)	$16,805,750		0		$16,805,750		$16,805,750		$16,805,750	

Some data is from 2015

Table 4.28: Hurtsboro Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 3

A. Populations	Hurtsboro		Wildfire		All Winter Storms	
Total People	551		0		551	
18 and under	101		0		103	
Senior Citizens	52		0		103	
Group Quarters	0		0		0	
Structural Assets	Number	Value	Number	Number	Number	Value
B. Residential	251	$8,069,000	0	0	251	$8,069,000
C. Commercial	21	$7,080,800	0	0	21	$7,080,800
D. Government	10	$455,950	0	0	10	$455,950
E. Utilities						
APCO						
TELC						
ALAGASCO	*	*	*	*	*	*
Phenix City Utilities						
Russell Co Water Authority						
Fort Mitchell Water System						
Hurtsboro Water Works	6	$1,200,000	0	0	6	$1,200,000
F. Education	0	0	0	0	0	0
G. Agricultural	0	0	0	0	0	0
H. Religious	11	*	0	0	11	*
I. Critical Facilities (Government + Utilities + Education)	10	$455,950	0	0	10	$455,950
Total Structures (Sum of B-H)	299		0		299	
Total Estimated Value (Sum of B-H)	$16,805,750		0		$16,805,750	

Some data is from 2015

Table 4.29: Phenix City Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 1

A. Populations	Phenix City		Drought/Heat		Earthquake		Flood		Hail	
Total People	36,641		36,641		0		36,641		36,641	
18 and under	9,605		7,005		0		7,005		7,005	
Senior Citizens	1,898		3,884		0		3,884		3,884	
Group Quarters	557		557		0		557		557	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	13,243	$665,181,600	0	0	0	0	13,243	$665,181,600	13,243	$665,181,600
C. Commercial	736	$691,459,500	0	0	0	0	736	$691,459,500	736	$691,459,500
D. Government	105	$59,582,899	0	0	0	0	105	$59,582,899	105	$59,582,899
E. Utilities										
APCO	*	*					*	*	*	*
TELC										
ALAGASCO	*	*					*	*	*	*
Phenix City Utilities	41	$43,234,621	0	0	0	0	41	$43,234,621	41	$43,234,621
Russell Co Water Authority										
Fort Mitchell Water System										
Hurtsboro Water Works										
F. Education	19	$89,908,754	0	0	0	0	19	$89,908,754	19	$89,908,754
G. Agricultural										
H. Religious	110	*	0	0	0	0	110	*	110	*
I. Critical Facilities (Government + Utilities + Education)	165	$192,726,274	0	0	0	0	165	$192,726,274	165	$192,726,274
Total Structures (Sum of B-H)	14,254		0		0		14,254		14,254	

Total Estimated Value (Sum of B-H)	$1,549,367,374	0	0	$1,549,367,374	$1,549,367,374

Some data is from 2015

Table 4.30: Phenix City Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 2

A. Populations	Phenix City		Sinkholes		Thunderstorms		Tornadoes		All Tropical Storms	
Total People	36,641		0		36,641		36,641		36,641	
18 and under	9,605		0		7,005		7,005		7,005	
Senior Citizens	1,898		0		3,884		3,884		3,884	
Group Quarters	557		0		557		557		557	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	13,243	$665,181,600	0	0	13,243	$665,181,600	13,243	$665,181,600	13,243	$665,181,600
C. Commercial	736	$691,459,500	0	0	736	$691,459,500	736	$691,459,500	736	$691,459,500
D. Government	105	$59,582,899	0	0	105	$59,582,899	105	$59,582,899	105	$59,582,899
E. Utilities										
APCO	*	*			*	*	*	*	*	*
TELC										
ALAGASCO	*	*			*	*	*	*	*	*
Phenix City Utilities	41	$43,234,621	0	0	41	$43,234,621	41	$43,234,621	41	$43,234,621
Russell Co Water Authority										
Fort Mitchell Water System										
Hurtsboro Water Works										
F. Education	19	$89,908,754	0	0	19	$89,908,754	19	$89,908,754	19	$89,908,754
G. Agricultural										
H. Religious	110	*	0	0	110	*	110	*	110	*

I. Critical Facilities (Government + Utilities + Education)	165	$192,726,274	0	0	165	$192,726,274	165	$192,726,274	165	$192,726,274
Total Structures (Sum of B-H)	14,254		0		14,254		14,254		14,254	
Total Estimated Value (Sum of B-H)	$1,549,367,374		0		$1,549,367,374		$1,549,367,374		$1,549,367,374	

Some data is from 2015

Table 4.31: Phenix City Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 3

A. Populations	Phenix City		Wildfires		All Winter Storms	
Total People	36,641		0		36,641	
18 and under	9,605		0		7,005	
Senior Citizens	1,898		0		3,884	
Group Quarters	557		0		557	
Structural Assets	Number	Value	Number	Value	Number	Value
B. Residential	13,243	$665,181,600	0	0	13,243	$665,181,600
C. Commercial	736	$691,459,500	0	0	736	$691,459,500
D. Government	105	$59,582,899	0	0	105	$59,582,899
E. Utilities						
APCO	*	*			*	*
TELC						
ALAGASCO	*	*			*	*
Phenix City Utilities	41	$43,234,621	0	0	41	$43,234,621
Russell Co Water Authority						
Fort Mitchell Water System						
Hurtsboro Water Works						
F. Education	19	$89,908,754	0	0	19	$89,908,754
G. Agricultural						
H. Religious	110	*	0	0	110	*
I. Critical Facilities (Government + Utilities + Education)	165	$192,726,274	0	0	165	$192,726,274
Total Structures (Sum of B-H)	14,254		0		14,254	
Total Estimated Value (Sum of B-H)	$1,549,367,374		0		$1,549,367,374	

Some data is from 2015

Table 4.32: Russell County Asset Inventory and Potential Dollar Loss Estimate By Hazard;
Page 1

A. Populations	Russell County		Drought/Heat		Earthquake		Flood		Hail	
Total People	17,600		17,600		0		17,600		17,600	
18 and under	14,358		3,881		0		3,881		3,881	
Senior Citizens	3,124		2,733		0		2,733		2,733	
Group Quarters	17		17		0		17		17	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	7,735	$858,060,600	0	0	0	0	7,735	$858,060,600	7,735	$858,060,600
C. Commercial	55	$357,509,700	0	0	0	0	55	$357,509,700	55	$357,509,700
D. Government	17	$39,872,124	0	0	0	0	17	$39,872,124	17	$39,872,124
E. Utilities										
APCO	*	*					*	*	*	*
TELC	6	$13,600,000	0	0	0	0	6	$13,600,000	6	$13,600,000
ALAGASCO	*	*					*	*	*	*
Phenix City Utilities										
Russell Co Water Authority	15	$4,450,000	0	0	0	0	15	$4,450,000	15	$4,450,000
Fort Mitchell Water System	13	$3,710,537	0	0	0	0	13	$3,710,537	13	$3,710,537
Hurtsboro Water Works										
F. Education	17	$27,691,300	0	0	0	0	17	$27,691,300	17	$27,691,300
G. Agricultural	10	$14,800,000	10	$14,800,000			10	$14,800,000	10	$14,800,000
H. Religious	143	*	0	0	0	0	143	*	143	*
I. Critical Facilities (Government + Utilities + Education)	68	$89,323,961	0	0	0	0	68	$89,323,961	68	$89,323,961

Total Structures (Sum of B-H)	8,011	10	0	8,011	8,011
Total Estimated Value (Sum of B-H)	1,320,694,261	$14,800,000	0	1,320,694,261	1,320,694,261

Some data is from 2015

Table 4.33: Russell County Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 2

A. Populations	Russell County		Sinkhole		Thunderstorm		Tornadoes		All Tropical Storms	
Total People	17,600		0		17,600		17,600		17,600	
18 and under	14,358		0		3,881		3,881		3,881	
Senior Citizens	3,124		0		2,733		2,733		2,733	
Group Quarters	17		0		17		17		17	
Structural Assets	Number	Value	Number	Value	Number	Value	Number	Value	Number	Value
B. Residential	7,735	$858,060,600	0	0	7,735	$858,060,600	7,735	$858,060,600	7,735	$858,060,600
C. Commercial	55	$357,509,700	0	0	55	$357,509,700	55	$357,509,700	55	$357,509,700
D. Government	17	$39,872,124	0	0	17	$39,872,124	17	$39,872,124	17	$39,872,124
E. Utilities										
APCO	*	*			*	*	*	*	*	*
TELC	6	$13,600,000	0	0	6	$13,600,000	6	$13,600,000	6	$13,600,000
ALAGASCO	*	*			*	*	*	*	*	*
Phenix City Utilities										
Russell Co Water Authority	15	$4,450,000	0	0	15	$4,450,000	15	$4,450,000	15	$4,450,000
Fort Mitchell Water System	13	$3,710,537	0	0	13	$3,710,537	13	$3,710,537	13	$3,710,537
Hurtsboro Water Works										
F. Education	17	$27,691,300	0	0	17	$27,691,300	17	$27,691,300	17	$27,691,300
G. Agricultural	10	$14,800,000	0	0	10	$14,800,000	10	$14,800,000	10	$14,800,000
H. Religious	143	*	0	0	143	*	143	*	143	*
I. Critical Facilities (Government + Utilities + Education)	68	$89,323,961	0	0	68	$89,323,961	68	$89,323,961	68	$89,323,961

Total Structures (Sum of B-H)	8,011	0	8,011	8,011	8,011
Total Estimated Value (Sum of B-H)	1,320,694,261	0	1,320,694,261	1,320,694,261	1,320,694,261

Some data is from 2015

Table 4.34 Russell County Asset Inventory and Potential Dollar Loss Estimate By Hazard; Page 3

A. Populations	Russell County		Wildfire		All Winter Storms	
Total People	17,600		0		17,600	
18 and under	14,358		0		3,881	
Senior Citizens	3,124		0		2,733	
Group Quarters	17		0		17	
Structural Assets	Number	Value	Number	Value	Number	Value
B. Residential	7,735	$858,060,600	0	0	7,735	$858,060,600
C. Commercial	55	$357,509,700	0	0	55	$357,509,700
D. Government	17	$39,872,124	0	0	17	$39,872,124
E. Utilities						
APCO	*	*			*	*
TELC	6	$13,600,000	0	0	6	$13,600,000
ALAGASCO	*	*			*	*
Phenix City Utilities						
Russell Co Water Authority	15	$4,450,000	0	0	15	$4,450,000
Fort Mitchell Water System	13	$3,710,537	0	0	13	$3,710,537
Hurtsboro Water Works						
F. Education	17	$27,691,300	0	0	17	$27,691,300
G. Agricultural	10	$14,800,000	0	0	10	$14,800,000
H. Religious	143	*	0	0	143	*
I. Critical Facilities (Government + Utilities + Education)	68	$89,323,961	0	0	68	$89,323,961
Total Structures (Sum of B-H)	8,011		0		8,011	
Total Estimated Value (Sum of B-H)	1,320,694,261		0		1,320,694,261	

Some data is from 2015

4.6 Vulnerable Populations in Lee and Russell Counties

Background

According to the CDC social vulnerability refers to a community's resilience after an external hazard has taken place. These hazards may be natural-caused or human-caused disasters. When a community's social vulnerability is reduced human and economic losses are less likely. The CDC created a Social Vulnerability Index to measure how vulnerable a county or census tract is to any hazard. The measurement is based on a calculation that uses fifteen census variables, which help identify the vulnerable portion of a population. The CDC uses a scale of 0 to 1. A score of 0 indicates that a community has no vulnerable to any hazard, but a score of 1 means a community is extremely vulnerable to any hazard.

Overall Vulnerability

The figure below is based on the data collected from the CDC's Social Vulnerability Index (SVI), which depicts the overall social vulnerability for Lee Russell counties. The overall SVI score for Lee County is 0.5889 and Russell County is 0.8892, which is based on a scale 0 to 1. Please refer to Figure 35 for more details.

Overall the Lee and Russell counties have a portion of their population, which has a medium to high vulnerability to all hazards. In Lee County, Opelika has the most vulnerable population to hazards, but Auburn also has a portion of the population that is more vulnerable than the rest of Lee County. Russell County as a whole has a higher vulnerability to hazards than Lee County, but Phenix City and Hurtsboro have the most vulnerable populations in the county, as well as the entire eastern and southern portion of Russell County. Due to the medium to high vulnerability populations in the entire Lee Russell counties face jurisdiction must create plans and policies to protect these individuals from injury or death during any hazard. Additional information about those individuals who are the most vulnerable will be added to the update for the Hazard Mitigation Plan. Understanding where the vulnerable population pockets are in each jurisdiction will help identify what hazards will or are more likely to impact these vulnerable people.

The CDC breaks down the fifteen variables into four themes that summarize how an area is socially vulnerable to a hazard. The themes focus on education, socioeconomic, housing, language skills, housing, ethnicity, family characters, and access to vehicles. Please refer to Figure 31 for the details regarding vulnerability based on the specific themes.

Housing and transportation

The housing and transportation is based on data from the American Community Survey for 2012-2016 for following variables: multi-unit housing, mobile homes, home crowing, no access to vehicles, and group quarters. The information presented in figure below shows that the majority of the population living in Lee and Russell counties are vulnerable to hazards based on the living conditions and access to transportation. Urban areas have a higher chance of vulnerability than rural areas, except for central and southern portions of Russell County. Persons living in multi-unit housing, manufactured homes, or in a crowded home are vulnerable to natural hazards such as tornadoes, flooding, hail, high winds/ thunderstorms, winter storms, tropical storms, and dam failure because these types of homes do not provide a safe environment to ride out a hazard. These types of homes are not built to the same standards as standalone home, for example manufactured homes are built to withstand maximum winds of 70 mph. These structures will not survive high

winds or tornadoes. Persons who do not have access to transportation are vulnerable to dam failure, flooding, high winds/ thunderstorms, tornadoes, wildfire, winter storms because the option to leave their home is at the mercy of obtaining a way to leave such as by vehicle, public transportation, bike, or walking. These modes of transportation are not viable for all individuals due to a lack of access or physical abilities. These persons who do not have the ability to leave are at risk because certain natural hazards provide little warnings such as a wildfire, dam failure, or tornado. If persons do not have a safe place in their home or access to transportation (of any type) then their lives will be vulnerable/ risked during the event of a natural hazard. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Housing Composition and Disability

The Lee and Russell counties are vulnerable to hazards based on housing composition and the number of persons with disabilities in the planning region. The housing composition and disability map, refer to the figure above, is based on data from the American Community Survey for 2012-2016 for the following variables: aged 65+, aged 17 and under, single-parent household, aged 5 and over with a disability. Russell County has a larger population that is highly vulnerable to hazards based on the housing composition and individuals with disabilities. Phenix City, Hurtsboro, and parts of Opelika have the most a portion of the population that is the most vulnerable in Lee and Russell counties. The remainder of the Lee and Russell counties have a medium to low vulnerability to hazards based on housing composition and the number of persons with disabilities. In terms of hazard mitigation, the housing composition is important to understand because children and the elderly are more vulnerable to succumb injuries during a hazard such as extreme heat or tornado event than a young or middle-aged adult. Natural hazards are also dangerous if a child or elderly is home alone during the event because they may not have the knowledge or ability to address or react to a hazardous situation. For example if a child is home alone during a tornado event he or she may not have the knowledge or experience to know where their safe place during a tornado, which makes that child vulnerable. Persons who have a disability (physical or mental) are extremely vulnerable to hazards of any type because they may be socially or logistically isolated when a hazard such as a dam failure, flooding, winter storm, or tornado. These persons may not be able to evacuate quickly, or may not even know the natural hazard event is taking place. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Socioeconomics

The Lee and Russell counties are vulnerable to hazards based on the socioeconomic status of the population living in the planning region. Vulnerability data based on socioeconomic status, refer to the figure below, is gathered from the American Community Survey for 2012-2106 for following variables: poverty, unemployment, per capita income, and no high school diploma. All of Russell County, except one small census tract in the northwest corner of the county, has a medium to a high level of vulnerability based on the population's socioeconomic status. Rural Lee County has a low vulnerability to hazards based on socioeconomic status, but urban areas in Lee County, such as Auburn or Opelika have a medium to a high level of vulnerability based on the population's socioeconomic status. Vulnerability to natural hazards due to socioeconomics can make a person or a family vulnerable to all hazards. These persons may not have the financial ability to prepare for hazards before the event happens such as winter storms or droughts, but they may not also have the financial ability to recover once a natural hazard event has taken place. The

ability to evacuate during or before a hazard happens may not be an option for those persons who have socioeconomic difficulties. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Minority and English Language Proficiency

As a whole, the Lee and Russell counties are vulnerable to hazards based on the population's minority status and English language proficiency. The minority and English language proficiency map, refer to the figure below, is based on data from the American Community Survey for 2012-2016 for the following variables: Ethnicity and English language proficiency. All but one census tract in Russell County has a low-medium to high vulnerability to hazards based on the population's ethnicity and ability to communicate in English. Western, southwestern, and portions of central Lee County has the largest portion of person vulnerable to any hazard based on the population's ethnicity and ability to communicate in English. Providing information out in multiple languages is important because not everyone can read, write, or understand verbal English. For those individuals who are not English proficient obtaining useful information about natural hazards is essential to their survival. If a person is unaware that a hazardous event is/going to take place due to a language barrier their life is at stake to all-natural hazards. These persons will essentially be taken by surprise when a tornado, wildfire, winter storm, flood, or dam failure take place in their community. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Figure 31 Social Vulnerability Lee and Russell Counties

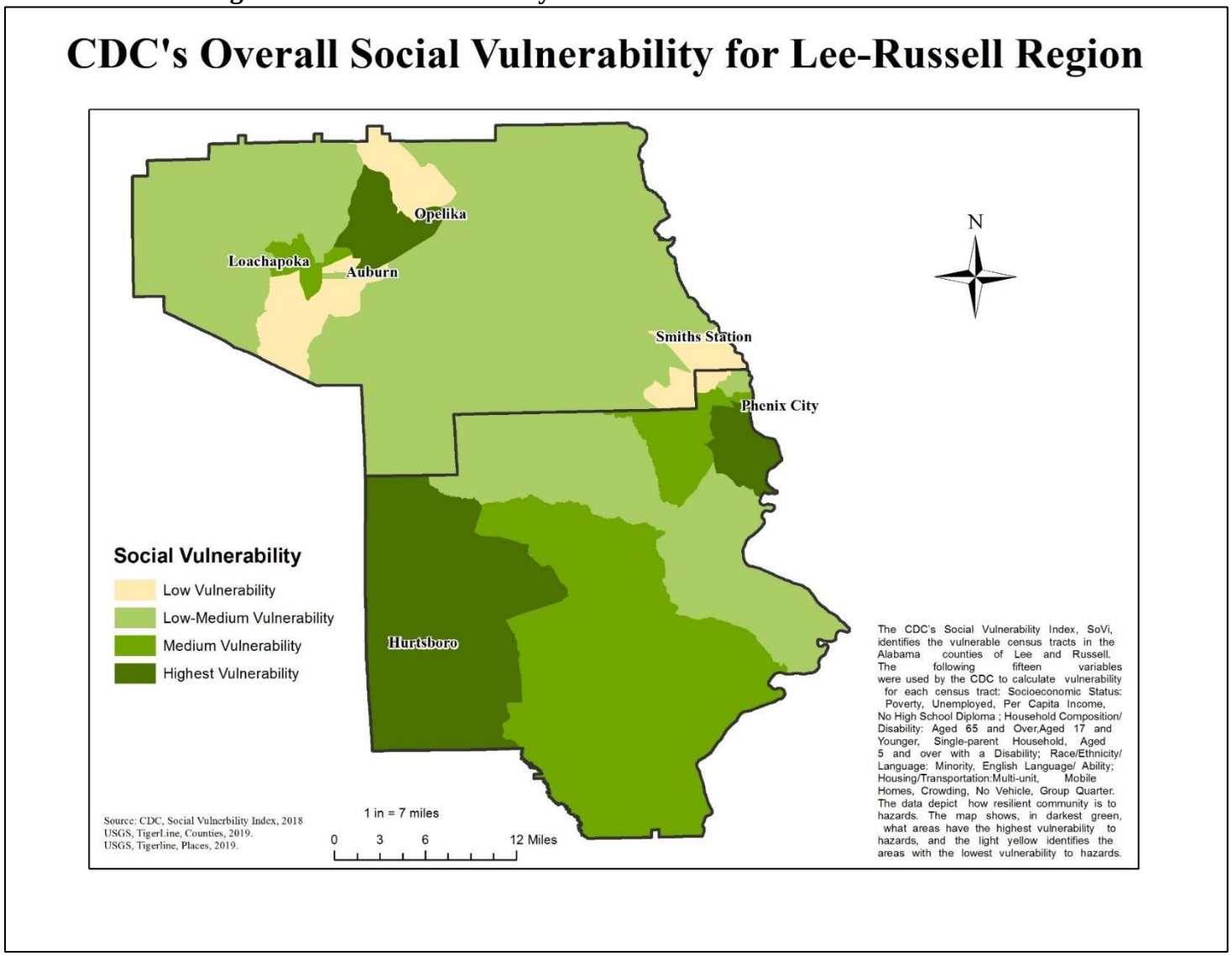
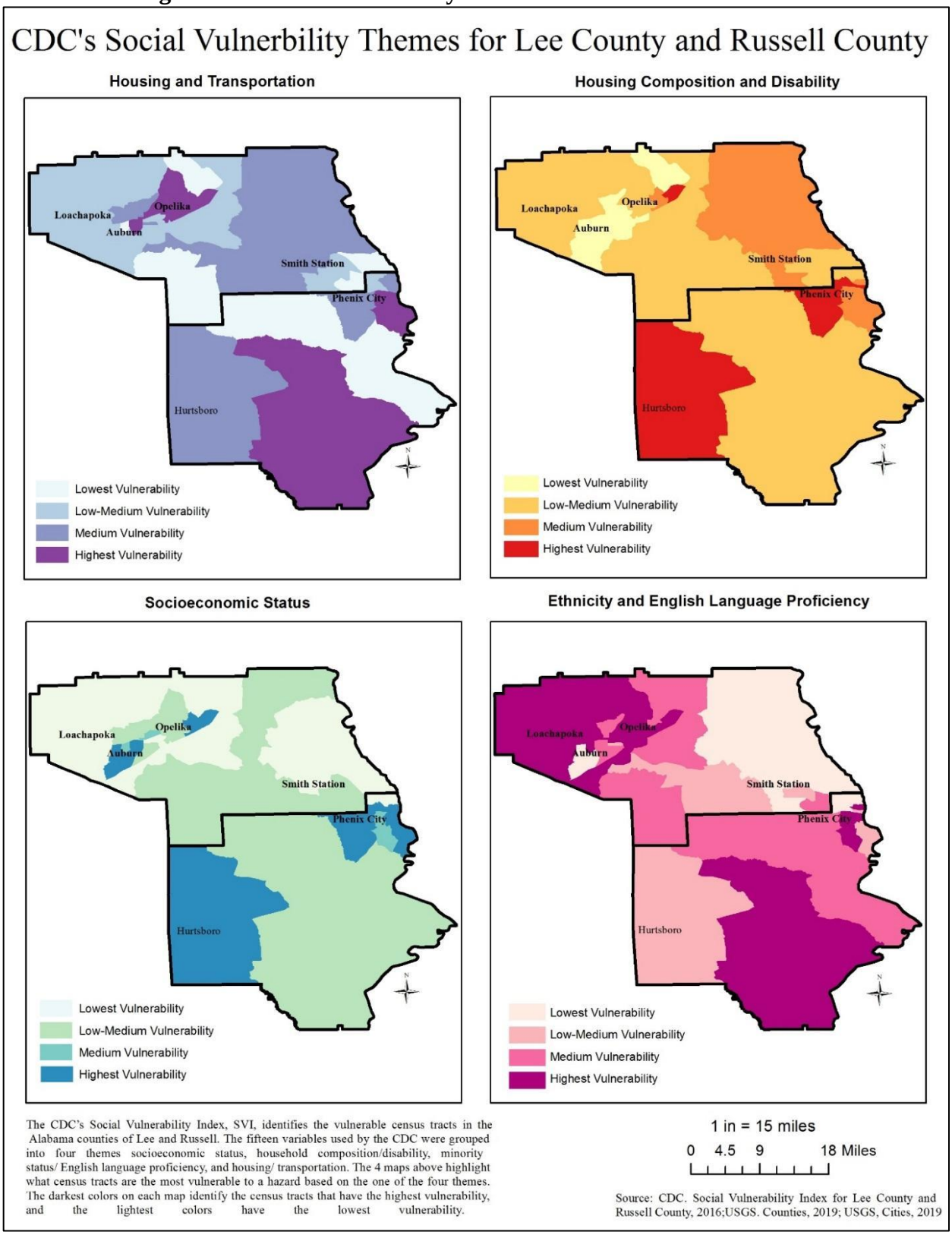


Figure 32: Social Vulnerability Themes Lee and Russell Counties



The CDC's Social Vulnerability Index, SVI, identifies the vulnerable census tracts in the Alabama counties of Lee and Russell. The fifteen variables used by the CDC were grouped into four themes socioeconomic status, household composition/disability, minority status/ English language proficiency, and housing/ transportation. The 4 maps above highlight what census tracts are the most vulnerable to a hazard based on the one of the four themes. The darkest colors on each map identify the census tracts that have the highest vulnerability, and the lightest colors have the lowest vulnerability.

Source: CDC. Social Vulnerability Index for Lee County and Russell County, 2016;USGS. Counties, 2019; USGS, Cities, 2019

SECTION 5 – MITIGATION STRATEGY

Mitigation Planning Process
5.2 Regional Mitigation Goals
5.3 Regional Mitigation Strategies
5.4 Capabilities Assessment for Local Jurisdictions
5.5 Jurisdictional Mitigation Action Plans
5.5.1 Lee-Russell Council of Governments Mitigation Action Plans
5.5.2 Lee County Jurisdiction Actions
5.5.3 Russell County Jurisdiction Actions

5.1 Mitigation Planning Process

Local planning stakeholders were asked to review the progress of their previously adopted mitigation goals and to reevaluate those strategies based on updated information from the Risk Assessment and vulnerability to each profile hazard. The goals and strategies were viewed in light of the impact and extent of hazard occurrences in local jurisdictions and the region as a whole.

5.2 Mitigation Goals

Mitigation goals are broad statements that focus on long-term visions to reduce or avoid vulnerabilities to identified hazards within the region. Through the planning process, six primary goals were developed from corresponding goals in previous local mitigation plans. The mitigation goals expected to be achieved by development, adoption, and continuation of this plan include:

1. **PREVENTION**: Manage the development of land and buildings to minimize the risk of life and property loss due to hazard events.
2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.
3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
4. **STRUCTURAL MITIGATION**: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
5. **EMERGENCY SERVICES**: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

5.3 Mitigation Strategies

Mitigation strategies are broad, yet more defined actions that help to further define mitigation goals. A wide range of activities that are aligned with the six-goal categorizations was considered in order to help achieve the established mitigation goals, in particular emphasizing mitigation concerning new and existing buildings and infrastructure. These strategies also provide additional background to addressing any specific hazard concerns. The six-goal categorizations used for mitigation strategies include Prevention, Property Protection, Natural Resource Protection, Structural Mitigation, Emergency Services, and Public Awareness and Education. The priorities for each jurisdiction have not changed since the last update these are discussed in detail below, as well as identifying appropriate hazard(s) that are mitigated through these approaches.

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment of development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)

6. Participation in National Flood Insurance Program-NFIP (Flooding)
7. Capital improvements planning (All Hazards)
8. Railroad Crossing Study

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of flood-prone properties (Flooding)
2. Relocation of flood-prone properties (Flooding)
3. Elevation of flood-prone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as a floodplain, wetlands, and steep slopes. Examples of natural resource protection activities include:

1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Sinkholes/Land Subsidence, Wildfire)

Goal #4: Structural Mitigation

Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing the construction of appropriate structures. Examples of structural mitigation protection activities include:

1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (Tornadoes, Extreme Temperatures, Winter Storms)
6. Underground Utilities (Tornadoes, Wildfire, Lighting, Hurricane/Tropical Storm/Depression)

Goal #5: Emergency Services

Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:

1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)
5. Provision of alternative power, e.g. generators (All Hazards)
6. Debris removal (All Hazards)

Goal #6: Public Education and Awareness
Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:

1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)

5.4 Capabilities Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive mitigation strategy by examining existing programs, regulations, resources, and practices. This determination allows a jurisdiction to assess whether mitigation actions are feasible, due to financial resources, political climate, administrative capacity, and other jurisdictional capabilities.

The Alabama Emergency Management Agency (AEMA) Division D is a twelve-county region composed of municipalities with a myriad of governmental powers. The specific planning area for this Phase One Lee and Russell Hazard Mitigation Plan is two counties with six municipalities. Both county governments are governed by an elected commission. The cities of Auburn, Opelika and Phenix City have a Mayor/Council/City Manager form of government, whereas the smaller municipalities, Hurtsboro, Smiths Station and Loachopoka have a Mayor/Council form of government.

The mitigation strategies listed in Section 5.3 are framed by the capacity and capabilities of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources.

Communities work together through the county Emergency Management Agency for assistance related to planning for mitigation and to implement specific strategies. Authority overspending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent feather of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, tow communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority.
Table 5.1 summarizes the statutory authority and resources of each jurisdiction and its present use or intended future use of these powers to implement potential actions and types of actions listed in

the hazard mitigation plan. The table describes powers or policies that are granted to different types of jurisdictions in general terms, describes the jurisdictions that currently apply those policies in their mitigation efforts, describes the jurisdictions that intend to apply those authorities and policies for future implementation and describes the means by which each jurisdiction will incorporate the mitigation action into its existing powers, authorities, policies, and capabilities.

Table 5.1: Statutory Authority and Resources

Multi-Jurisdictional Hazard Mitigation Plan: Capability Assessment	Authorized for:	Practiced by:	Incorporated through:
Police power: ability to regulate activities of individuals in the jurisdiction for purposes of health, safety, and public welfare	Municipalities	All	Council or Commission action to enact and enforce regulations
Control of public expenditures: ability to acquire property and improve property owned by the jurisdiction; capacity to borrow and expend funds	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Building code enforcement: ability to enforce codes related to building materials and construction standards outside of flood hazard areas	Municipalities	All	Council or Commission action to enact and enforce regulations
Floodplain management authority: ability to regulate development in areas of special flood hazard in compliance with NFIP standards; includes authority to regulate land use and subdivisions inside of flood hazard areas	Municipalities, Counties	All	Council or Commission action to enact and enforce regulations

Purchase properties subject to flooding and maintain as permanent open space	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Capital improvements: ability to plan and implement public infrastructure to mitigate hazards	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Zoning authority: ability to divide political jurisdiction into districts for purposes of regulation buildings and their use, both inside and outside of flood hazard areas	Municipalities	All	Council action to enact and enforce regulations
Subdivision regulations: ability to regulate new developments involving new parcels and infrastructure, both inside and outside flood hazard areas	Municipalities, Counties	All	County Commission or Council action to enact and enforce regulations
Storm water management program: ability to regulate retention, detention, and release of storm water runoff	Municipalities	All	Council action to enact and enforce regulations

Table 5.2 below provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in the Lee-Russell Planning Area. A “Yes” (Y) indicates the item is currently in place and being implemented. A “No” (N) indicates the item is not in place or being implemented. An asterisk (*) indicates the item is currently being developed for future implementation.

Table 5.2: Relevant Plans, Ordinances, and Programs

Jurisdiction	Zoning Ordinance	Code Enforcement	Master Plan (Date)	Certified Floodplain Manager	NFIP Participation	Subdivision Regulations
Lee County	N	Y	N		Y	Y
City of Auburn	Y	Y	2018-2030	Y	Y	Y
Town of Loachapoka	N	N	N	N	N	N
City of Opelika	Y	Y	2016-2030	Y	Y	Y
City of Smiths Station	Y	Y	Y	N	Y	Y
Russell County	N	Y	2011		Y	Y
Town of Hurtsboro	N	N	N	N	Y	N
City of Phenix City	Y	Y	Y	N	Y	Y

This section identifies and analyzes a range of mitigation actions and projects under consideration to achieve the regional mitigation goals for reducing the effects of hazard events for the region at large, as well as each of the jurisdictions within the region. Local planning stakeholders used knowledge and expertise in dealing with natural hazards was invaluable in updating the strategy. The primary considerations used to update and prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, development trends, and economic, environmental issues, and local capabilities to determine the most appropriate plan of action for their jurisdictions. Each action or project listed has accessory information, such as the designation of a lead agency, hazard(s) addressed, and potential funding source(s). The following table describes the key elements of the Mitigation Action Plans.

Table 5.3: Mitigation Actions and Projects for Consideration

Jurisdiction Name

Goal	Category of goal that is met: #1: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events (PREVENTION) #2: Protect structures and their occupants and contents from the damaging effects of hazard events (PROPERTY PROTECTION) #3: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands (NATURAL RESOURCE PROTECTION) #4: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable (STRUCTURAL MITIGATION) #5: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events (EMERGENCY SERVICES) #6: Educate and foster public awareness of hazards and techniques available for mitigation (PUBLIC EDUCATION AND AWARENESS)
Action Description	Title and description of action to be undertaken
Hazards Addressed	Hazard which the action addresses
Lead Agency	Entity responsible for undertaking the action
Funding Source	Level of funding required for action, where applicable
Priority/Status	Categorization based on the following projected criteria: **Completed**: Notable mitigation projects implemented in the past five years **Ongoing**: Action in progress / perennial occurrence **High**: Projected implementation within five years **Medium**: Projected implementation between five and ten years **Low**: Projected implementation beyond ten years

Benefit/ Cost Score	The Benefit/Cost score included in the jurisdictional Mitigation Action Plans are considered at the planning level and does not include a full analysis of all costs and benefits associated with action implementation. For example, a mitigation action that scores "High" in benefits and "Low" in costs will be listed as "Moderate" in the plan due to providing a long- term solution, but with a high implementation cost. For some projects, such as routine or ongoing operations conducted with local operating funds and existing staff, this may be the only explicit comparison of costs and benefits. For projects of which grant funding or bond issues may be sought, more in-depth evaluations of costs and benefits may be required. As specific project scopes are detailed, the benefits and costs of an action can be identified with more precision and the benefit-cost ratio (BCR) that results from a full benefit-cost analysis may differ from the planning level Benefit/Cost score presented in the plan. It should be noted that higher scores do not necessarily correspond to high priorities, nor do low scores correspond to low priority projects. An important action with a high priority to a jurisdiction may have a lower Benefit/Cost score because of its complexity, assumed high expense, and other potential costs. Jurisdictions should not be discouraged or deterred from further consideration of actions which have low scores until additional, more specific, evaluations of the costs and benefits has been undertaken. **Low**: Benefits: Projects that only benefit a limited population, or provides short-term benefits / Costs: projects likely to cost over $100,000 and requiring additional funding or staffing outside of normal operations, and is complicated to implement. **Moderate**: Benefits: Projects that would be felt by moderate amount of population in jurisdiction, or solves a problem for several years / Costs: projects that may need additional funding or continued study or staffing outside of normal operations, with estimated costs between $10,000 and $100,000. **High**: Benefits: Projects that benefit many in the jurisdiction that are long- term solutions / Costs: projects that can be implemented by existing personnel with little additional burden on budget and uncomplicated to implement.

Lee County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority/Status	Benefit/Cost Score	Jurisdiction	Status
1	Develop and up to date map of current and future public and private dams/levees in all jurisdictions.	Dam Failure, Flooding, High Winds/Thunderstorms, TS/TD/Hurricane	LCEMA, Engineering Departments of Lee County, Auburn and Opelika	Local State Federal	Low/	Moderate	All	No progress: Dams/leveees were determined to be manmade hazards
1	Maintain up-to-date flood maps for Lee County in digital format by participating in FEMA's Floodplain Map Modernization Program	Flooding	Local Floodplain Managers for Lee County, Auburn, Opelika	Local ADECA AEMA	High	High	City of Auburn City of Opelika City of Smiths Station Lee County	Complete
1	Identify and map areas that are vulnerable to sinkholes by conducting asphalt and geotechnical soil testing.	Sinkholes/Land Subsidence	Engineering departments of Lee County, City of Opelika	Local State Federal	Low No progress	Low	City of Opelika Lee County	No progress: Action requires additional staff, time, resources, funding
1	Continue to maintain GIS data from all jurisdictions to	All	GIS Departments Auburn, Opelika,	Local State	Medium On-going	High	All	Water infrastructure

	identify and map current and future critical facilities in each jurisdiction.		Lee County, LCEMA, LRCOG	Federal				mapping is complete
4	Maintain a tree maintenance program to prevent loss and protect lives, property, and infrastructure during a natural hazard.	Hail, Lightning, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane, Winter Storm	Public Works Departments, Opelika, Lee County; Arborist, City of Auburn	Local State funds, if available Federal funds, if available	Medium On-going	High	All	Complete
5	Maintain a debris management program before and after a natural hazard occurrence for residence, business, critical facilities and public roads.	All	Public Works and Engineering Departments in Auburn, Opelika and Lee County; LCEMA	Local FEMA	Medium	High	All	Complete
1	Continue to implement mitigation projects to prevent future sinkholes from occurring in areas prone to this hazard.	Sinkholes/Land Subsidence	Public Works & Engineering Departments in Opelika and Lee County; LCEMA	Public Works and Engineering Departments in Opelika and Lee	Medium Many projects have been completed.	High	City of Opelika Lee County	Complete: Lee County has spent $1,000,000 repairing sinkhole damage to roads

				County; LCEMA				
1	Update the public utility subsystems.	Hail, Lightning, High Winds/Thunderstorms	APCO, TELC, Alagaso	Local	Low	Low	All	No progress: Too costly and outside the scope of EMA Influence
1	Promote the interconnection of the public water systems.	Drought	Municipal Water Systems; Loachapoka Water Authority; Smiths Station Water and Sewer Authority.	Local State Funds, if available Federal Funds, if available	Low No progress to date	Moderate	All	No progress: Progress depends on goals of water boards and authorities

1	Continue to implement recommended projects from the Storm Water Drainage Plans of the City of Auburn, City of Opelika and Lee County into the Hazard Mitigation Plan.	Flooding	LCEMA Public Works and Engineering Departments in Auburn, Opelika and Lee County	Local State funds, if available Federal funds, if available	High	High	City of Auburn City of Opelika City of Smiths Station Lee County	Complete
4	Develop and maintain 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.	Flooding, High Winds/Thunderstorms, TS/TD/Hurricane	Public Works and Engineering Departments in Opelika and Lee County.	Local State funds, if available Federal funds, if available	Medium Plan has been developed.	Moderate	All	Complete; Currently working on individual storm shelter grant program.
4	Develop and coordinate a list of possible areas to build and/or repair retention ponds in an effort to keep repetitive flooding from	Flooding	Public Works and Engineering Departments in Opelika and Lee County.	Local State funds, if available Federal funds, if available	Low	Moderate	All	No progress: Staff and local funding resources not available

	damaging commercial and residential structures.							
1	Continue to maintain a list of roads and bridges that need to be mitigated, replaced, and repaired in an effort to keep repetitive flooding from being an issue in terms of egress and ingress.	Flooding	Engineering Departments in Auburn, Opelika and Lee County, AOMPO; LCEMA	Local State funds Federal funds	High	High	All	Donahue Bridge is completet; Saugahatchee Lake Road Bridge is closed with alternate route now available
5	Maintain 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	All	LCEMA, Auburn and Opelika Law Enforcement and Fire Departments, Lee County Sheriff, Volunteer Fire Departments	Local	Medium	High	All	Complete

	occur in the jurisdictions.							
2	Identify and implement relocation projects for residence and businesses impacted by flooding.	Flooding	LCEMA; Local Governments	Local FEMA	High	Moderate	All	No new relocations have occurred in past 5 years
2	Continue to acquire and preserve land that is subject to repetitive flooding from landowners who are willing to participate in the program.	Flooding	LCEMA; Local Governments	Local FEMA	High	Moderate	City of Auburn City of Opelika City of Smiths Station Lee County	No new acquisitions have occurred in past 5 years
2	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.	High Winds, Thunderstorms, Tornado, TS/TD/Hurricane	LCEMA; Local govenmens	Local FEMA	Low	Moderate	All	Storm shelter built for senior citizens in Beaulah. Wiorking on one in Smiths Station
6	Continue to implement an	Wildfire	Alabama Forestry	Local	Medium	High	Lee County	Workshops were

	educational program with the State Forestry Office to promote effective land management practices and regulations with county landowners.		Commission, Volunteer Fire Departments, LCEMA	State				conducted locally by Alabama Forestry Commission
5	Maintain, test and replace (as needed) weather sirens in the county.	All	LCEMA, All jurisdictions	Local FEMA	High	High	All	There are 67 outdoor sirens operating in Lee County; testing occurs weekly
5	Seek funding for NOAA Weather Radios to be placed in areas of high citizen traffic, areas of high population of at risk populations, outdoor facilities, etc.	All	Lee County EMA, Lee County 911	Foundation Grants State funds, if available FEMA	Medium	High	All	No progress: Safe rooms were higher priority during the last 5 years
5	Continue funding for portable HAM	All	LCEMA, Lee County 911, Red	Local State Federal	High	High	All	Complete

	Radio stations to be placed in shelters, hospital/medical clinics, etc. during times of natural disasters to enable better communication abilities with service agencies.		Cross, RACES HAM Radio Club					
5	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.	All	Public Works and Engineering Departments in Auburn, Opelika and Lee County.	Local State Federal	Low	Low	All	No progress: Local and federal funding not available.

5	Utilize technology, social media and internet options as part of the warning system.	All	LCEMA	Local State Federal	High	High	All	New; will be used to alert about storm shelters
5	Conduct a survey for the county's emergency response agencies to identify any existing needs and possible funding sources in terms of safety equipment, personnel, and other needed resources.	All	LCEMA	Local State Federal	Medium On-going	Moderate	All	Complete: $12,444 in Hazmat equipment has been purchased.
6	Continue to offer annual training courses on the occurrence of natural hazards and the recovery efforts associated with the natural hazard.	All	LCEMA	Local	Medium On-going	High	All	Training classes are offered quarterly by LCEMA.

5	Explore funding options to renovate/expand the Lee County Emergency Operations Center	All	LCEMA	Local State Federal Foundation	Medium	Moderate	All	New
6	Maintain a media, website, and public information packet with available shelter information in the event of a disaster.	Flooding, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane, Wildfire, Winter Storms	LCEMA, VOAD, Red Cross, Municipal and County Law Enforcement.	Local State Federal	Medium	High	All	Complete
4	Continue to develop and coordinate a list of independent homeowners, schools, 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.	High Winds, Thunderstorms, Tornado, TS/TD/Hurricane	LCEMA, VOAD, Red Cross, Auburn City Schools, Opelika City Schools, Lee County School District	Local State Federal	High	High	All	Complete; 82 homeowners are on the list in part with the individual storm shelter grant.

4	Continue to develop and coordinate a list of sites that might be available to host a community shelter in areas of high-risk populations.	Flooding, Tornado, TS/TD/Hurricane, Wildfire, Winter Storm	LCEMA, Local Government, Auburn City Schools, Opelika City Schools, Lee County School District	Local State Federal	Low	High	All	Individual storm shelter grant program.
5	Increase the emergency water supply that is available to ensure sufficient supply during a natural disaster.	All	Municipal water systems, Loachapoka Water Authority, Smiths Station Water and Sewer Authority.	Local CDBG USDA	Medium	Moderate	All	Local funds have been used to add some additional water storage capacity in Lochapoka and Opelika.
5	Continue to acquire portable and fixed generators that will be available for mass care community shelters during times of natural disasters	All	LCEMA, Local Governments	Local State Federal	High	High	All	2 generators are in place to be used at temporary community shelters; at least 2 more are

								needed at this time.
5	Maintain a recovery response team to initiate recovery efforts and to provide damage reports to the Lee County EMA	All	LCEMA	Local	High	High	All	Complete
5	Continue to maintain a database of contact personnel to send grant alerts regarding the availability of funds for equipment and training.	All	LCEMA, LRCOG	Local	High	High	All	Complete; LRCOG has acquired grant alert software
6	Distribute natural hazard information at public buildings, such as the library, and on the internet to promote and assist residential and commercial owners in	All	LCEMA	Local AEMA	High	High	All	Complete

	constructing storm shelters.							
6	Continue to hold Community Emergency Response Team (CERT) training for citizens of Lee County to assist in natural hazard preparation, planning and public outreach.	All	LCEMA	Local AEMA	High	High	All	Complete
6	Offer assistance to citizens by providing access to current maps and information on the National Flood Insurance Program.	Flooding	LCEMA, Floodplain Managers at Auburn, Lee County and Opelika	Local State	High Maps are currently online with ADECA	High	All	Complete; Flood Plain Maps are now available online via ADECA

1	Continue to participate in NFIP by the following activities: 1) participate 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.	Flooding	LCEMA, Floodplain Managers at Auburn, Lee County and Opelika	Local	High	High	City of Auburn City of Opelika City of Smiths Station Lee County	Complete
5	Purchase generators to keep pumps/lift stations and other critical water facilities	All	LCEMA, Municipal Water Systems, Loachapoka Water	Local State Federal	High	High	All	8 generators are in place at critical facilities. At least 3

	working in the event of power outages, ensuring that communities have access to potable water.		Authority, Smiths Station Water and Sewer Authority.					more are needed at this time.

Russell County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority/Status	Benefit/Cost Score	Jurisdiction	Progress
1	Develop an up to date map of all current or planned private and public dams and levees in all jurisdictions	Flooding High Winds/Thunderstorms	Russell County Engineering; Phenix City Engineering; RCEMA	Local funds State funds, if available Federal funds, if available	Low	Medium	All	Deferred for funding, staffing
1	Maintain up to date flood maps for Russell County in	Flooding	Russell County Engineering; Phenix City	Local funds AEMA ADECA	High In progress	High	All	In progress

	digital format by participating in FEMA's Floodplain Map Modernization Program		Engineering; Floodplain Managers					
1	Integrate existing GIS data into one shareable file	All	RCEMA; City of Phenix City; Russell County Commission	Local	Medium In Progress	Moderate	All	Complete
4	Implement a tree maintenance program (in ROW) to prevent loss and protect lives, property and infrastructure	Hail, High Winds/Thunderstorms, Tornado, TS/TD/Hurricanes, Winter Storm	Russell County, Phenix City Public Works, Maintenance and Engineering Departments	Local State funds, if available Federal funds, if available	Medium On-going	High	All	Complete
5	Maintain a debris management program	Flooding, Hail, Sinkholes, High Winds/Thunderstorms, Tornado,	Russell County; Phenix City Public	Local State funds, if available	Medium	Moderate	All	No progress; Funding,

	for homeowners, businesses, critical facilities and infrastructure after natural hazard events	TS/TD/Hurricane, Wildfire, Winter Storm	Works, Maintenance and Engineering Departments	Federal funds, if available				staffing not available
4	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 commercial, residential and public structures	Flooding, High Winds/Thunderstorms, TS/TD/Hurricane	Russell County, Phenix City Public Works and Engineering Departments	Local State funds, if available Federal funds, if available	Medium	High	All	Complete

	and infrastructure.							
1	Continue to maintain and enforce regulations for silt fences to prevent erosion.	Flooding, High Winds/Thunderstorms, TS/TD/Hurricanes	Russell County and Phenix City Public Works and Engineering Departments	Local	Medium	High	All	Complete
1	Study, develop and implement a storm water drainage plan	Flooding, High Winds/Thunderstorms, TS/TD/Hurricanes	Russell County, Phenix City Public Works and Engineering Departments	Local State funds, if available Federal funds, if available	Medium	Moderate	All	Complete
2	Keep accurate lists of properties in Russell County that may be candidates for full or partial buyouts, elevations and/or wind retrofits.	Flooding, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane	RCEMA	Local State funds Federal funds	Medium On-going	Moderate	All	Complete

5	Continue to implement a reporting system to obtain detailed damage reports from law enforcement, emergency management services, fire, rescue and other governmental entities. l	All	RCEMA, Phenix City and Russell County Law Enforcement, PC Fire Department, Volunteer Fire Departments	Local	Medium	High	All	Complete; Buyouts completed for 1 church since 2010
5	Utilize cellular and internet applications for damage reporting	All	RCEMA	Local State funds Federal funds	High	High	All	Deleted; Dredging is addressed in Action 2.3
1	Continue to acquire and preserve land that is subject to repetitive flooding from landowners who are	Flooding	RCEMA	Local FEMA	Medium	Moderate	All	Complete

	willing to participate in the program							
6	Develop an educational program with the state forestry office by distributing land management practices and regulation materials to landowners	Wildfire	State Forestry Department, RCEMA	Local State	Low	Moderate	All	New in 2015
2	Identify and construct firebreaks around critical facilities that are vulnerable to wildfires	Drought, Wildfire	State Forestry Department, RCEMA	Local State	Low	Low	All	Complete;
5	Continue to seek and secure funding to place outdoor	All	RCEMA	Local AEMA FEMA	Medium	Moderate	All	No progress made; Staffing not available

	warning sirens in needed places throughout the county							
5	Continue to enhance and seek funding and/or partnerships with other agencies to implement mass automated notification systems throughout the county.	All	RCEMA, Russell County 911 Coordinator, Phenix City Schools, Russell County Schools	Local AEMA FEMA USDA	High	Moderate	All	No progress made; Funding not available
5	Seek and secure funding for NOAA Weather Radios to be placed in areas with high populations of vulnerable citizens and	Flooding, Hail, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane, Winter Storm	RCEMA, Russell County 911 Coordinator	Local AEMA FEMA USDA	High On-going	High	All	Complete; 5 new sirens added since 2010.

	or where large numbers of citizens congregate.							
5	Maintain Web EOC	All	RCEMA	Local FEMA	High	High	All	Complete
5	Conduct a survey of the county's emergency response agencies to identify existing needs and possible funding sources in terms of equipment, personnel, and resources.	All	RCEMA, Phenix City and Russell County Law Enforcement, PC Fire Department; Volunteer Fire Departments, 911 Coordinator	Local	Medium	High	All	Complete; 265 weather radios have been distributed to childcare, churches, recreation
6	Continue to offer training courses on the occurrence of natural hazards and recovery	All	RCEMA	Local State funds, if available Federal funds, if available	Medium On-going	High	All	New in 2015

	efforts associated with natural hazards.							
6	Maintain a media, website and public information packet with shelter locations and services available in the event of a disaster.	All	RCEMA, Phenix City and Russell County Law Enforcement, PC Fire Department, Red Cross	Local	Medium	High	All	Complete
5	Develop and maintain a list of homeowners and /or agencies who wish to have a safe room. Secure funds to assist homeowners and agencies in constructing safe rooms.	High Winds/Thunderstorms, Tornado	RCEMA	Local AEMA FEMA	Medium On-going	High	All	Complete; Training has been offered on aa quarterly basis

5	Work with transportation providers to safely move individuals to shelter.	Flooding, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane, Winter Storm	RCEMA, Phenix City Express Public Transit, Phenix City Schools, Russell County Schools	Local State funds, if available Federal funds, if available	Medium	High	All	Complete
4	Obtain funding to support the construction of community shelters in areas of need and/or retrofit areas in existing schools so students can shelter in place.	Tornado, Winter Storms	RCEMA, Phenix City Schools, Russell County Schools	Local AEMA FEMA	Medium	Moderate	All	Complete; 7 new safe rooms added since 2010; 8 on wait list
5	Continue to maintain a recovery response team to provide damage reports to	Flooding, High Winds/Thunderstorms, Tornado, TS/TD/Hurricanes, Winter Storm	RCEMA; Phenix City and Russell County Law Enforcement, PC Fire	Local	Medium	High	All	New in 2015

	Russell County EMA.		Department, Red Cross					
5	Continue to maintain a database of contract personnel to send grant alerts concerning the availability of funds for equipment and training.	All	RCEMA LRCOG	Local	Medium	High	All	New in 2015
6	Distribute natural hazard information via all available outlets, including social media.	All	RCEMA	Local State funds, if available Federal funds, if available	Medium On-going	High	All	Complete
5	Continue to hold Community Emergency Response Team (CERT)	All	RCEMA	Local State funds, if availableFEMA	High On-going	High	All	Complete; LRCOG subscribes to Grant Alert Service

	Training and Be Ready Days for citizens to increase their knowledge and ability to respond effectively to natural hazard events.							
1	All local governments will continue to participate in NFIP by 1) Participating in floodplain identification and mapping, 2) offering assistance and encouraging property owners to participate in NFIP as	Flooding, High Winds/Thunderstorms, TS/TD/Hurricane	RCEMA, Phenix City City Manager, Russell County Administrator, Hurtsboro Mayor	Local State funds, if available Federal funds, if available	High All participating	High	All	Complete

	protection against flood losses, and 3) Developing monitoring activities.							
6	Make current flood maps and NFIP information available to social media websites, brochures and training materials.	Flooding, High Winds/Thunderstorms, TS/TD/Hurricane	RCEMA, Floodplain Managers in Russell County and Phenix City	Local Federal funds, if available	Medium On-going	High	All	Complete
5	Purchase generators and trailers in an effort to keep lift stations at water distributors working in the event of power outages, ensuring that there	Flooding, High Winds/Thunderstorms, Tornado, TS/TD/Hurricane, Winter Storm	RCEMA, Phenix City Utilities, Russell County Water Authority, Fort Mitchell Water and Sewer System, Hurtsboro	Local AEMA Federal funds	Medium	High	All	Complete

	will be the ability to have potable water.		Water Works					

Lee-Russell COG Mitigation Actions

Goal	Action Description	Hazard	Lead Agency	Funding Source	Priority/ Status	Benefits/ Cost Score
	Conduct a utilities study to determine the potential impact from hazard, and identify any potential projects to eliminate any potential damage.	All	LRCOG			
	Conduct a storm water study to identify problem areas and identify any future projects.	Flooding/ Drought				
	Develop a comprehensive watershed plan for the region.	Flooding/ Drought				
	Implement GIS to assist in hazard mitigation planning	All				
	Conduct a safe railroad crossing study to locate dangerous crossings, and identify	Human				

	potential future projects					
	Conduct a community evacuation route studies to identify potential new projects	All				
	Identify drought indicators for the region in order to identify potential future projects	Drought				
	Hold community workshops and presentation about the importance of hazard planning in order to increase awareness of hazards.	All				

Section 6 – Plan Maintenance Process

This section of the plan addresses requirements of Interim Final Rule (IFR) Section 201.6(C) (4).

Section Contents

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process
6.2 Hazard Mitigation Plan Incorporation
6.3 Public Awareness/Participation

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process

The Lee-Russell Council of Governments (LRCOG) will facilitate plan maintenance activities with assistance from the AEMA Division D Regional Coordinator, local EMA directors, and other regional planning agencies as their county plans are phased in through the five-year framework of the Hazard Mitigation Plan. Local EMA directors will serve as a liaison to participating jurisdictions with their respective counties through their local processes, such as Local Emergency Planning Committee (LEPC) or similar stakeholder groups. The plan monitoring review process shall be chaired by the elected AAEM representative (currently Ernie --, Autauga County EMA Director), from AEMA Division D. Election of an AAEM representative occurs every summer on an annual basis. Periodic review and revision of the Hazard Mitigation Plan are important to ensure the plan's currency and compliance with applicable regulations and to assess the progress of local mitigation actions. Review and revision of the Hazard Mitigation Plan may occur through the following two procedures:

Annual Review Process

On at least an annual basis, each participating county EMA official shall facilitate a meeting in their respective county and include local jurisdictions and other stakeholders, such as the Local Emergency Planning Committee. The exact meeting process in each participating county will be slightly different. At a minimum, the scope of the annual county-level plan review meeting will be to review and evaluate completed mitigation actions for effectiveness, review status of high-priority or ongoing mitigation actions, discuss possible changes to hazard vulnerability or other elements of the risk assessment, assess any major land-use changes, and discuss any other relevant issue pertaining to the Hazard Mitigation Plan. The general public will be invited to attend this meeting through public outreach, as further described in Section 6.3 below, and encouraged to provide their input into the annual review.

Subsequently, area regional meeting between LRCOG, local EMA officials, AEMA Division D Coordinator, and regional stakeholders will be held to review information collected at the county-level meetings and revise the plan. It is viewed appropriately by the local EMA directors that this meeting shall normally coincide with and AEMA Division D quarterly meeting. Any major revision made to the Hazard Mitigation Plan that affects the region as a whole will be distributed to all jurisdictions for adoption in a public session. Otherwise, any project added to a specific Jurisdictional Mitigation Action Plan will be adopted by that specific jurisdiction in a public session.

Emergency Review Process

In certain instances, such as a disaster occurrence impacting a participation jurisdiction, the full Annual Review Process may not be timely enough to address unforeseen issues created by a particular event in these situations, a county EMA official may facilitate a county-level plan review meeting, similar to the process described above in the Annual Review Process, with the requisite public outreach. Once this meeting is completed, a local amendment may be adopted by a participating jurisdiction that only pertains to the revision of their specific Jurisdictional Mitigation Action Plan in a public session. After any local amendment, the local county EMA official shall submit documentation of the local amendment to the Chair of the plan monitoring and review process.

Five-Year Plan Update

Before the five-year expiration (which will begin with the adoption of Phase One, Lee-Russell region) of the Regional Hazard Mitigation Plan, a thorough review, beginning approximately 18 months prior to plan expiration, shall be held to determine any significant changes in the AEMA Division D planning area that may affect the region's vulnerability to hazard impacts, and an evaluation of the mitigation strategy and jurisdictional mitigation action plans developed as part of this process. The remaining AEMA Division D counties will be included in this Regional Plan in a phased process with the goal of having the initial full AEMA Division D plan completed by 2025. This plan update shall incorporate any changes to federal or state regulation that may affect the Hazard

Mitigation Plan contents. The plan update process will follow a local-driven, public process, similar to the plan review processes outlined above.

Initial steps will include:

- Attend City Council, Town Commission, and County Commission meetings to provide updates to the jurisdictions on the five-year update. Request their participation in the update process
- Identify and contact key personnel to be a part of the Stakeholder and Technical Advisory Committee
- Conduct effective public engagement strategies
- Schedule committee and public meetings

The five-year update will include:

- Document the planning process including who was involved and their role in the process
- Review the hazard mitigation plan and regulations
- Review current plans, policies, studies, ordinances, and development trends
- Detail the hazards that could potentially impact all jurisdictions
- Assess and assign risk value for all hazards
- Identify all assets and critical facilities in the region
- Estimate the potential losses
- Construct strategies, objectives, actions, and goals to address each hazard
- Review participation in the National Flood Insurance Program
- Continue to maintain and update the document

In addition, multiple state, regional, and local partners will be consulted to provide data or comments in plan formation. These entities include the U.S. Army Corps of Engineers, Fort Benning, Electrical Cooperatives, Alabama Forestry Commission, Geological Survey of Alabama (GSA), Alabama Department of Public Health (ADPH), Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), Alabama Historical Commission (AHC), neighboring county EMA offices, regional academic providers, and private sector entities. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval.

6.2 Hazard Mitigation Plan Incorporation

Once Phase 1, Lee and Russell Region Hazard Mitigation Plan is “approvable upon adoption” by FEMA, each jurisdiction shall proceed with adoption procedures. Each proposed action listed in the jurisdictional mitigation action plans is assigned to one or multiple lead agencies or departments in order to assign responsibility and accountability of action implementation to specific sources. In addition to the assigned local agency or department, each mitigation action plan also has a priority or status assigned that roughly coincides with an implementation timeline. The local jurisdictions in AEMA Division D will work to seek to provide operational funding to actions that are ongoing and seek outside funding for capital projects that are outside the realm of normal funding during both pre-disaster and post-disaster periods. In the past, all the jurisdictions in Lee and Russell counties have not incorporated the Hazard Mitigation Plan into existing plans, policies, or ordinances.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning organization will provide technical assistance for incorporation, upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan, and will not introduce

additional hazard vulnerabilities to the local area and region at-large. Local EMA directors will incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including each county's Emergency Operation Plan and county THIRAs. During county-level plan reviews, participation communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The Hazard Mitigation Plan will also be provided to other affected regional planning agencies for consistency with regional planning and economic development activities, as well as local economic development councils.

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

- City of Auburn Comprehensive Plan 2030
- City of Auburn 2020 Long Range Plan
- City of Auburn Zoning Ordinances
- City of Auburn Subdivision Regulations
- City of Opelika Comprehensive Plan 2020
- City of Opelika Zoning Ordinances
- City of Opelika Master Plan 2030
- City of Opelika Subdivision Regulations
- City of Smiths Station Zoning Ordinance
- City of Smiths Station Comprehensive Plan 2036
- Russell County Comprehensive Plan
- Russell County Subdivision Regulations
- Phenix City Zoning Ordinance
- Phenix City Comprehensive Plan 2014
- Phenix City Subdivision Regulations

The following are the requirements each jurisdiction in Lee and Russell counties must meet in order to incorporate this hazard mitigation plan into other plans and ordinances.

In the City of Auburn the Planning Commission, in cooperation with the Planning Director and staff, shall revise and update the Comprehensive Plan at intervals not exceeding five (5) years, or as justified by changing circumstances. The Board of Zoning Adjustment shall hear and decide appeals from a decision of the Planning Director made in the performance of his duties. Along with contacting key personnel to be a part of the Stakeholder and Technical Advisory Committee, the city must conduct effective public engagement strategies such as schedule committee meetings and hold public hearings. The city council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business.

For the City of Opelika the Planning Commission has developed a five-year comprehensive plan. The subcommittee of the Opelika Comprehensive Plan met to hear from directors and staff of several different city departments and Opelika Utilities, Opelika City Schools, Auburn/Opelika Airport Authority, and East Alabama Medical Center to review their input into the Comprehensive Plan and make recommendations. The commission is hereby authorized and empowered to exercise all powers and do all things authorized to such commission by the laws of this state as it may deem necessary for its work. Opelika will execute public involvement strategies such as schedule committee meetings and hold public hearings. The city council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business. It is the Council's duty to approve the planning commission's comprehensive plan.

In Phenix City the planning process for the City's Comprehensive Community Master Plan is a collection and review of information, previous plans, studies, and field surveys of the City, in order to provide an assessment of the community relative to the plan. Individual meetings or discussions are conducted to better understand future needs. Following the assessment, an open house gathering is held for the community to come and provide input on their vision as well as aid the planning team in identifying strong places and weak places within the community. Using the assessment for base information, a master plan concept is drafted, utilizing the vision and goals expressed during the planning process. These are reviewed by city staff along with the Planning Commission and City Council, including additional public hearing and comment. Upon approval of the plan by the Planning Commission and City Council, the Planning Commission will assist the Mayor, City Manager, Council, City Departments, and others in the implementation of the plan. The Planning Commission should review the plan annually and update the plan as needed.

In Lee and Russell counties the planning process has included public involvement, a county assessment, drafting of a planning concept, vision, goals and recommendations, review and approval by the Planning Commission, and County Commission in order to have the hazard mitigation incorporated.

Loachapoka, Smiths Station, and Hurtsboro do not have a defined process, in the towns' codes, to have the plan incorporated into existing ordinances. We will assume that the plans must go before the town councils to be voted upon in order to incorporate into the existing plans.

6.3 Public Awareness/Participation

A critical part of maintaining an effective and relevant natural hazard mitigation plan is ongoing public review and comment. Public participation in the hazard mitigation planning process, including monitoring and review of the existing plan, and development and adoption of future plans, is a very important component. Efforts will continue to involve local, state and government agencies, businesses, academia and the general public in the ongoing mitigation planning process to the maximum extent possible.

As described in the Monitoring, Evaluation, and Update process, any significant changes, amendments, or updates to the Hazard Mitigation Plan shall be discussed in public meetings prior to any adoption procedures. Public meetings will be held when any plan modification or major revisions to the plan are required or when otherwise deemed necessary, and will be adopted during a public session. The public will be informed prior to the public hearings and other Hazard Mitigation related meetings through a variety of media sources, including but not limited to: local newspaper advertisements and notices, radio advertising, postings at high traffic community areas, booths at local Severe Weather Expo events, social media, websites, etc. It is important to ensure that the public has the opportunity to be involved with all updates and changes to the hazard mitigation plan as well as the opportunity to voice any comments, questions, and concerns. Consequently, LRCOG and local EMA Directors are dedicated to the direct involvement of its citizens in providing feedback and comments on the plan throughout the five-year implementation cycle. LRCOG and local EMA offices will keep public hard copies and provide hard copies of the Hazard Mitigation Plan to each County Commission office, seats of government in each municipality, and other appropriate public locations, i.e. library, senior citizens center. The plan will also be made available on appropriate websites such as County EMA and LRCOG. Press releases will be published via various media, such as local newspaper advertisements, radio advertising, postings at high traffic community areas, social media, and websites, to inform the general public and stakeholders that the Hazard Mitigation Plan is available for review, where to find the Hazard Mitigation Plan, and how the public can play a role in its creation and future revision. The public hearing will be held to present the final plan to the public before each jurisdiction adopts the plan. The public can voice additional comments and concerns outside of public hearings by emailing or call the staff at LRCOG Planning and Economic department until a better mechanism for recording the public input is created. In the future, workshops and/or lunch and learns will be hosted as a way to continue to engage and educate the public about natural hazard

events. These types of events will be used to maintain public engagement, build a relationship with the public, collect information from the public, and inform the public about how to be involved in the next update.

Section 7 – Appendix

This section of the plan is dedicated to the Appendix.

Section Contents

7.1 Appendix A: Community Survey
7.2 Appendix B: Agendas and Documents
7.3 Appendix C: Briefs, Advertisement, Sign-in Sheets, and Newspapers
7.4 Appendix D: Hazard Events Tables
7.5: Emails with Jurisdictions

7.1 Community Survey Questions

LEE COUNTY ALABAMA HAZARD MITIGATION PLAN UPDATE 2019 PUBLIC SURVEY
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 ☐Auburn University ☐ Loachapoka☐ Opelika ☐ Smiths Station
   ☐ Other area of Lee County

☐ ☐ **Does it flood where you live?** ☐ ☐Y ☐ ☐ ☐ I don't

☐ **Do you have flood insurance?** ☐ ☐Y ☐ ☐ ☐ I don't

3. **How prepared do you feel for disasters such as tornadoes, floods or severe storms?**
   ☐ Not prepared ☐ Somewhat Prepared ☐ Prepared ☐ Very Prepared

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

☐ Educational ☐ Community classes on natural hazards ☐ Safe
☐ Community shelters ☐ Relocate to a safer location ☐ Readiness

4. **Which information sources are the most effective at warning you of approaching storms or disasters in Lee County?** *(Check all that apply to you)*
   ☐ Cell phone ☐ Facebook ☐ Internet Web Site ☐ IPad ☐ Newspaper ☐ Radio
   ☐ Outdoor Sirens
   ☐

5. Please indicate your personal experience and level of concern about the effects of each natural hazard's potential impact on life and property in Lee County.

Hazard	Have Experienced	Not Concerned	Concerned	Very Concerned
Dam Failure				
Drought				
Earthquakes				
Extreme Temperature (too hot/too cold)				
Flooding				
Hail				
High Wind/Thunderstorm				
Landslides				
Lightning				
Sinkhole				
Tropical Storms/Hurricane				
Tornado				
Wildfire				
Winter Storm				

Please leave this survey with the person who gave it to you today or mail to: Tracie Hadaway, Lee-Russell Council of Governments; 2207 Gateway Drive; Opelika, AL 36801 Questions: 334-528-9237 or thadaway@lrcog.com

RUSSELL COUNTY ALABAMA HAZARD MITIGATION PLAN UPDATE 2019 PUBLIC SURVEY

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

2. Where in Russell County do you live?

☐ Hurtsboro ☐ Phenix City ☐ Unincorporated Russell County

☐

2. Does it flood where you live? ☐Yes ☐No ☐ I don't

Do you have flood insurance? ☐Yes ☐No ☐ I don't

4. How prepared do you feel for disasters such as tornadoes, floods or severe storms?

☐ Not prepared ☐ Somewhat Prepared ☐ Prepared ☐ Very Prepared

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

☐ Educational brochures ☐ Community classes on natural hazards ☐ Safe Room

☐ Community shelters ☐ Relocate to a safer location ☐ Readiness kit

6. **Which information sources are the most effective at warning you of approaching storms or disasters in Russell County?** *(Check all that apply to you)*

☐ Cell phone ☐ Facebook ☐ Internet Web Site ☐ IPad ☐ Newspaper ☐ Radio

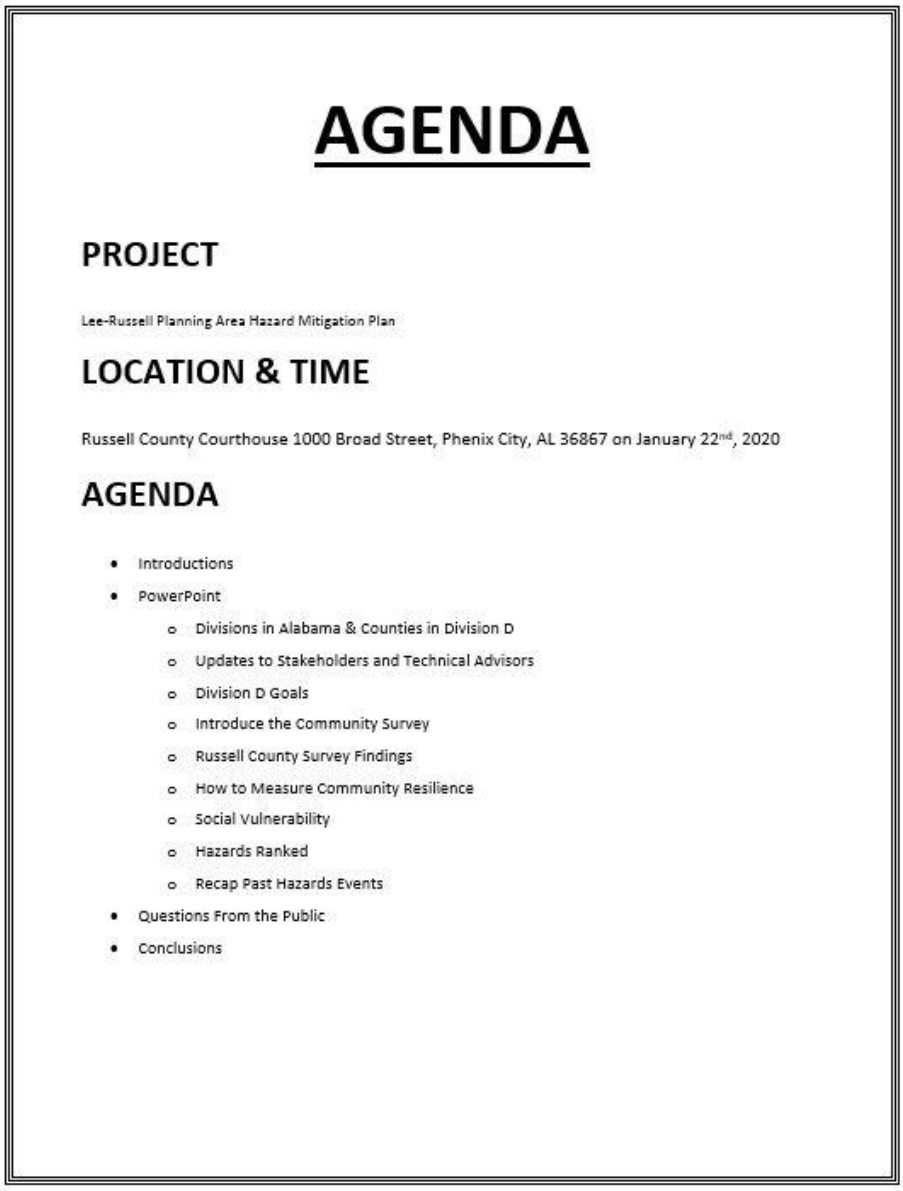
☐ Outdoor Sirens ☐ Television ☐ Telephone ☐ Twitter ☐ Weather Alert Radio

Please indicate your personal experience and level of concern about the effects of each natural hazard's potential impact on life and property in Russell County.

Hazard	Have Experienced	Not Concerned	Concerned	Very Concerned
Dam Failure				
Drought				
Earthquakes				
Extreme Temperature (too hot/too cold)				
Flooding				
Hail				
High Wind/Thunderstorm				
Landslides				
Lightning				
Sinkhole				
Tropical Storm/Hurricane				
Tornado				
Wildfire				
Winter Storm				

Please leave this survey with the person who gave it to you today or mail to: Tracie Hadaway, Lee-Russell Council of Governments; 2207 Gateway Drive; Opelika, AL 36801 Questions: 334-528-9237 or thadaway@lrcog.com

7.2 Appendix B: Agendas & Notes from Meetings



AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Russell County Courthouse 1000 Broad Street, Phenix City, AL 36867 on January 22nd, 2020

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Updates to Stakeholders and Technical Advisors
  - Division D Goals
  - Introduce the Community Survey
  - Russell County Survey Findings
  - How to Measure Community Resilience
  - Social Vulnerability
  - Hazards Ranked
  - Recap Past Hazards Events
- Questions From the Public
- Conclusions

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Russell County Courthouse 1000 Broad Street, Phenix City, AL 36867 on January 16th, 2020

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Updates to Stakeholders and Technical Advisors
  - Division D Goals
  - Introduce the Community Survey
  - Russell County Survey Findings
  - How to Measure Community Resilience
  - Social Vulnerability
  - Hazards Ranked
  - Recap Past Hazards Events
- Questions
- Conclusions

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Lee County Emergency Management Agency 908 Ave B, Opelika, AL 36801 on January 14th, 2020

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Updates to Stakeholders and Technical Advisors
  - Division D Goals
  - Introduce the Community Survey
  - Russell County Survey Findings
  - How to Measure Community Resilience
  - Social Vulnerability
  - Hazards Ranked
  - Recap Past Hazards Events
- Questions
- Conclusions

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Lee County Emergency Management Agency 908 Ave B, Opelika, AL 36801 on November 5th[th], 2019

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Updates to Stakeholders and Technical Advisors
  - Plan Requirements, Process, and Timeline
  - Role of Stakeholders and Technical Advisors
  - Benefits of Mitigation Planning
  - Mission Statement
  - Hazard Identified
  - Historical Hazard Events Recap
- Questions
- Conclusions

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Russell County Courthouse 1000 Broad Street, Phenix City, AL 36867 on October 31st, 2019

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Updates to Stakeholders and Technical Advisors
  - Plan Requirements, Process, and Timeline
  - Role of Stakeholders and Technical Advisors
  - Benefits of Mitigation Planning
  - Mission Statement
  - Hazard Identified
  - Historical Hazard Events Recap
- Questions
- Conclusions

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Lee County Emergency Management Agency 908 Ave B, Opelika, AL 36801 on October 17th, 2019

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Benefits of Mitigation Planning
  - Legal Regulations for Local Hazard Mitigation
  - Plan Requirements
  - Core Planning Team for Division D
  - Responsibilities, Processes, Timeline
  - Hazards Introduced
  - Risk Index
- Questions
- Conclusion

AGENDA

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Russell County Courthouse 1000 Broad Street, Phenix City, AL 36867, on October 10th, 2019

AGENDA

- Introductions
- PowerPoint
  - Divisions in Alabama & Counties in Division D
  - Benefits of Mitigation Planning
  - Legal Regulations for Local Hazard Mitigation
  - Plan Requirements
  - Core Planning Team for Division D
  - Responsibilities, Processes, Timeline
  - Hazards Introduced
  - Risk Index
- Questions
- Conclusion

Division D Meetings Notes

Division D Multi-Jurisdictional Multi-hazard Mitigation Plan
Overview

Grant Update:

- Lee-Russell Council of Governments (LRCOG) submitted the PDM grant on 12/15/18.
- Lee-Russell Council of Governments submitted requested revisions by AEMA on 1/4/19.
- The PDM grant was submitted to FEMA by the AEMA for review on 1/9/19.
- Alabama Emergency Management Agency has projected notification of funding in fall 2019.

Counties Participating in Division D Multi-jurisdictional Multi-hazard Mitigation Plan:

- Autauga (Feb. 2021), Chambers (June 2022), Chilton (Oct. 2021), Coosa (March 2022), Elmore (2020), Lee (2020), Lowndes (June 2021), Macon (Aug. 2021), Montgomery (Jan. 2021), Russell (2020), and Tallapoosa (June 2021) counties and municipalities as well as other jurisdictions within these 11 counties.

check

check on due dates

Division D Hazard Mitigation Plan Team Members:

- Lee-Russell Council of Governments staff will act as the Lead Organization to manage and facilitate the planning process by working with the Core Planning Team. A LRCOG staff person will serve as the administrator of the PDM grant if funded and will lead the overall mitigation planning effort by working with the core planning team, local subcommittees and other stakeholders to develop and adopt the Divisional Plan. Once the committee meetings and public meetings/surveys are completed and all data collection is finalized, LRCOG staff would compile and consolidate collected information and updates into the draft Divisional Multi-jurisdictional Multi-Hazard Mitigation Plan.
- Hazard Mitigation Core Planning Team will include the Division D Coordinator, the 11 EMA Directors or their designee and LRCOG staff in the development and adoption of the Division D Multi-jurisdiction Multi-hazard Mitigation Plan. The Division D Hazard Mitigation Core Planning Team would also help establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.
- County-level Hazard Mitigation Planning Sub-committee will include but not limited to individuals from local emergency management, education, public safety, utilities, engineering, planning/zoning, GIS, administration, public works, building, or highway departments. The County Hazard Mitigation Planning Sub-Committee meetings would be convened in each county to review and document what changes/impacts/progress has occurred in the past 5 years for inclusion in the updated divisional plan.

Division D Hazard Mitigation Core Planning Team Responsibilities:

- Serving on the Core Planning Team with Division D Coordinator and the 11 EMA Directors or their designee.
- Approving the final Work Program and Schedule.
- Assisting in organizing and attending regular meetings of the Core Planning Team and county-level planning sub-committees. If unable to attend, sending a designee or make myself available to discuss the agenda through phone conversation or in-person meeting with designated LRCOG staff.
- Assisting in developing and conducting an outreach strategy to involve other county-level planning sub-committee members, stakeholders, and the public, as appropriate to represent the Jurisdiction.
- Identifying community resources available to support the planning effort, including meeting spaces, facilitators, and media outlets.
- Representing the jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Providing information and feedback on the jurisdictional and division risk assessment and mitigation strategies and select a course of action to be followed for the communities.
- Providing an assessment of prioritized projects that have been completed or are ongoing, or changes to prioritization.
- Submitting the draft plan to the county-level planning sub-committee for review.
- Working with the members of the Core Planning Team to incorporate all Jurisdiction's comments into the draft plan.

Division D Meetings Notes

- Submitting the Division D Multi-jurisdiction Multi-hazard Mitigation Plan to the respective governing body for consideration and adoption.
- After adoption, assisting in the coordination process to monitor, evaluate, and work toward plan implementation.
- Assist in documenting the in-kind labor of Core Planning and Sub-committee members for the local match requirement of the grant.

Hazard Mitigation Plan Update Evaluation Process:

1. **Complete grant start up requirements** once funding notification is received.

2. **Review current Hazard Mitigation Plans for each county** -The review of the current approved plans will provide a starting point for identifying areas for improvement that may require more time and resources. Each of the eleven plans will be reviewed for consistency of information within the divisional plan. Additionally, FEMA's Local Mitigation Plan Review Tools from each of the 11 previous plans will be reviewed and recommendations for improvement will be incorporated into the planning process.

3. **Organize Resources and Convene Core Planning Team -** The core planning team will manage the overall plan activities, contribute to the decision making process, review the previous local hazard mitigation plans, finalize requirements for participation in the planning process, and establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.

4. **Organize the County Planning Sub-Committee** - The county-level Planning Sub-Committee would be organized in each county to review the community capabilities, hazard identification, risk assessments, mitigation and plan maintenance strategies of the existing local Hazard Mitigation Plan. During the review, the group would document what changes/impacts/progress has been made in each area for inclusion in the divisional plan.

5. **Create Outreach Strategy for Division D** – The Planning Process Section would be reviewed and evaluated to determine if the planning procedures were effective, was public outreach activities successful in gaining public participation, and is the current level of public support and/or decision maker priorities the same or has it changed related to hazard mitigation. Once reviewed, the planning team would identify any necessary changes or additional strategies that are needed in moving forward with the updated plan. Public outreach efforts will include but not limited to advertisement and invitation to all planning and community meetings, social media outreach, plan website, interactive surveys at stakeholder meetings (i.e. Pollev.com), online surveys (i.e. survey monkey), and phone interviews.

6. **Review Community Capabilities and Previously Approved Hazard Mitigation Plans – The** Capability Assessment Section would be reviewed to determine if community capabilities were documented sufficiently in the previous plans, were there any community capabilities that were missing in terms of administrative, human, technical, and financial resources and if the policies, plans, regulations, or reports listed in the plan were current and up to date.

7. **Conduct Risk Assessment – Hazard Identification, Assessing Risk, and Vulnerabilities** – Hazard Identification and Risks/Vulnerability Assessment would be evaluated to see if the listed hazards and hazard occurrences, probability of future occurrences and the impact on life, property and the community is sufficient or new data is available. Community assets, development trends, population changes, critical facilities, and local mitigation efforts will be updated by utilizing the technical expertise of planning committees, new data sources and existing local plans. Estimates of potential dollar losses and the methodology used to prepare the estimates will be updated from the previous plan.

8. **Identify Mitigation Goals, Action Plan, and Implementation Plan** - Mitigation Strategy Section would be evaluated to determine if the implementation of the community's mitigation strategy was effective and was the strategy revised following any disasters, if the existing mitigation actions were still relevant

Division D Meeting Notes

and were there obstacles to successful implementation of these actions, if integration with other planning mechanisms occurred and if progress was made in implementing the mitigation action plan. Mitigation Strategy would evaluate each jurisdiction's mitigation strategy particularly in light of experiences gained from the implementation of the previous plan. The 5 year update will assess the previous stated goals and actions, evaluate progress in implementing the action plan, and adjust its actions to address current realities. The mitigation strategy will also be revised to add any new disasters to determine if recommended actions are still appropriate given the impacts of the event.

9. **Plan Maintenance Procedures** would be evaluated to determine how well the plan maintenance procedures established in the previously approved plan worked. An updated blueprint for monitoring, evaluating, updating the mitigation plan within the 5 year cycle, as well as the responsible parties, will be outlined. It will also include new and existing strategies for continued public involvement and incorporation into existing planning mechanisms in each jurisdiction.

10. **Develop and Review the Draft Plan** - The draft plan will be reviewed by Division D Core Planning Team, county subcommittees, other identified stakeholders, and the public during the draft process and prior to plan approval and adoption.

11. **Submission of Draft Plan by AEMA and FEMA for review and approval** - An approved draft plan will be submitted to AEMA/FEMA for their review and comment. All comments/revisions/suggestions received from AEMA/FEMA will be integrated into the final plan and would be in compliance with all current, applicable FEMA Local Planning Guidance and Policies.

12. **Adoption of the Division D Multi-jurisdictional Multi-hazard Mitigation Plan in each jurisdiction** - The final approved plan will be formally adopted by all participating local governments at a regularly scheduled commission/council meeting. Documentation of these approvals will be included in the final Division D Multi-Jurisdictional Hazard Mitigation Plan.

Next Steps:

1. Compile a list of potential members of the County Planning Sub-Committee from each County EMA Director.
2. Start reviewing existing data sources to include the following:
    a. Alabama State Hazard Mitigation Plan
    b. Local Hazard Mitigation Plans and the FEMA's Local Mitigation Plan Review Tools
    c. Emergency Operations Plans
    d. State and Federal Sources of Hazard Information
    e. Planning and Regulatory
    f. Changes in Development

Hazards Identitifed at Division D Meeting

Proposed Division D	Autauga/Chilton/Macon/Montgomery/Tallapoosa	Lee/Russell	Elmore	Chambers	Coosa	Lowndes	State of Alabama
Dam Failure	Thunderstorm	Drought/Heat Wave	Thunderstorms/Severe Thunderstorms	Flooding	Tornadoes	Dam Failure	Dam Failure
Drought	Lightning	Earthquakes	Lightning	Tornadoes	Severe Storms (discusses high winds, lightning)	Drought	Drought
Earthquakes	Hail	Flood	Hail	Severe Storms-hail, lightning	Flooding	Extreme Temperatures	Earthquakes
Extreme Temperature	Tornado	Hail	Tornadoes and High Wind Events	Hurricanes	Winter Storms	Floods	Extreme Temperatures
Flooding	Flood/Flash Flood	Lightning	Flooding (includes Flash Flooding, River Flooding)	Winter Storms/Freezes	Hurricanes	Hail	Flooding
Hail	Drought/Extreme Heat	Sinkholes	Hurricanes and Tropical Storms	Landslides	Droughts	High Winds	Hail
High Winds	Winter Storm/Frost/Freeze/Heavy Snow/Ice Storm/Winter Weather/Extreme Cold	Thunderstorms (Includes Strong Winds)	Extreme Temperatures – Heat and Cold	Sink Holes (Land Subsidence)	Not included: Dam Failure	Landslides	High Winds
Landslides	Hurricane/Tropical Storm/Tropical Depression/High Wind/Strong Wind	Tropical Depression/Tropical Storms/Hurricanes	Winter Storms	Earthquakes	Earthquake	Sinkholes and Subsidence	Landslides
Lightning	Sinkhole/Expansive Soil	Tornadoes	Drought	Droughts/Heat Waves	Extreme Temperatures	Wildfire	Lightning
Sinkholes and Land Subsidence	Landslide	Wildfire	Wildfire	Dam/Levee Failures	Landslides	Winter/Ice Storms	Sea Level Rise and Coastal Land Change
Tropical Storms/Tropical Depressions/Hurricanes	Earthquake	Winter Storms (Includes Ice Storms, Heavy Snow)	Landslides	Does not include: Wildfire	Sinkholes and Land Subsidence	Thunderstorms and Lightning	Sinkholes and Land Subsidence
Tornadoes	Dam/Levee Failure	Not included: Dam Failure	Sinkholes and Land Subsidence		Wildfire	Tropical Storms and Hurricanes	Tsunamis
Wildfire	Wildfire	Landslides	Earthquakes			Not included:	Wildfire
Winter Storms			Dam Failure			Earthquake	Winter Storms
			Dense Fog				
			Celestial Impact (Includes Space Weather)				
			Hazardous Materials				
			Transportation System Failures				
			Epidemiological/Public Health				
			Civil Unrest				
			Adversarial Threats				

Proposed Goals from Division D Meeting

Division 'D' Hazard Mitigation Plan – Proposed Goals:

1. **PREVENTION**: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.

2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.

3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.

4. **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.

5. **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.

6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

Initial Letter to Russell County

Dear Russell County Hazard Mitigation Plan participant:

In collaboration with the Russell County Emergency Management Agency, Lee-Russell Council of Governments has been awarded a grant to update the existing Russell 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 Russell County to remain in compliance with 44 CFR 201.6 and FEMA Local Planning Guidance and Policies. An updated plan is also a requirement to maintain 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 Russell County. We will need your expertise again in 2019 to ensure this update properly assesses Russell County's vulnerabilities to natural hazards and contains effective strategies to mitigate loss of property and life.

The first meeting of Russell County Stakeholders and Technical Advisors will take place from 10:00- 12:00 am EDT on Thursday, October 10, 2019 in the Commission Chambers of the Russell County Courthouse, which is located at 1000 Broad Street in Phenix City.

Please contact Lee-Russell Council of Governments via phone (334-749-5264, ext. 237) or e-mail (thadaway@lrcog.com), by October 9, 2019 to RSVP your attendance. If you cannot attend this meeting, we ask that you send a representative in your place.

The current Russell County HMP can be found at: https://ema.alabama.gov/county-mitigation-plan/

Tracie H. Hadaway,
Director of Planning and Economic Development
Lee-Russell Council of Governments
2207 Gateway Drive, Opelika, AL 36801
334.528.9237 or 334-749-5264 Ext. 237
thadaway@lrcog.com

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Initial Letter to Lee County

Dear Lee County Hazard Mitigation Plan participant:

In collaboration with the Lee County Emergency Management Agency, Lee-Russell Council of Governments 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 is also a requirement to maintain 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 will need your expertise again in 2019 to ensure this update properly assesses Lee County's vulnerabilities to natural hazards and contains effective strategies to mitigate loss of property and life.

The first meeting of the Lee County Stakeholders and Technical Advisors will take place from 1:00 – 3:00 pm CDT on Thursday, October 17, 2019 at the offices of the Lee County Emergency Management Agency, 909 Avenue B, Opelika, AL.

Please contact Lee-Russell Council of Governments via phone (334-749-5264, ext. 237) or email thadaway@lrcog.com to RSVP your attendance. If you cannot attend this meeting, we ask that you send a representative in your place.

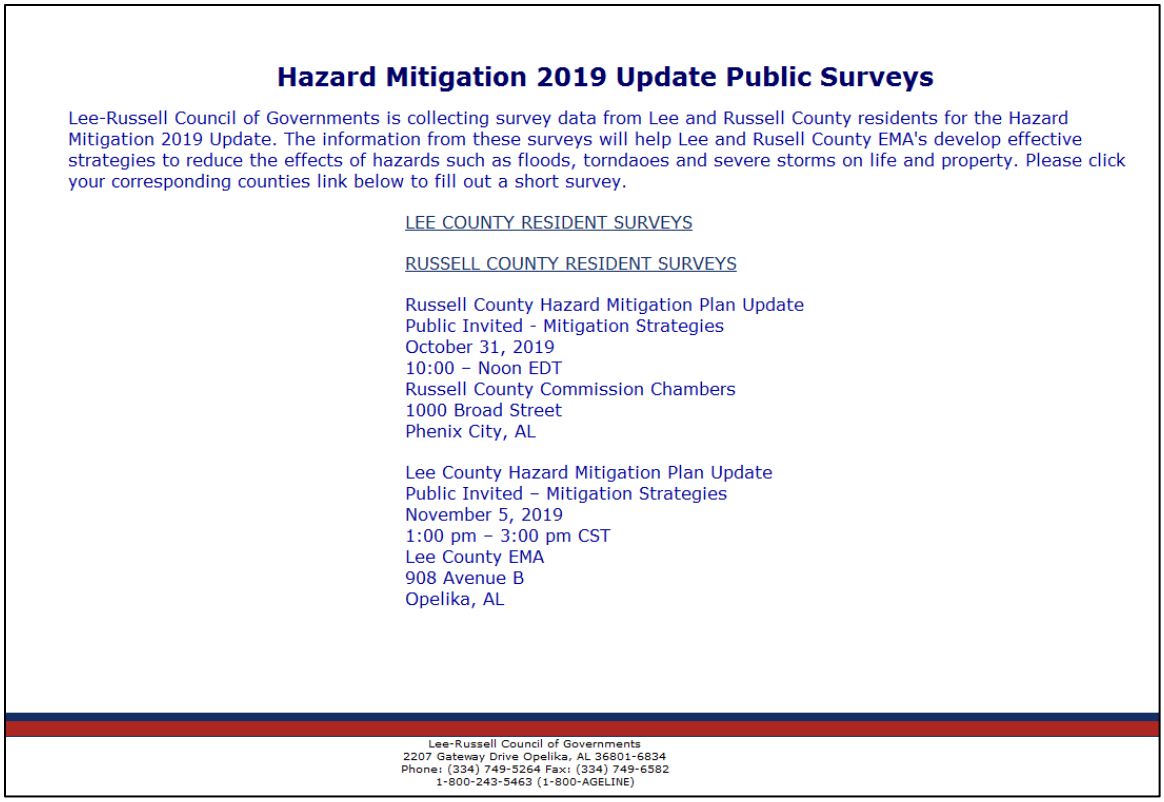
The current Lee County HMP can be found at: https://ema.alabama.gov/county-mitigation-plan/

Tracie H. Hadaway,
Director of Planning and Economic Development
Lee-Russell Council of Governments
2207 Gateway Drive, Opelika, AL 36801
334.528.9237 or 334-749-5264 Ext. 237
thadaway@lrcog.com

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7.3 Flyers, Briefings, Sign-in Sheets, and Newspapers

October 31st and November 5th, Plan Update, Lee-Russell Council of Governments Website



Hazard Mitigation 2019 Update Public Surveys

Lee-Russell Council of Governments is collecting survey data from Lee and Russell County residents for the Hazard Mitigation 2019 Update. The information from these surveys will help Lee and Rusell County EMA's develop effective strategies to reduce the effects of hazards such as floods, torndaoes and severe storms on life and property. Please click your corresponding counties link below to fill out a short survey.

LEE COUNTY RESIDENT SURVEYS

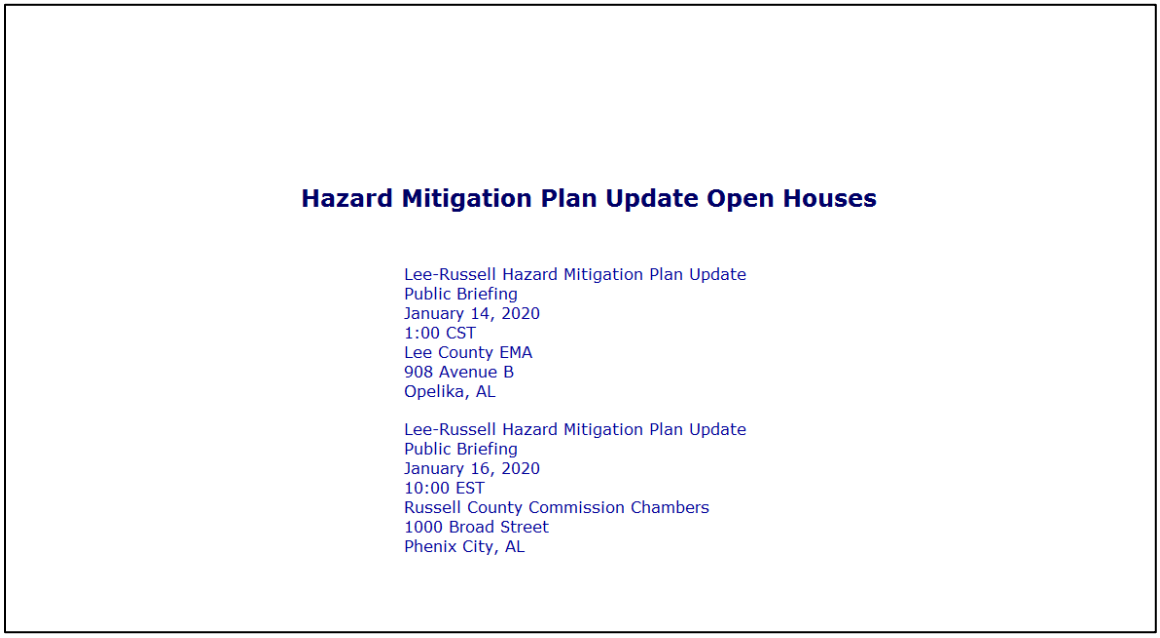
RUSSELL COUNTY RESIDENT SURVEYS

Russell County Hazard Mitigation Plan Update
Public Invited - Mitigation Strategies
October 31, 2019
10:00 – Noon EDT
Russell County Commission Chambers
1000 Broad Street
Phenix City, AL

Lee County Hazard Mitigation Plan Update
Public Invited – Mitigation Strategies
November 5, 2019
1:00 pm – 3:00 pm CST
Lee County EMA
908 Avenue B
Opelika, AL

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)

January 14th and January 16th, Plan Update, Lee-Russell Council of Governments Website

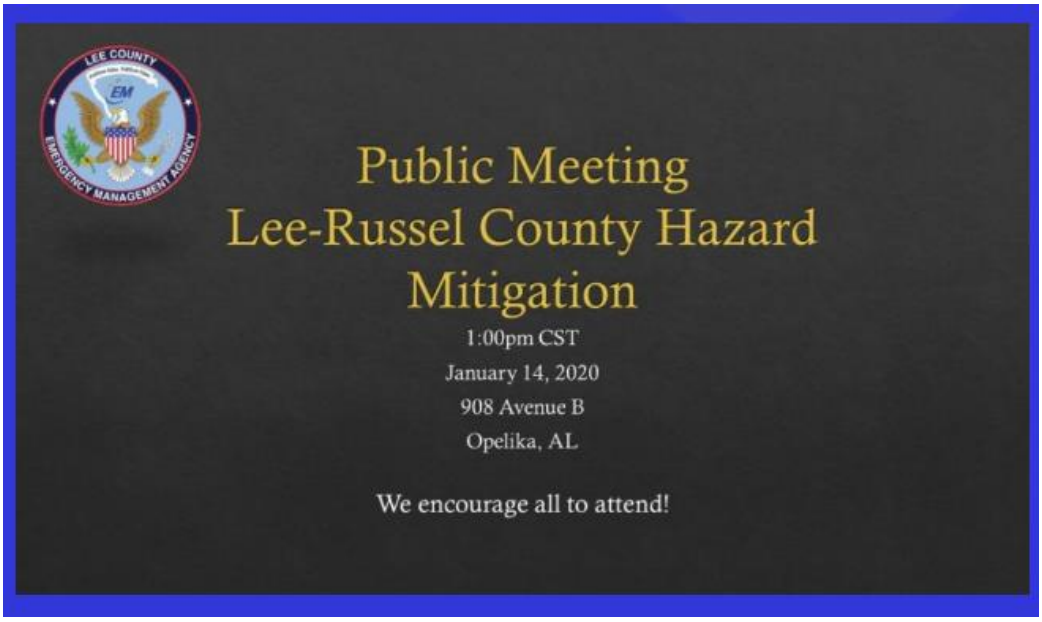


Hazard Mitigation Plan Update Open Houses

Lee-Russell Hazard Mitigation Plan Update
Public Briefing
January 14, 2020
1:00 CST
Lee County EMA
908 Avenue B
Opelika, AL

Lee-Russell Hazard Mitigation Plan Update
Public Briefing
January 16, 2020
10:00 EST
Russell County Commission Chambers
1000 Broad Street
Phenix City, AL

January 14th, Plan Update, Opelika EMA Website


LEE COUNTY
EM
EMERGENCY MANAGEMENT AGENCY
Public Meeting
Lee-Russel County Hazard Mitigation
1:00pm CST
January 14, 2020
908 Avenue B
Opelika, AL
We encourage all to attend!

January 22nd, Public Briefing, Russell County Commissioner Meeting

PUBLIC BRIEFING

PROJECT

Lee-Russell Planning Area Hazard Mitigation Plan

LOCATION & TIME

Russell County Courthouse 1000 Broad Street, Phenix City, AL 36867 at 9:15 January 22nd, 2020

PURPOSE

The Lee-Russell Council of Governments (LRCOG) will be presenting a brief presentation about the update for the Lee-Russell Planning Area Hazard Mitigation Plan at 9:15 am Eastern Time. The purpose of the presentation is to brief the public on the draft update of the first phase of AEMA, Division D, Regional Hazard Mitigation Plan.

A draft copy of the draft plan can be found at our website, www.lrcog.com

For more information, please contact:

Tracie Hadaway

Planning and Economics Director

thadaway@lrcog.com

334-749-5264

Taylor Esco

Planning and Economic Specialist

tesco@lrcog.com

334-749-5264

January 30th, Open House, Lee-Russell Council of Governments, AO Newspaper and the Citizen of East Alabama

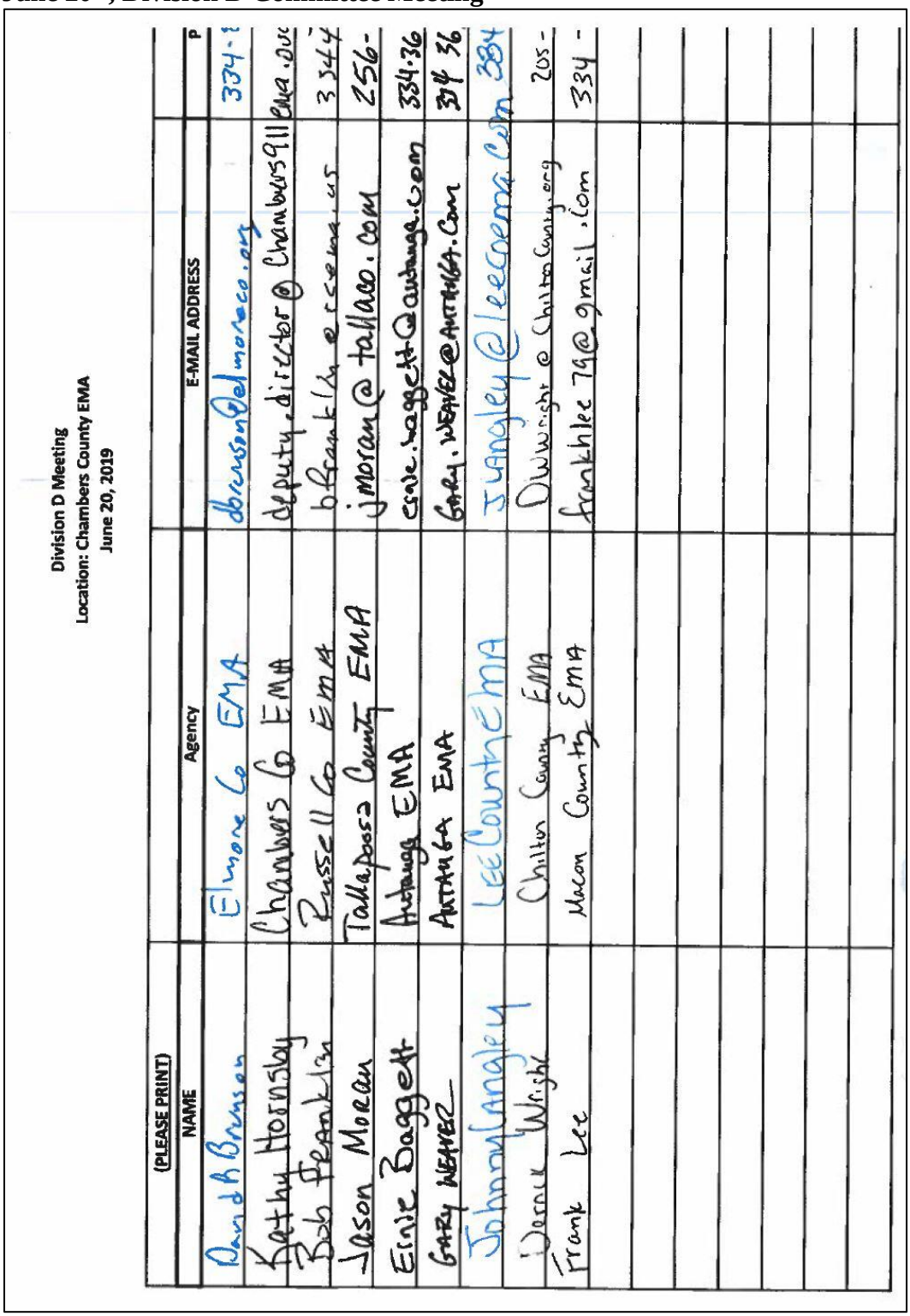
PUBLIC BRIEFING

The Lee-Russell Council of Governments (LRCOG) will be hosting an Open House for the Lee-Russell Planning Area Hazard Mitigation Plan update. The open house will take place on January 30, 2020 from 4:00 pm CST-7:00 pm CST at the Lee-Russell COG office, 2207 Gateway Drive, Opelika, AL. The purpose of the Open House is to brief the public on the draft update of the first phase of AEMA, Division D, Regional Hazard Mitigation Plan.

A draft copy of the draft plan can be found at our website, www.lrcog.com.

If you have any questions regarding the plan or the meeting, please contact Tracie Hadaway, thadaway@lrcog.com or Taylor Esco, tesco@lrcog.com or 334-749-5264.

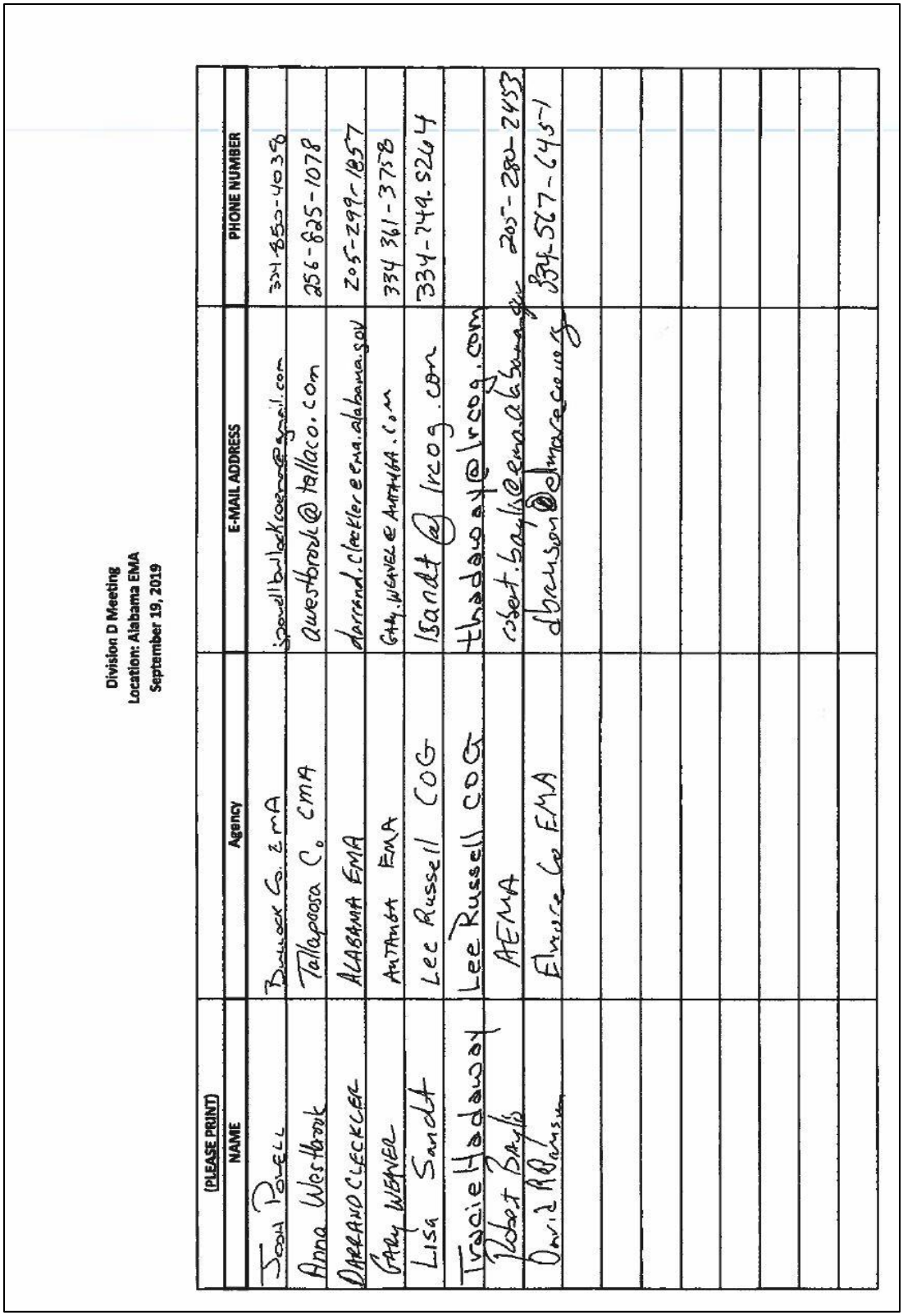
June 20th, Division D Committee Meeting



Division D Meeting
Location: Chambers County EMA
June 20, 2019

(PLEASE PRINT) NAME	Agency	E-MAIL ADDRESS	P
Donald A Brunson	Elmore Co EMA	dbrunson@elmoreco.org	334-[illegible]
Kathy Hornsby	Chambers Co EMA	deputy.director@chambers911ema.org	
Bob Franklin	Russell Co EMA	bfranklin@russellcountyal.us	334-[illegible]
Jason Moran	Tallapoosa County EMA	jmoran@tallco.com	256-
Eddie Baggett	Autauga EMA	eddie.baggett@autaugacounty.com	334-36
Gary Weaver	Autauga EMA	Gary.Weaver@autaugacounty.com	334 36
Johnny Langley	Lee County EMA	jlangley@leecountyema.com	334
Derek Wright	Chilton County EMA	Dwright@chiltoncounty.org	205-
Frank Lee	Macon County EMA	franklee79@gmail.com	334-

September 19th, 2019, Division D Committee Meeting



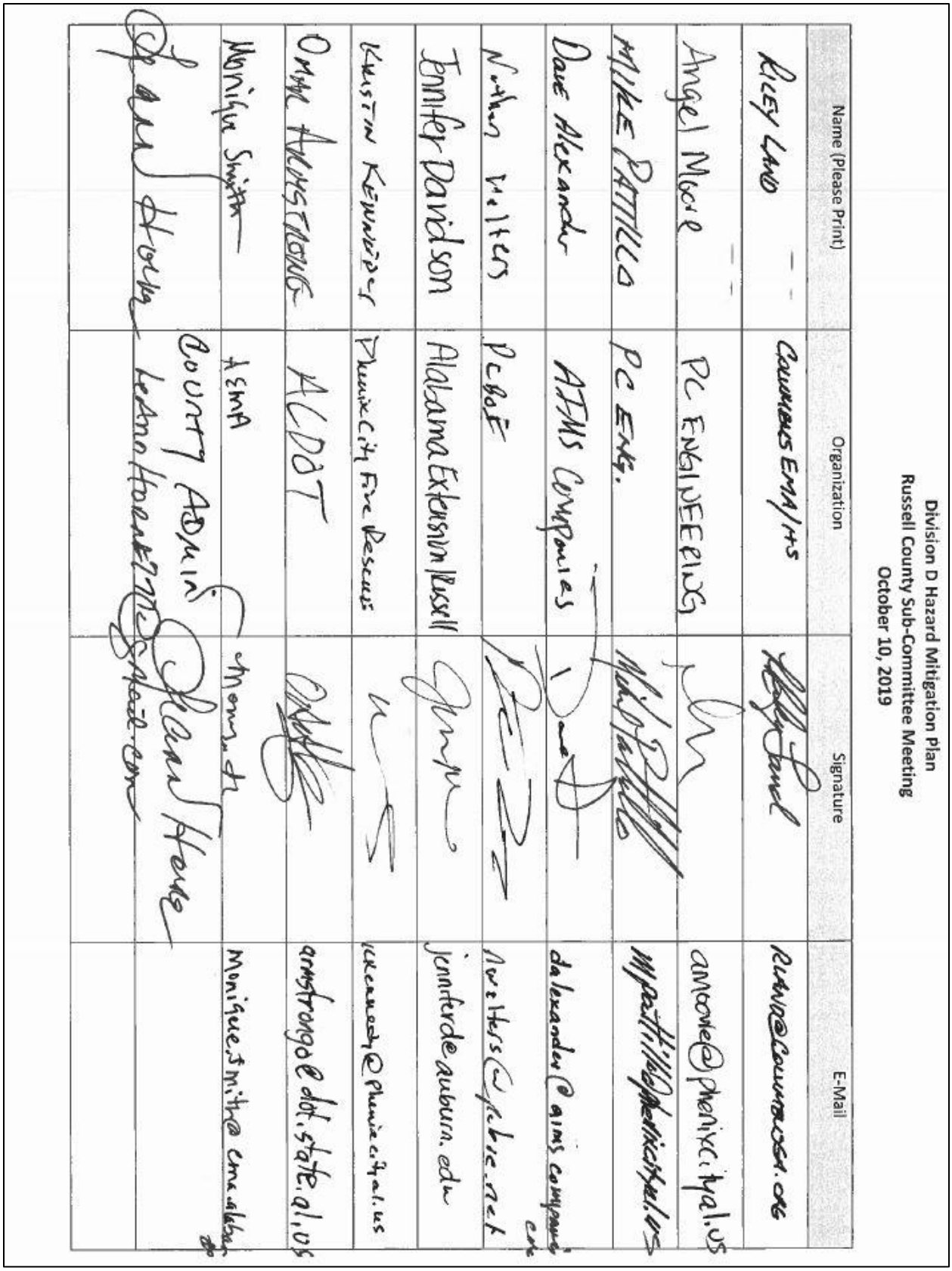
Division D Meeting
Location: Alabama EMA
September 19, 2019

(PLEASE PRINT)			
NAME	Agency	E-MAIL ADDRESS	PHONE NUMBER
Josh Powell	Bullock Co. EMA	joewellbullockcountyema@gmail.com	334-853-4039
Anna Westbrook	Tallapoosa Co. EMA	Qwestbrook@tallaco.com	256-825-1078
DARRAND CLECKLER	ALABAMA EMA	darrand.cleckler@ema.alabama.gov	205-799-1857
Gary Wiginer	Autauga EMA	Gary.wiginer@autauga.com	334 361-3758
Lisa Sandlin	Lee Russell COG	lsandlin@lrcog.com	334-749-5264
Tracie Haddaway	Lee Russell COG	thaddaway@lrcog.com	
Robert Bayles	AEMA	robert.bayles@ema.alabama.gov	205-280-2453
David Robinson	Elmore Co EMA	drobinson@elmorecounty	334-567-6451

October 10th, Public Meeting, Sign-In Sheet

Division D Hazard Mitigation Plan
Russell County Sub-Committee Meeting
October 10, 2019

Name (Please Print)	Organization	Signature	E-Mail
Lisa Sandt	Lrcog	Lisa Sandt	lsandt @ Lrcog.com
Seigal Tim	Fort Benny Fire Dept		Timothy.J.Seigal.civ @mail.mil
Terry WYDRA	FT BENN. EM		TERRY.W.WYDRA.CIV @MAIL.MIL
Tim Price	FT Benn AT		timothy.price4.ctr@mail.mil
Samantha Cato	Russell County EMA		scato@rcema.us
DAVID MARTIN	Russell County EMA		dmartin @ Rcema.us
Bob Franklin	Russell County EMA		bfranklin@rcema.us
Lt. Lon Russell	Russell County School District		Lrussell@rcso.org
Marianne Michael	Troy University	Marianne Michael	mamichael@troy.edu
Todd Hughes	Phenix City		Hughes@phenixcityal.us
Parker Goodman	Tallapoosa River Electric Coop		Pgoodman@trec.coop



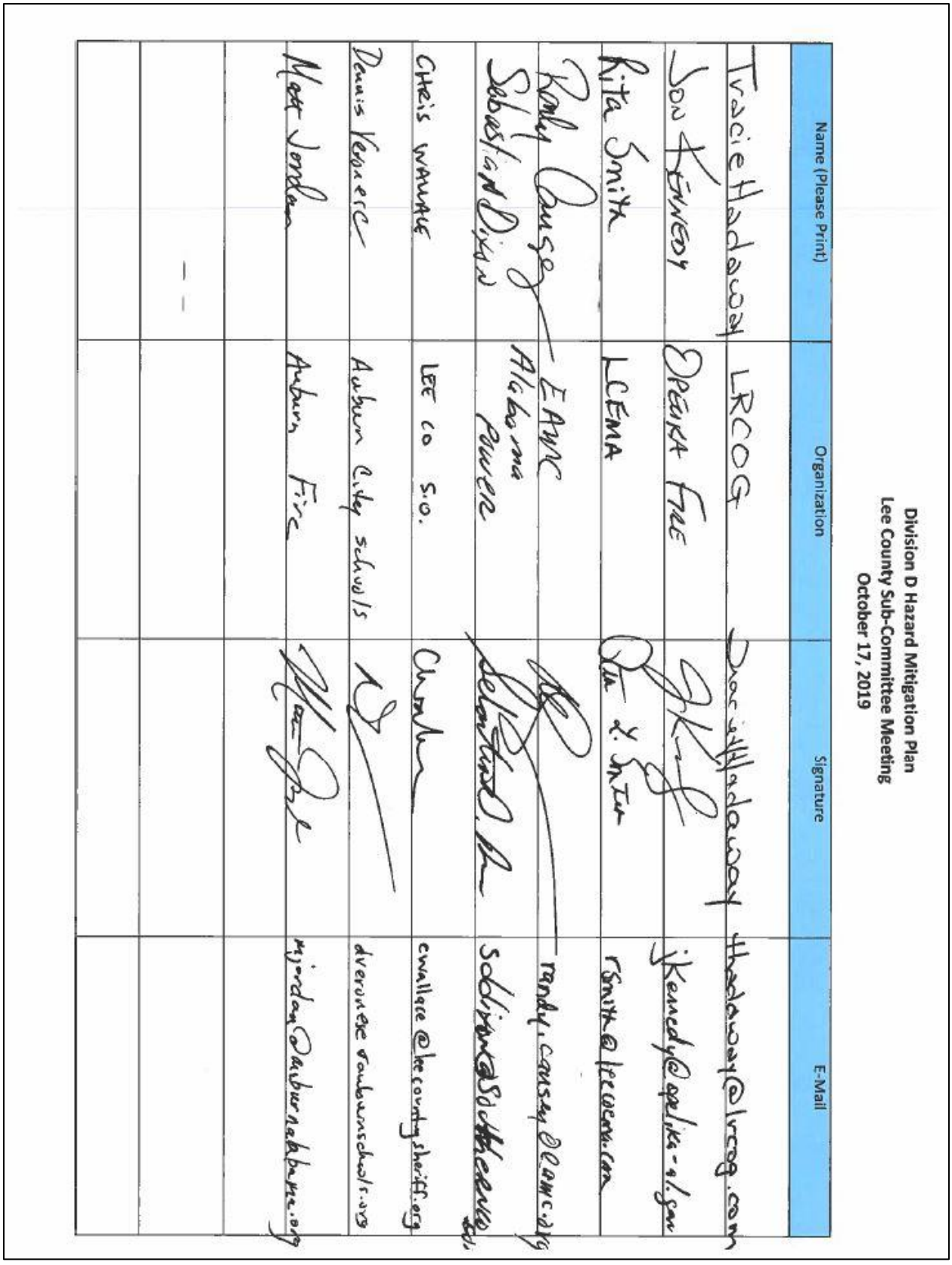
Division D Hazard Mitigation Plan
Russell County Sub-Committee Meeting
October 10, 2019

Name (Please Print)	Organization	Signature	E-Mail
Riley Land	Columbus EMA/HS		RLand@columbusga.org
Angel Moore	PC Engineering		amoore@phenixcityal.us
Mike Pattillo	PC Eng.		MPattillo@pattillocivil.us
Dave Alexander	AIMS Companies		da lexander@aims companies.com
Nathan Waters	PCBOE		Nwaters@pcboe.net
Jennifer Davidson	Alabama Extension/Russell		jenniferde@auburn.edu
Kristen Kennedy	Phenix City Fire Rescue		kcennedy@phenixcityal.us
Mark Armstrong	ALDOT		armstrongo@dot.state.al.us
Monique Smith	AEMA		Moniquesmith@emaalabama.gov
Paul Young	Russell County ADMIN		
	Leana Hoenemeyer		

October 17th, Public Meeting, Sign-In Sheet

Division D Hazard Mitigation Plan
Lee County Sub-Committee Meeting
October 17, 2019

Name (Please Print)	Organization	Signature	E-Mail
Monique Smith	AEMA	Monique Smith	monique.smith@ema.alabama.gov
Kathy Carson	LCEMA	KC Carson	
Byron J. Prather	Opelika Fire	Byron Prather	bprather@opelika-al.gov
Austin Bayles	EAMC EMS		austin.bayles@eamc.org
Austin Jones	LC EMA		austinj@fleccoema.com
Tim Woody	City of Auburn	Tim Woody	twoody@auburnalabama.org
Cory Hanks	Alabama Power Co	C M. Hanks	CMhanks@Southernco.com
Mike Hilyer	City of Opelika/ESG		mhilyer@opelika-al.gov



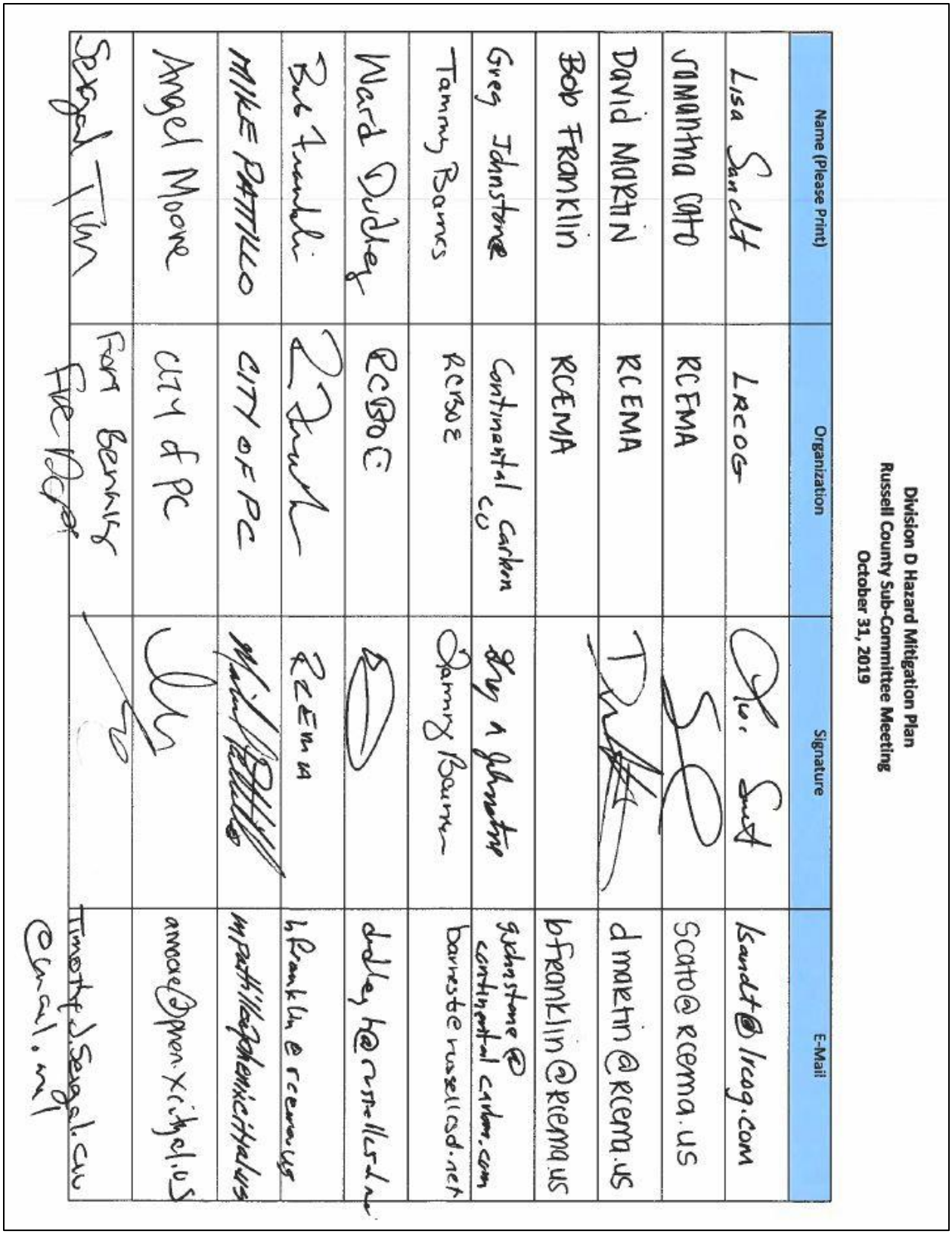
Division D Hazard Mitigation Plan
Lee County Sub-Committee Meeting
October 17, 2019

Name (Please Print)	Organization	Signature	E-Mail
Tracie Haddaway	LRCOG	Tracie Haddaway	thaddaway@lrcog.com
Jon Kennedy	Opelika Fire		jkennedy@opelika-al.gov
Rita Smith	LCEMA	Rita Y. Smith	rsmith@leecoem.com
Randy Causey	EAMC		randy.causey@eamc.org
Sabrina Dixon	Alabama Power		sadixon@southernco.com
Chris Wallace	Lee Co S.O.		cwallace@leecountysheriff.org
Dennis Vereree	Auburn City Schools		dvereuetee@auburnschools.org
Matt Jordan	Auburn Fire		mjordan@auburnalabama.org

October 31st, Public Meeting, Sign-In Sheet

Division D Hazard Mitigation Plan
Russell County Sub-Committee Meeting
October 31, 2019

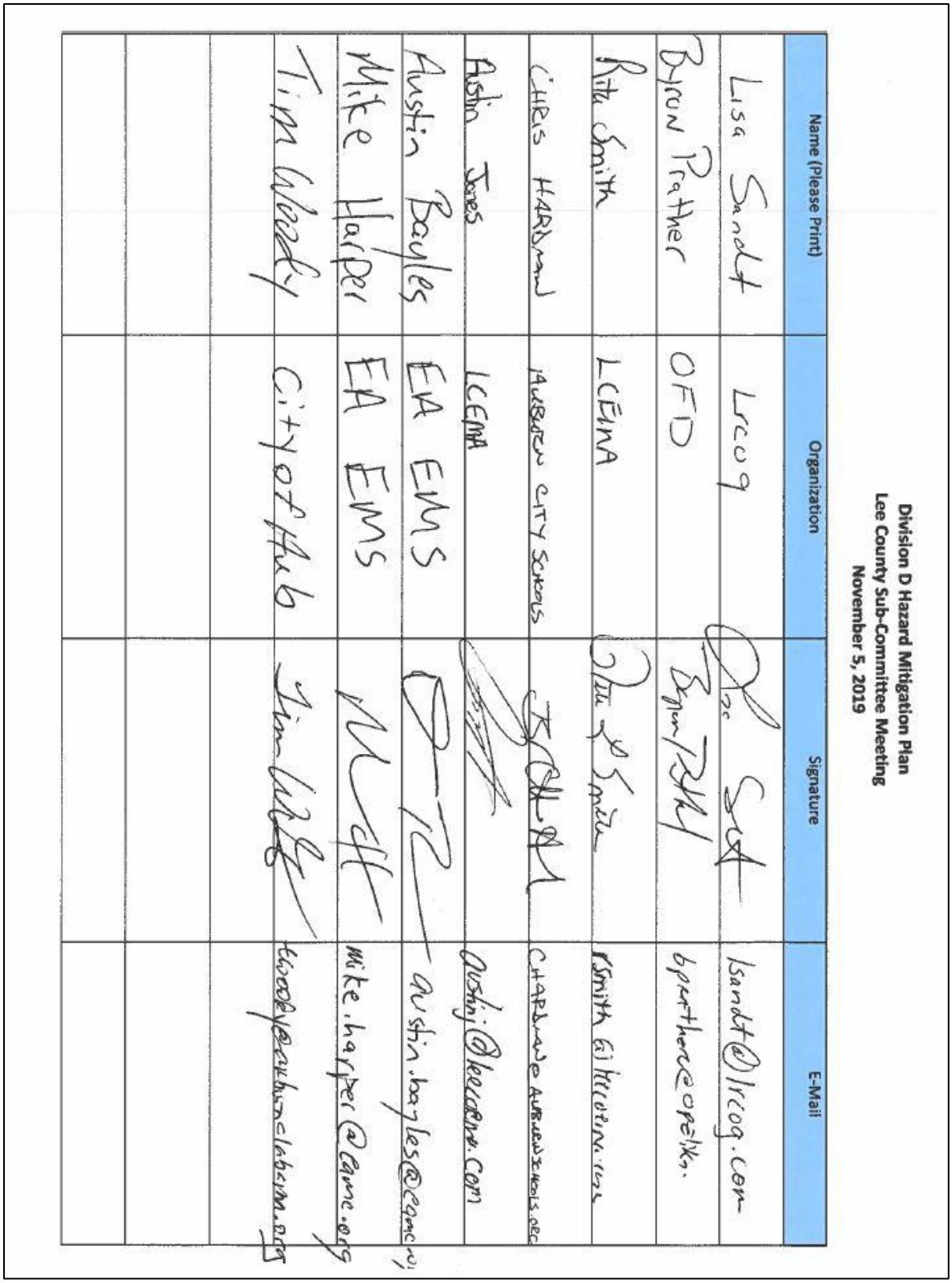
Name (Please Print)	Organization	Signature	E-Mail
Eula Phillips	Town of Hurtsboro	Eula Phillips	eula08@att.net
Shawn Blakeney	Russell Co Engr	SeBlakeney	sblakeney@rchd.us
Dave Alexand	AIMS Cty		dalexander@AIMSCompanies.com
Ray Smith	Phenix City		rsmith@phenixcityal.
Jackie Screws	CVCC	Jackie Screws	jackie.screws@cv.edu
Rebekah Crawford	ALDOT	Rebekah Crawford	crawfordr@dot.state.al.us
Peggy Martin	Russell Cty Comm.	Peggy Martin	
Erica Hare	Jack Hughston Mem. Hosp.		ehare@jhmhospital.com
Earlie Davis	ALDOT	Earlie Davis	davisea@dot.state.al.us
Jason Stubbs	F		jason@excelsiormarketingservices.com



Division D Hazard Mitigation Plan
Russell County Sub-Committee Meeting
October 31, 2019

Name (Please Print)	Organization	Signature	E-Mail
Lisa Sandt	LRCOG		lsandt@lrcog.com
SAMANTHA CATO	RCEMA		Scato@rcema.us
David Martin	RCEMA		d martin@rcema.us
Bob Franklin	RCEMA		bfranklin@rcema.us
Greg Johnstone	Continental Carbon CO		gjohnstone@continental carbon.com
Tammy Barnes	RCBOE		barnest@russellcsd.net
Ward Dudley	RCBOE		dudley_h@russellcsd.net
Bob Trumbo	City of PC		b.Franklin@rcema.us
MIKE PATTILLO	CITY OF PC		mpattillo@pikeinvicitydu.us
Angel Moore	City of PC		amoore@pen.xcity.net.us
Spencer Tew	Fort Bennig Fire Dept		Timothy.Spencer.tew@gmail.com

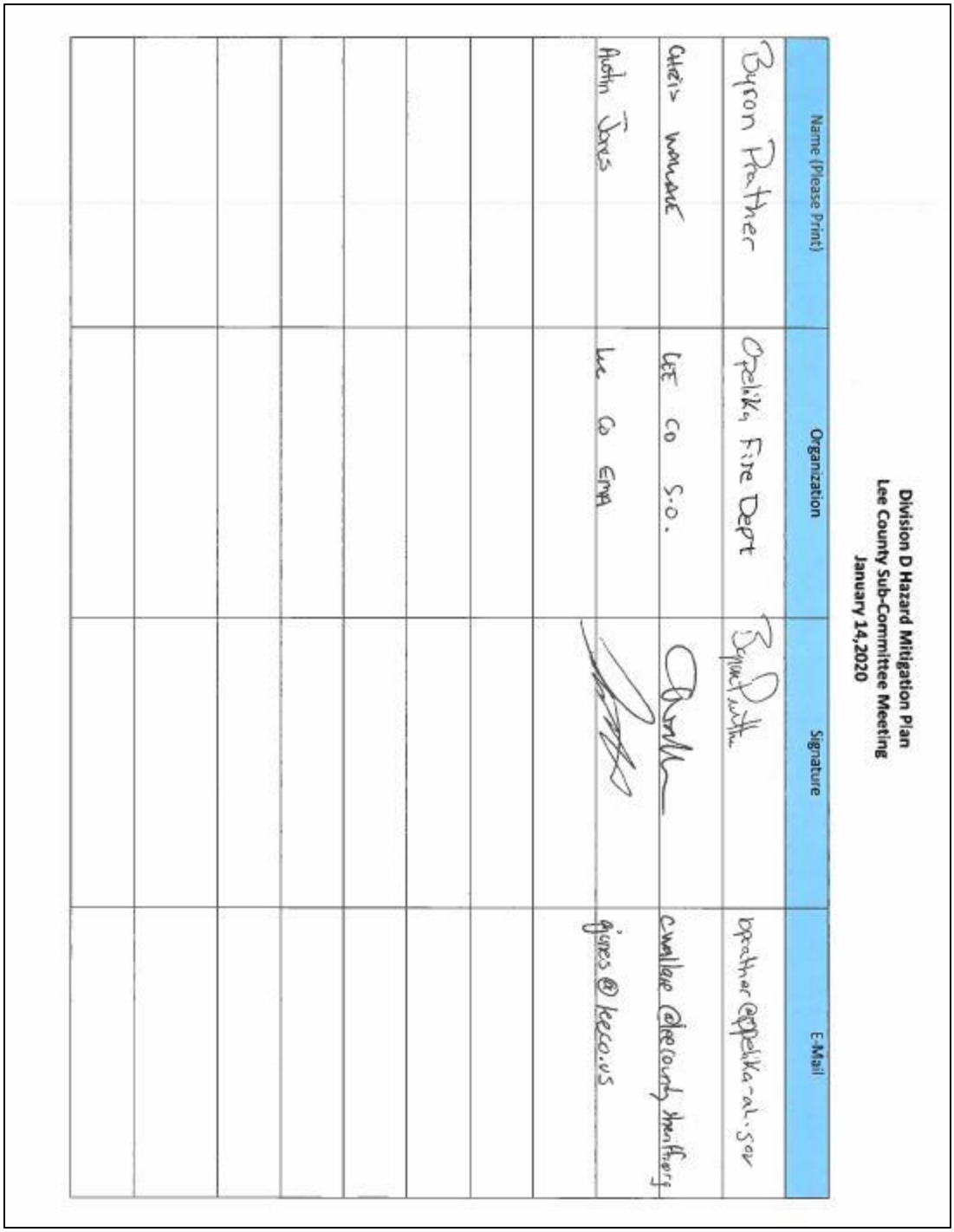
November 5th, Public Meeting, Sign-In Sheet



Division D Hazard Mitigation Plan
Lee County Sub-Committee Meeting
November 5, 2019

Name (Please Print)	Organization	Signature	E-Mail
Lisa Sandt	LRCOG		lsandt@lrcog.com
Byron Prather	OFD		bprantherce@etk.com
Rita Smith	LCEMA		rsmith@lcema.org
CHRIS HARDMAN	AUBURN CITY SCHOOLS		CHARDMAN@AUBURN.K12.AL.US
Austin Jones	LCEMA		austinj@lcema.com
Austin Bayles	EA EMS		austin.bayles@eamc.org
Mike Harper	EA EMS		mike.harper@eamc.org
Tim Whitesell	City of Phenix		twhitesell@phenixcityal.org

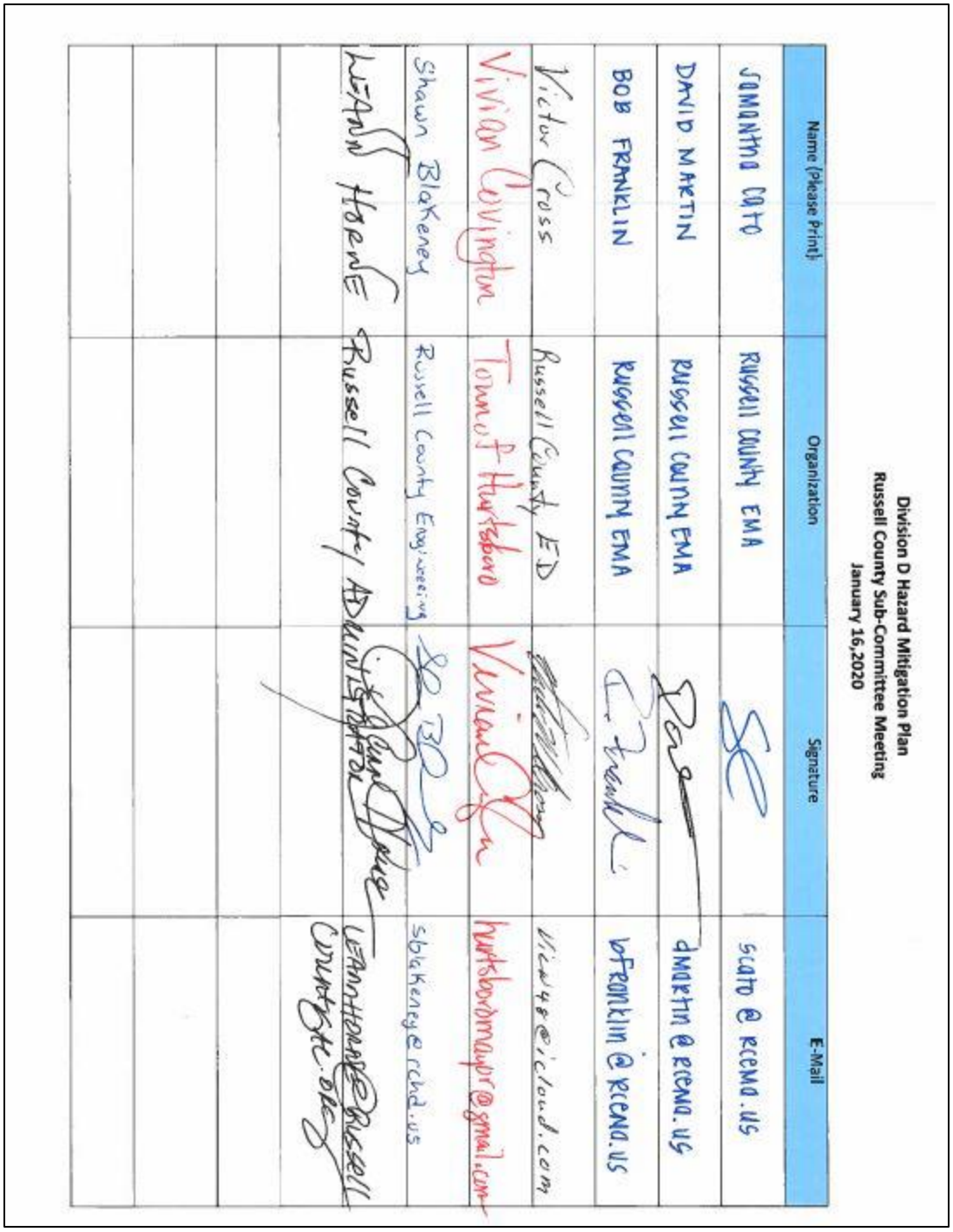
January 14th, Public Meeting, Sign-In Sheet



Division D Hazard Mitigation Plan
Lee County Sub-Committee Meeting
January 14,2020

Name (Please Print)	Organization	Signature	E-Mail
Byron Prather	Opelika Fire Dept		bprather@opelika-al.gov
Chris Wommack	Lee Co S.O.		cwallace@leecountyal.org
Austin Jones	Lee Co EMA		ajones@leecoal.us

January 16th, Public Meeting, Sign-In Sheet



Division D Hazard Mitigation Plan
Russell County Sub-Committee Meeting
January 16,2020

Name (Please Print)	Organization	Signature	E-Mail
JOMONTAE COTO	RUSSELL COUNTY EMA		SCOTO@RCEMA.US
DAVID MARTIN	RUSSELL COUNTY EMA		DMARTIN@RCEMA.US
BOB FRANKLIN	RUSSELL COUNTY EMA		BFRANKLIN@RCEMA.US
Victor Cross	Russell County ED		
Vivian Covington	Town of Hurtsboro		
Shawn Blakeney	Russell County Engineering		
[illegible]	Russell County/ ADMINISTRATOR		

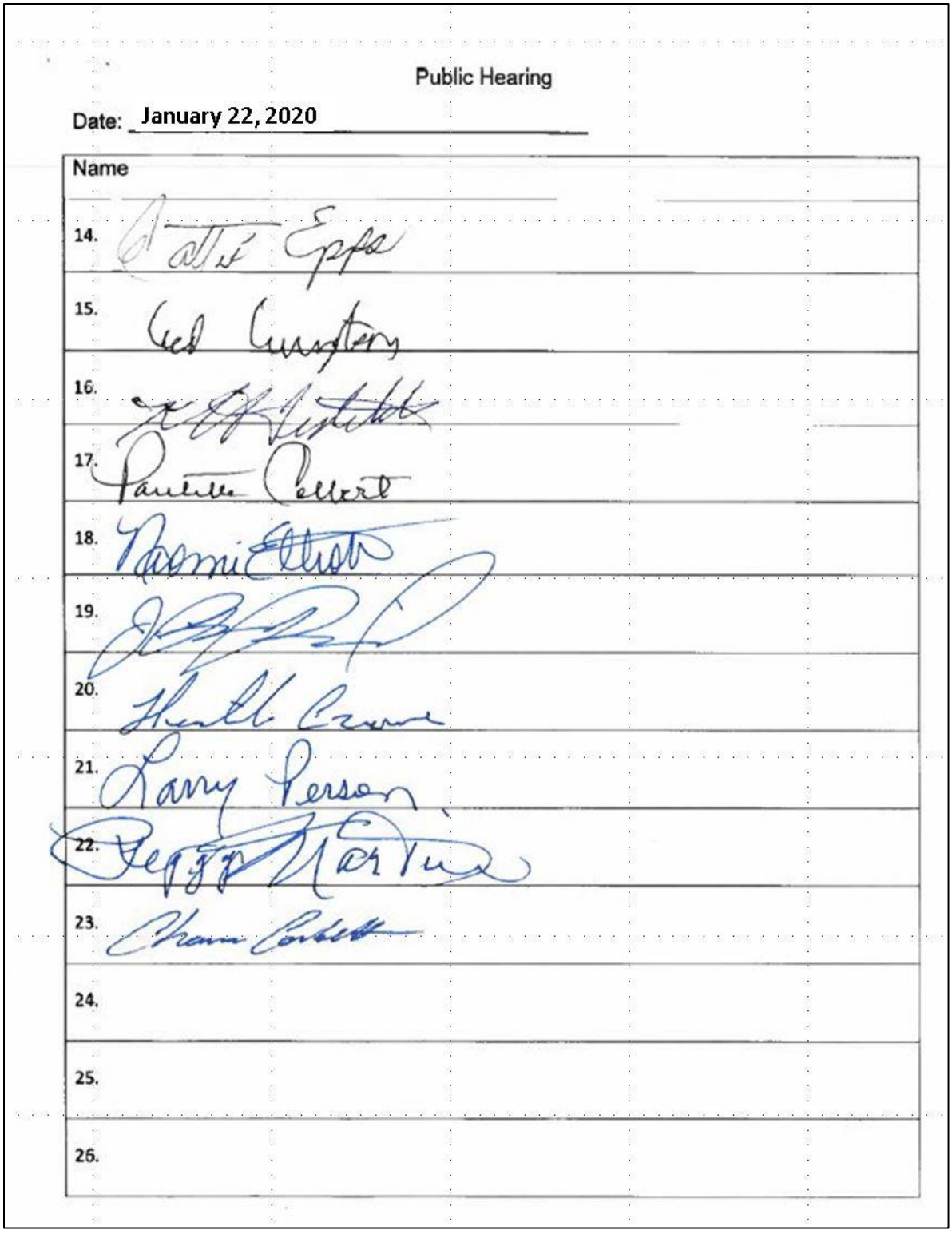
January 22nd, Public Meeting, Sign-In Sheet

PUBLIC HEARING FOR

HAZARD MITIGATION PLAN PUBLIC BRIEFING

Date: January 22, 2020

Name	Topic
1.	
2.	
3.	
4.	
5.	
6. Victoria Gross	
7. Joni Stauffer	
8.	
9.	
10.	
11.	
12.	



Public Hearing

Date: January 22, 2020

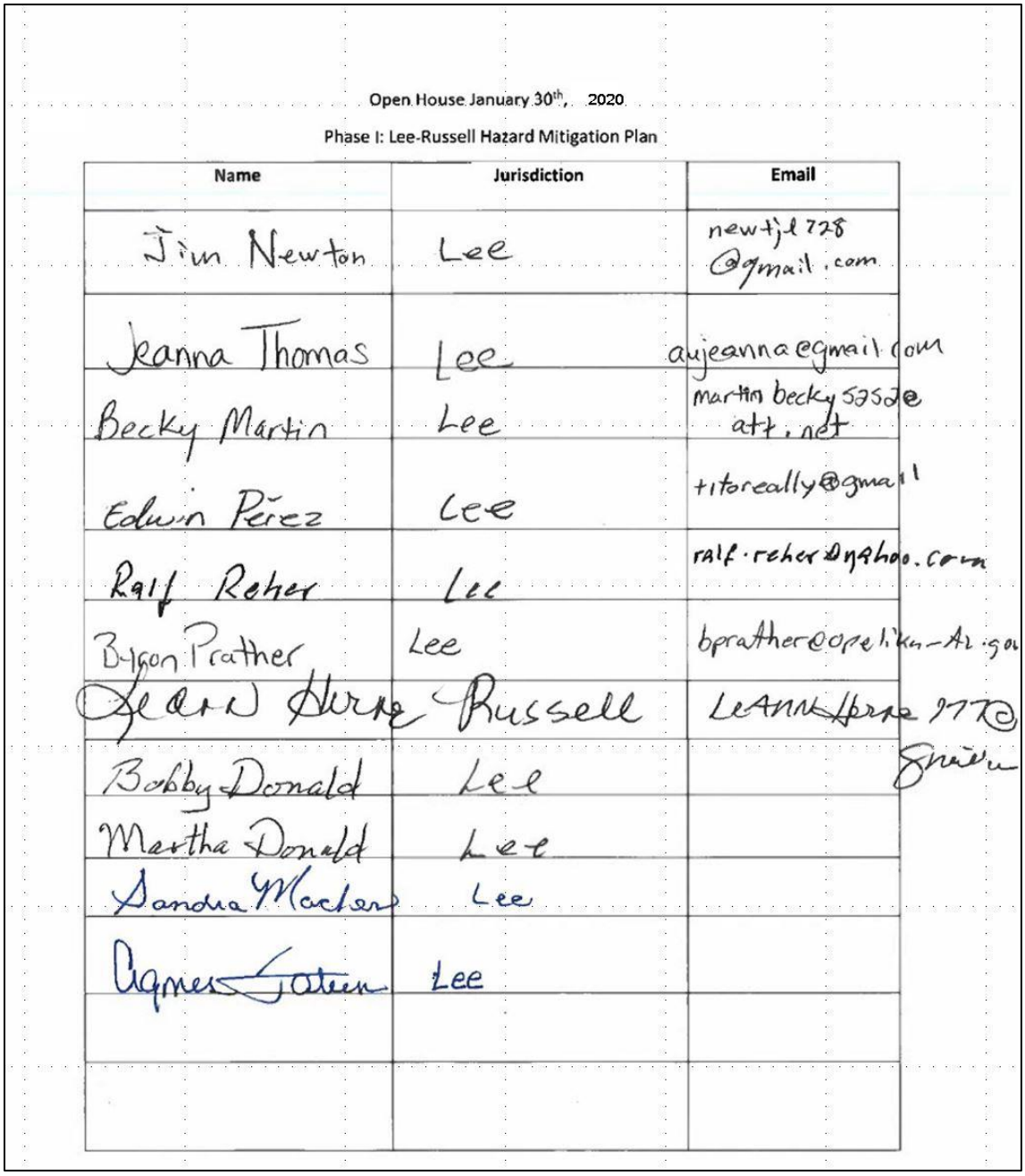
	Name
14.	
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25.	
26.	

January 30th, Public Meeting, Sign-In Sheet

Open House January 30th, 2020

Phase I: Lee-Russell Hazard Mitigation Plan

Name	Jurisdiction	Email
Eunice Manning	Lee	emanning@sclantern.net
Vivian Cofer	Russell	holtcovington@gmail.com
[illegible]	Lee	dwyatt@lrcog.com
Bob Franklin	Russell	bfranklin@rcema.us
Barbara Bragg	Lee	bkg2007@bellsouth.net
David Newton	Lee / [illegible]	dsnewt10@gmail.com
Lisa Barnes	Lee	lbarnes@lrcog.com
Van Vaney	Lee	VVaney@lrcog.com
Lisa Sandt	Lee	lsandt@lrcog.com
Karl Westman	Lee	kwestfall@LAC16.com
Willie Coughran	Russell	
Rosie Berry	Russell	
Lou Ella Foxx	Lee	foxxle@outlook.com



Open House January 30th, 2020

Phase I: Lee-Russell Hazard Mitigation Plan

Name	Jurisdiction	Email
Jim Newton	Lee	newtjl728@gmail.com
Jeanna Thomas	Lee	ajeanna@gmail.com
Becky Martin	Lee	martinbecky5252@att.net
Edwin Perez	Lee	+1toreally@gmail
Ralf Reher	Lee	ralf.reher@yahoo.com
Bygon Prather	Lee	bprather@opelika-az.gov
LeAnn Horne	Russell	LEANNHorne777@
Bobby Donald	Lee	
Martha Donald	Lee	
Sandra Mackey	Lee	
Agnes Gatewood	Lee	

Janurary30th, 2020, Newspaper Article, the Citizen of East Alabama



HAZARD MITIGATION PLAN

Tornadoes, flood highest risks for Lee, Russell counties

By Toni Stauffer
tstauffer@citizenea.com

The Alabama Emergency Management Agency, Division D, released survey results for the Lee-Russell Planning Region.

The report, which is required by FEMA every five years, was presented at the Jan. 22 Russell County commission meeting by Taylor Esco, a planning and economic specialist with the Lee-Russell Council of Governments. The Division D goals were, in this order, property protection, natural resources protection, structural mitigation, emergency mitigation, and public education and awareness. Both Lee and Russell counties fall in Phase I of the plan's time line.

The report used a community survey that was implemented online and at community events, targeting senior citizens. Of the 307 completed surveys, 77 participants were from Russell County, and 230 were from Lee County.

Analyzed resilience for both counties focused on human and economic losses, with a zero to one scale, zero being no vulnerability and one being extremely vulnerable.

The study was based on 15 social vulnerability variables, some of which were age, mobile homes, no access to a vehicle, aged 65+, aged 17 and under, per capita income, and no high school diploma.

Lee County Survey Results

In Lee County, 57 percent of respondents felt they were somewhat prepared for a natural hazard, while 29 percent said they were not prepared. Those who felt prepared accounted for 13 percent of respondents, and only one percent felt very prepared.

To help feel more prepared, 35 percent of Lee County respondents said they think community shelters would help. Safe rooms were the choice for 18 percent of those surveyed. Others, ranked from highest to lowest, were readiness kits, community classes, relocate to a safer location, and educational brochures.

As for if respondents live in a flood plain, 51 percent said no, 46 percent said they didn't know, and 3 percent said yes. As for having National Flood Insurance, 81 percent of Lee County respondents said they do not have it, 15 percent said they didn't know, and four percent said they did have it.

The most effective information sources, ranked in order, are cellphone and outdoor sirens, both at 18 percent. Others, ranked highest to lowest, are television, radio, weather alert radio, Facebook, Internet websites, telephone (landline), newspaper, Ipad, and Twitter.

Lee County has a social vulnerability score of 0.5889, and the Opelika area was assessed as being the most vulnerable.

Risk Assessment for Lee County

The highest risk for Lee County was tornadoes with catastrophic impact. There have been 34 tornadoes in Lee County in the past 23 years from EF0 to EF4. Other risks, ranked in order, are extreme temperatures, high winds/thunderstorms, hurricanes/tropical storms, tropical depressions, lightning, winter storms, hail, drought, flood, dam/levee failure, wildfires, landslides, earthquakes, and sinkholes.

Russell County Survey Results

Out of those surveyed in Russell County, 41 percent said they were not prepared for natural hazards, 43 percent said they were somewhat prepared, while 13 percent said they were prepared, and only three percent said they were very prepared. To help feel more prepared for natural hazards, 23 percent said a safe room would be useful, 22 percent said community shelters were important for preparedness, 18 percent wanted a readiness kit, 15 percent wanted community classes, another 15 percent said educational brochures would help, and seven percent felt that relocating to a safer location would help.

A surprising result is that 47 percent of Russell County residents surveyed had no idea whether or not they live in a flood plain. Another 47 percent said they don't, while the remaining six percent said they do live in a flood plain. Additionally, a staggering 86 percent do not have National Flood Insurance. Eight percent said they don't know if they have it, and only six percent said they had it.

Russell County survey results indicate that 26 percent of the target population think that Facebook is the most effective source to receive warnings of approaching natural hazards. Others, in order of percentage from high to low, were cell phones, telephones (landline), outdoor sirens, radio, weather alert radio, newspaper, twitter, internet websites, and Ipads.

Russell County Social Vulnerability is 0.8891, and the highest vulnerability is in the Hurtsboro area.

Russell County Risk Assessment

The highest risk for Russell County is flooding with critical impact. Russell County has had 17 significant floods in 23 years. Tornadoes are next on the list of high risk hazards with the possibility of catastrophic impact. Russell County has had 17 tornadoes in 23 years, from EF0 to EF3 in strength. Other risks, ranked in order, are drought, winter storms, extreme temperatures, dam/levee failures, high winds/thunderstorms, hail, depressions/tropical storms/hurricanes, lightning, wildfires, landslides, earthquakes, and sinkholes.

To obtain a copy of these reports, or for more information, visit lrcog.com.

7.4 Appendix D: Hazard Event Tables

Lee-Russell Extreme Temperatures

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD
LEE (ZONE)	LEE (ZONE)	AL	2/3/1996	Cold/wind Chill	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/3/1996	Cold/wind Chill	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/23/1996	Heat	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/7/1996	Cold/wind Chill	0	0	0.00K	1.000M
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	3/7/1996	Cold/wind Chill	0	0	0.00K	1.000M
LEE (ZONE)	LEE (ZONE)	AL	1/24/2003	Extreme Cold/wind Chill	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/24/2003	Extreme Cold/wind Chill	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/8/2007	Heat	0	60	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	6/28/2012	Heat	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/1/2012	Heat	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/26/2012	Heat	0	0	0.00K	0
LEE (ZONE)	LEE (ZONE)	AL	1/6/2014	Cold/wind Chill	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/6/2014	Cold/wind Chill	0	0	0.00K	0.00K

Lee-Russell Drought Events

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD

LEE (ZONE)	LEE (ZONE)	AL	7/11/2006	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	4	AL	7/11/2006	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2006	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/1/2006	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/1/2006	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/1/2006	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	5/22/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	5/22/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	6/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	6/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	7/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	10/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/1/2007	Drought	0	0	0.00K	0.00K

LEE (ZONE)	LEE (ZONE)	AL	12/1/2007	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/1/2007	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	3/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	4/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	4/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	5/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	6/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	6/24/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	7/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2008	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/1/2008	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/14/2010	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/21/2010	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/21/2010	Drought	0	0	0.00K	0.00K

LEE (ZONE)	LEE (ZONE)	AL	10/1/2010	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/1/2010	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/1/2010	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/23/2010	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	12/1/2010	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	12/1/2010	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/4/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	3/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	4/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	4/5/2011	Drought	0	0	0.00K	0.00K

RUSSELL (ZONE)	RUSSELL (ZONE)	AL	4/5/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	5/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	5/10/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	6/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	6/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	7/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	10/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	12/1/2011	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/1/2011	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2012	Drought	0	0	0.00K	0.00K

LEE (ZONE)	LEE (ZONE)	AL	2/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	3/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	4/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	4/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	5/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	5/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	6/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	6/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	7/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	7/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	10/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/1/2012	Drought	0	0	0.00K	0.00K

LEE (ZONE)	LEE (ZONE)	AL	12/1/2012	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/1/2012	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2013	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2013	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/1/2013	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/1/2013	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/1/2016	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/1/2016	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	10/1/2016	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/18/2016	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/1/2016	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/1/2016	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	12/1/2016	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/1/2016	Drought	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/1/2017	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/1/2017	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/23/2018	Drought	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/1/2018	Drought	0	0	0.00K	0.00K

Lee-Russell Flood & Flashflood Events

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD

COUNTYWIDE	LEE CO.	AL	1/7/1998	Flash Flood	0	0	25.00K	5.00K
COUNTYWIDE	RUSSELL CO.	AL	1/7/1998	Flash Flood	0	0	25.00K	5.00K
COUNTYWIDE	RUSSELL CO.	AL	3/8/1998	Flash Flood	0	0	75.00K	10.00K
COUNTYWIDE	LEE CO.	AL	6/28/1999	Flash Flood	0	0	1.500M	0.00K
SEALE	RUSSELL CO.	AL	3/3/2001	Flash Flood	0	0	14.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	5/8/2003	Flood	0	0	1.750M	100.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	5/8/2003	Flood	0	0	200.00K	25.00K
COUNTYWIDE	LEE CO.	AL	7/1/2003	Flash Flood	0	0	40.00K	0.00K
AUBURN	LEE CO.	AL	7/26/2004	Flash Flood	0	0	75.00K	0.00K
COUNTYWIDE	RUSSELL CO.	AL	9/16/2004	Flash Flood	0	0	25.00K	0.00K
COUNTYWIDE	LEE CO.	AL	3/27/2005	Flash Flood	0	0	20.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/27/2005	Flash Flood	0	0	22.00K	0.00K
COUNTYWIDE	LEE CO.	AL	3/31/2005	Flash Flood	0	0	80.00K	0.00K
COUNTYWIDE	LEE CO.	AL	4/1/2005	Flash Flood	0	0	300.00K	0.00K
COUNTYWIDE	RUSSELL CO.	AL	7/10/2005	Flash Flood	0	0	17.00K	0.00K
AUBURN	LEE CO.	AL	11/15/2006	Flash Flood	0	0	0.00K	0.00K
SALEM	LEE CO.	AL	9/19/2009	Flash Flood	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	9/19/2009	Flash Flood	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	11/10/2009	Flood	0	0	0.00K	0.00K

STONEWALL	LEE CO.	AL	12/14/2009	Flash Flood	0	0	5.00K	0.00K
PITTSVIEW	RUSSELL CO.	AL	12/14/2009	Flash Flood	0	0	10.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	5/3/2010	Flash Flood	0	0	10.00K	0.00K
ROANOKE JCT	LEE CO.	AL	6/26/2011	Flash Flood	0	0	50.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	9/20/2011	Flash Flood	0	0	20.00K	0.00K
AUBURN	LEE CO.	AL	8/15/2013	Flash Flood	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	4/7/2014	Flash Flood	0	0	0.00K	0.00K
ROANOKE JCT	LEE CO.	AL	8/11/2014	Flash Flood	0	0	0.00K	0.00K
NORTH AUBURN	LEE CO.	AL	12/24/2015	Flash Flood	0	0	0.00K	0.00K
LOFLIN	RUSSELL CO.	AL	12/24/2015	Flash Flood	0	0	0.00K	0.00K
VALLEY	LEE CO.	AL	12/25/2015	Flash Flood	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	1/2/2017	Flash Flood	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/25/2017	Flash Flood	0	0	0.00K	0.00K
J C MEADOWS XRDS	LEE CO.	AL	5/23/2018	Flash Flood	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	5/23/2018	Flash Flood	0	0	0.00K	0.00K
UNLAND	RUSSELL CO.	AL	6/17/2018	Flash Flood	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	8/14/2018	Flash Flood	0	0	0.00K	0.00K
NUCKOLS	RUSSELL CO.	AL	6/8/2019	Flash Flood	0	0	0.00K	0.00K

Lee Russell Hail Events

Location	County/Zone	St.	Date	**Type**	**Mag**	Dth	Inj	PrD	CrD

LEE CO.	LEE CO.	AL	5/21/1990	Hail	1.75 in.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	4/29/1991	Hail	1.00 in.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	5/13/1993	Hail	0.75 in.	0	0	0.00K	0.00K
Opelika	LEE CO.	AL	3/18/1995	Hail	0.75 in.	0	0	0.00K	0.00K
Gold Hill	LEE CO.	AL	4/23/1995	Hail	1.75 in.	0	0	0.00K	0.00K
Marvyn	LEE CO.	AL	10/27/1995	Hail	0.88 in.	0	0	0.00K	0.00K
Smiths	LEE CO.	AL	12/18/1995	Hail	0.75 in.	0	0	0.00K	0.00K
SALEM	LEE CO.	AL	3/16/1996	Hail	1.00 in.	0	0	12.00K	0.00K
SMITH STATION	LEE CO.	AL	3/18/1996	Hail	0.75 in.	0	0	8.00K	5.00K
BEAUREGARD	LEE CO.	AL	4/14/1996	Hail	0.75 in.	0	0	8.00K	2.00K
SEALE	RUSSELL CO.	AL	4/14/1996	Hail	0.75 in.	0	0	8.00K	2.00K
SEALE	RUSSELL CO.	AL	4/29/1996	Hail	1.75 in.	0	0	25.00K	5.00K
PHENIX CITY	RUSSELL CO.	AL	6/15/1996	Hail	0.75 in.	0	0	10.00K	0.00K
SMITHS	LEE CO.	AL	6/23/1996	Hail	0.75 in.	0	0	10.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/13/1997	Hail	0.88 in.	0	0	4.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/3/1997	Hail	1.00 in.	0	0	4.00K	0.00K
AUBURN	LEE CO.	AL	5/9/1997	Hail	0.75 in.	0	0	4.00K	0.00K
SMITHS STATION	LEE CO.	AL	5/9/1997	Hail	1.25 in.	0	0	6.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/9/1997	Hail	0.75 in.	0	0	4.00K	0.00K
OPELIKA	LEE CO.	AL	7/15/1997	Hail	0.75 in.	0	0	3.00K	0.00K
SMITHS STATION	LEE CO.	AL	11/1/1997	Hail	0.75 in.	0	0	2.00K	0.00K

OPELIKA	LEE CO.	AL	11/1/1997	Hail	1.75 in.	0	0	8.00K	0.00K
MARVYN	LEE CO.	AL	3/20/1998	Hail	0.75 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	4/3/1998	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	4/8/1998	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	4/8/1998	Hail	1.00 in.	0	0	2.00K	2.00K
AUBURN	LEE CO.	AL	4/8/1998	Hail	1.00 in.	0	0	2.00K	2.00K
OPELIKA	LEE CO.	AL	4/8/1998	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/3/1998	Hail	0.75 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	5/3/1998	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	6/5/1998	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	6/25/1998	Hail	0.75 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	10/7/1998	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	10/7/1998	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	2/27/1999	Hail	0.75 in.	0	0	0.00K	0.00K
COTTONTON	RUSSELL CO.	AL	4/15/1999	Hail	1.00 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	5/6/1999	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	5/13/1999	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/13/1999	Hail	1.00 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	5/13/1999	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	6/4/1999	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	6/4/1999	Hail	1.00 in.	0	0	0.00K	0.00K

OPELIKA	LEE CO.	AL	2/13/2000	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	2/13/2000	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	2/13/2000	Hail	1.00 in.	0	0	0.00K	0.00K
SALEM	LEE CO.	AL	2/13/2000	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	3/10/2000	Hail	0.75 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	3/10/2000	Hail	0.75 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/10/2000	Hail	1.00 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/10/2000	Hail	0.75 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	8/9/2000	Hail	0.88 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	8/9/2000	Hail	0.88 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	8/10/2000	Hail	1.00 in.	0	0	1.00K	0.00K
AUBURN	LEE CO.	AL	8/10/2000	Hail	0.75 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	6/3/2001	Hail	0.75 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	6/3/2001	Hail	0.88 in.	0	0	0.00K	0.00K
LOACHAPOKA	LEE CO.	AL	7/10/2001	Hail	1.00 in.	0	0	0.00K	0.00K
COTTONTON	RUSSELL CO.	AL	3/31/2002	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	3/31/2002	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	5/11/2002	Hail	0.75 in.	0	0	0.00K	0.00K
MARVYN	LEE CO.	AL	5/30/2002	Hail	1.00 in.	0	0	2.00K	0.00K
SALEM	LEE CO.	AL	6/4/2002	Hail	1.00 in.	0	0	0.00K	0.00K

OPELIKA	LEE CO.	AL	8/20/2002	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	8/20/2002	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	1/22/2003	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	3/14/2003	Hail	0.88 in.	0	0	0.00K	0.00K
PITTSVIEW	RUSSELL CO.	AL	3/14/2003	Hail	1.75 in.	0	0	5.00K	0.00K
OPELIKA	LEE CO.	AL	3/19/2003	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	3/19/2003	Hail	0.75 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/19/2003	Hail	0.75 in.	0	0	0.00K	0.00K
LOACHAPOKA	LEE CO.	AL	4/25/2003	Hail	2.75 in.	0	0	250.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/25/2003	Hail	2.00 in.	0	0	80.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	4/25/2003	Hail	1.75 in.	0	0	35.00K	0.00K
SEALE	RUSSELL CO.	AL	5/1/2003	Hail	0.75 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	4/12/2004	Hail	0.75 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/12/2004	Hail	0.75 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	6/27/2004	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	10/19/2004	Hail	1.75 in.	0	0	2.00K	0.00K
SMITHS	LEE CO.	AL	3/22/2005	Hail	1.75 in.	0	0	16.00K	0.00K
SEALE	RUSSELL CO.	AL	3/22/2005	Hail	1.75 in.	0	0	22.00K	0.00K
PITTSVIEW	RUSSELL CO.	AL	3/26/2005	Hail	0.88 in.	0	0	0.00K	0.00K
HOLY TRINITY	RUSSELL CO.	AL	3/26/2005	Hail	1.25 in.	0	0	0.00K	0.00K

LOACHAPOKA	LEE CO.	AL	3/27/2005	Hail	0.75 in.	0	0	0.00K	0.00K
COTTONTON	RUSSELL CO.	AL	3/27/2005	Hail	0.75 in.	0	0	0.00K	0.00K
LOACHAPOKA	LEE CO.	AL	3/31/2005	Hail	1.75 in.	0	0	23.00K	0.00K
LOACHAPOKA	LEE CO.	AL	4/22/2005	Hail	1.00 in.	0	0	1.00K	0.00K
LADONIA	RUSSELL CO.	AL	4/22/2005	Hail	0.88 in.	0	0	1.00K	0.00K
SEALE	RUSSELL CO.	AL	4/22/2005	Hail	1.75 in.	0	0	4.00K	0.00K
SMITHS	LEE CO.	AL	5/20/2005	Hail	1.00 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	6/2/2005	Hail	1.00 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	8/17/2005	Hail	0.75 in.	0	0	0.00K	0.00K
BLEECKER	LEE CO.	AL	12/28/2005	Hail	0.75 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	12/28/2005	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	12/28/2005	Hail	2.75 in.	0	0	6.00K	0.00K
COTTONTON	RUSSELL CO.	AL	12/28/2005	Hail	0.75 in.	0	0	0.00K	0.00K
HOLY TRINITY	RUSSELL CO.	AL	12/28/2005	Hail	1.75 in.	0	0	2.00K	0.00K
OPELIKA	LEE CO.	AL	3/20/2006	Hail	1.00 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	3/20/2006	Hail	1.00 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	4/8/2006	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/10/2006	Hail	1.00 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/13/2006	Hail	0.88 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/13/2006	Hail	0.88 in.	0	0	0.00K	0.00K

LOACHAPOKA	LEE CO.	AL	10/11/2006	Hail	0.88 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	2/13/2007	Hail	1.75 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	4/11/2007	Hail	2.75 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	4/11/2007	Hail	4.00 in.	0	0	100.00K	0.00K
OPELIKA	LEE CO.	AL	6/11/2007	Hail	0.88 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	3/14/2008	Hail	0.88 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	4/4/2008	Hail	0.75 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	4/4/2008	Hail	1.00 in.	0	0	0.00K	0.00K
ANDREWS	LEE CO.	AL	4/4/2008	Hail	1.75 in.	0	0	0.00K	0.00K
MOTTS	LEE CO.	AL	3/28/2009	Hail	0.75 in.	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	3/28/2009	Hail	0.88 in.	0	0	0.00K	0.00K
MOTTS	LEE CO.	AL	3/28/2009	Hail	0.75 in.	0	0	0.00K	0.00K
SHOTWELL	LEE CO.	AL	3/28/2009	Hail	0.75 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	4/5/2009	Hail	1.75 in.	0	0	0.00K	0.00K
ROXANA	LEE CO.	AL	4/10/2009	Hail	1.00 in.	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	4/10/2009	Hail	1.25 in.	0	0	0.00K	0.00K
SEALE	RUSSELL CO.	AL	4/10/2009	Hail	1.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	5/28/2009	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	5/28/2009	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	6/2/2009	Hail	0.88 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2009	Hail	0.75 in.	0	0	0.00K	0.00K

CAWATCHEE	LEE CO.	AL	4/24/2010	Hail	0.88 in.	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	4/24/2010	Hail	0.75 in.	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	6/19/2010	Hail	1.00 in.	0	0	0.00K	0.00K
SALEM	LEE CO.	AL	8/2/2010	Hail	1.00 in.	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	3/26/2011	Hail	1.00 in.	0	0	0.00K	0.00K
LOFLIN	RUSSELL CO.	AL	3/27/2011	Hail	1.75 in.	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	3/27/2011	Hail	1.25 in.	0	0	0.00K	0.00K
FLOURNOYS	RUSSELL CO.	AL	3/27/2011	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	3/27/2011	Hail	1.50 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	4/4/2011	Hail	0.75 in.	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	4/4/2011	Hail	0.88 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	4/15/2011	Hail	1.75 in.	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	6/16/2011	Hail	1.00 in.	0	0	0.00K	0.00K
CHEWACLA	LEE CO.	AL	6/17/2011	Hail	1.00 in.	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/14/2011	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/21/2012	Hail	0.88 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	5/21/2012	Hail	1.00 in.	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	5/21/2012	Hail	1.00 in.	0	0	0.00K	0.00K

CRAWFORD	RUSSELL CO.	AL	5/21/2012	Hail	0.75 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2012	Hail	1.00 in.	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2012	Hail	0.88 in.	0	0	0.00K	0.00K
GIRARD	RUSSELL CO.	AL	7/5/2012	Hail	1.00 in.	0	0	0.00K	0.00K
WHATLEY XRD	LEE CO.	AL	3/18/2013	Hail	1.00 in.	0	0	0.00K	0.00K
GRIFFEN MILL	LEE CO.	AL	3/18/2013	Hail	3.00 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	3/18/2013	Hail	1.75 in.	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	3/18/2013	Hail	1.50 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/18/2013	Hail	2.00 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/18/2013	Hail	1.25 in.	0	0	0.00K	0.00K
BEEHIVE	LEE CO.	AL	6/24/2015	Hail	1.00 in.	0	0	0.00K	0.00K
NUCKOLS	RUSSELL CO.	AL	4/6/2016	Hail	1.00 in.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/6/2016	Hail	1.00 in.	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	4/5/2017	Hail	1.00 in.	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	4/5/2017	Hail	1.00 in.	0	0	0.00K	0.00K
SALEM	LEE CO.	AL	4/5/2017	Hail	1.00 in.	0	0	0.00K	0.00K
BLEECKER	LEE CO.	AL	4/5/2017	Hail	1.00 in.	0	0	0.00K	0.00K

SMITHS STATION	LEE CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
GLENVILLE	RUSSELL CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
GLENVILLE	RUSSELL CO.	AL	4/5/2017	Hail	1.75 in.	0	0	0.00K	0.00K
POWLEDGE	LEE CO.	AL	2/7/2018	Hail	1.25 in.	0	0	0.00K	0.00K
CHEWACLA	LEE CO.	AL	7/21/2018	Hail	1.50 in.	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/21/2018	Hail	1.75 in.	0	0	0.00K	0.00K
SANDFORT	RUSSELL CO.	AL	7/21/2018	Hail	1.00 in.	0	0	0.00K	0.00K
NUCKOLS	RUSSELL CO.	AL	7/21/2018	Hail	1.75 in.	0	0	0.00K	0.00K

Lee Russell Lightning Events

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD
AUBURN	LEE CO.	AL	6/23/1996	Lightning	0	0	15.00K	0.00K
AUBURN	LEE CO.	AL	6/23/1996	Lightning	0	0	15.00K	0.00K
AUBURN	LEE CO.	AL	9/9/1996	Lightning	0	0	20.00K	0.00K
AUBURN	LEE CO.	AL	4/27/1997	Lightning	0	0	10.00K	0.00K
AUBURN	LEE CO.	AL	7/11/1998	Lightning	0	0	10.00K	0.00K

OPELIKA	LEE CO.	AL	5/30/2002	Lightning	0	0	3.00K	0.00K
OPELIKA	LEE CO.	AL	7/23/2002	Lightning	0	0	75.00K	0.00K
OPELIKA	LEE CO.	AL	12/24/2002	Lightning	0	0	7.00K	0.00K
MC CULLOH	LEE CO.	AL	8/15/2003	Lightning	0	0	1.50K	0.00K
AUBURN	LEE CO.	AL	4/14/2007	Lightning	0	0	2.00K	0.00K
SEALE	RUSSELL CO.	AL	7/11/2008	Lightning	0	0	50.00K	0.00K
BEEHIVE	LEE CO.	AL	7/22/2008	Lightning	0	0	100.00K	0.00K
PINE GROVE	LEE CO.	AL	5/10/2009	Lightning	0	0	75.00K	0.00K
CAWATCHEE	LEE CO.	AL	7/21/2017	Lightning	1	0	0.00K	0.00K

Lee-Russell Thunderstorm, Winds, and Heavy Rain Evens

	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
LEE CO.	LEE CO.	AL	2/10/1990	4:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	2/10/1990	6:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	2/22/1990	8:15	CST	Thunderstorm Wind	0 kts.	0	1	0.00K	0.00K
LEE CO.	LEE CO.	AL	4/10/1990	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	4/10/1990	16:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	4/10/1990	16:45	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	4/28/1990	12:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

RUSSELL CO.	RUSSELL CO.	AL	5/21/1990	15:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	5/21/1990	15:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	7/23/1990	16:28	CST	Thunderstorm Wind	61 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	7/23/1990	17:22	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	3/1/1991	15:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	3/20/1991	9:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	3/29/1991	9:20	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	3/29/1991	9:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	3/29/1991	10:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	4/9/1991	18:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	5/5/1991	14:50	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	5/5/1991	15:10	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	5/5/1991	16:00	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	5/5/1991	16:30	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	6/4/1991	14:25	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

LEE CO.	LEE CO.	AL	4/20/1992	16:00	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	7/1/1992	12:50	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	8/27/1992	13:50	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	8/27/1992	15:15	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
LEE CO.	LEE CO.	AL	11/22/1992	10:30	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	11/22/1992	13:02	PST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
RUSSELL CO.	RUSSELL CO.	AL	5/13/1993	9:15	CST	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Auburn	LEE CO.	AL	6/26/1994	17:40	CST	Thunderstorm Wind	50 kts.	0	0	50.00K	0.00K
Auburn	LEE CO.	AL	7/27/1994	11:30	CST	Thunderstorm Wind	0 kts.	0	0	50.00K	0.00K
Auburn	LEE CO.	AL	10/11/1994	0:00	CST	Thunderstorm Wind	0 kts.	0	0	0.05K	0.00K
LEE CO.	LEE CO.	AL	5/15/1995	15:00	CST	Thunderstorm Wind	0 kts.	0	0	15.00K	0.00K
Opelika	LEE CO.	AL	5/15/1995	15:22	CST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
Salem	LEE CO.	AL	7/16/1995	17:55	CST	Thunderstorm Wind	0 kts.	0	0	2.00K	0.00K
Montgomery	LEE CO.	AL	7/17/1995	12:55	CST	Thunderstorm Wind	0 kts.	0	0	2.00K	0.00K
Opelika	LEE CO.	AL	7/29/1995	17:00	CST	Thunderstorm Wind	0 kts.	0	0	2.00K	0.00K

Auburn	LEE CO.	AL	8/19/1995	20:45	CST	Thunderstorm Wind	0 kts.	0	0	12.00K	0.00K
OPELIKA	LEE CO.	AL	1/26/1996	22:20	CST	Thunderstorm Wind	50 kts.	0	0	15.00K	0.00K
OPELIKA	LEE CO.	AL	3/6/1996	6:00	CST	Thunderstorm Wind	50 kts.	0	0	80.00K	10.00K
OPELIKA	LEE CO.	AL	3/6/1996	23:50	CST	Thunderstorm Wind	70 kts.	1	0	50.00K	0.00K
SEALE	RUSSELL CO.	AL	3/18/1996	22:40	CST	Thunderstorm Wind	50 kts.	0	0	25.00K	8.00K
SEALE	RUSSELL CO.	AL	6/15/1996	17:25	CST	Thunderstorm Wind	50 kts.	0	0	20.00K	2.00K
PHENIX CITY	LEE CO.	AL	6/20/1996	16:00	CST	Thunderstorm Wind	50 kts.	0	0	25.00K	0.00K
AUBURN	LEE CO.	AL	7/5/1996	18:20	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
OPELIKA	LEE CO.	AL	9/21/1996	14:00	CST	Thunderstorm Wind	50 kts.	0	0	8.00K	1.00K
AUBURN	LEE CO.	AL	1/24/1997	9:00	CST	Thunderstorm Wind	50 kts.	0	0	7.00K	1.00K
SEALE	RUSSELL CO.	AL	3/30/1997	17:55	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
SEALE	RUSSELL CO.	AL	4/22/1997	17:30	CST	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	6/14/1997	15:00	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
SEALE	RUSSELL CO.	AL	11/1/1997	16:00	CST	Thunderstorm Wind	50 kts.	0	0	10.00K	0.00K
LADONIA	RUSSELL CO.	AL	11/21/1997	19:15	CST	Thunderstorm Wind	50 kts.	0	0	7.00K	0.00K

AUBURN	LEE CO.	AL	6/5/1998	15:50	CST	Thunderstorm Wind	55 kts.	1	0	10.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	6/5/1998	16:15	CST	Thunderstorm Wind	50 kts.	0	0	10.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	6/5/1998	16:15	CST	Thunderstorm Wind	60 kts.	0	2	25.00K	0.00K
AUBURN	LEE CO.	AL	6/19/1998	13:35	CST	Thunderstorm Wind	50 kts.	0	0	15.00K	0.00K
AUBURN	LEE CO.	AL	7/11/1998	14:50	CST	Thunderstorm Wind	55 kts.	0	0	20.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	3/3/1999	2:30	CST	Thunderstorm Wind	55 kts.	0	0	15.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/15/1999	4:50	CST	Thunderstorm Wind	65 kts.	0	0	40.00K	0.00K
COTTONTON	RUSSELL CO.	AL	4/15/1999	5:30	CST	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
PITTSVIEW	RUSSELL CO.	AL	4/27/1999	11:45	CST	Thunderstorm Wind	55 kts.	0	0	8.00K	0.00K
HOPEWELL	LEE CO.	AL	5/7/1999	18:25	CST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	8/12/1999	18:20	CST	Thunderstorm Wind	55 kts.	0	0	5.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	8/19/1999	16:00	CST	Thunderstorm Wind	55 kts.	0	0	8.00K	0.00K
LADONIA	RUSSELL CO.	AL	8/20/1999	15:05	CST	Thunderstorm Wind	55 kts.	0	0	5.00K	0.00K
LOACHAPOKA	LEE CO.	AL	9/8/1999	17:55	CST	Thunderstorm Wind	50 kts.	0	0	1.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/11/2000	8:45	CST	Thunderstorm Wind	55 kts. E	0	0	2.00K	0.00K

PHENIX CITY	RUSSELL CO.	AL	3/11/2000	8:50	CST	Thunderstorm Wind	55 kts. E	0	0	3.00K	0.00K
COUNTYWIDE	LEE CO.	AL	7/20/2000	18:55	CST	Thunderstorm Wind	55 kts. E	0	0	30.00K	0.00K
AUBURN	LEE CO.	AL	7/23/2000	13:00	CST	Thunderstorm Wind	55 kts. E	0	0	2.00K	0.00K
OPELIKA	LEE CO.	AL	1/19/2001	10:40	CST	Thunderstorm Wind	50 kts. E	0	0	2.00K	0.00K
LOACHAPOKA	LEE CO.	AL	3/15/2001	2:10	CST	Thunderstorm Wind	50 kts. E	0	0	2.00K	0.00K
AUBURN	LEE CO.	AL	3/15/2001	2:15	CST	Thunderstorm Wind	52 kts. E	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	3/15/2001	3:20	CST	Thunderstorm Wind	50 kts. E	0	0	3.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	6/28/2001	14:07	CST	Thunderstorm Wind	50 kts. E	0	0	2.00K	0.00K
COUNTYWIDE	LEE CO.	AL	7/5/2001	16:25	CST	Thunderstorm Wind	55 kts. E	0	0	2.00K	0.00K
COUNTYWIDE	RUSSELL CO.	AL	1/19/2002	14:20	CST	Thunderstorm Wind	50 kts. E	0	0	5.00K	0.00K
COUNTYWIDE	RUSSELL CO.	AL	5/11/2002	18:47	CST	Thunderstorm Wind	50 kts. E	0	0	20.00K	0.00K
OPELIKA	LEE CO.	AL	1/22/2003	5:45	CST	Thunderstorm Wind	65 kts. E	0	0	35.00K	0.00K
SEALE	RUSSELL CO.	AL	5/2/2003	20:30	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
OPELIKA	LEE CO.	AL	5/18/2003	11:23	CST	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
LOACHAPOKA	LEE CO.	AL	6/13/2003	13:00	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K

SEALE	RUSSELL CO.	AL	4/12/2004	20:43	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
AUBURN	LEE CO.	AL	5/31/2004	6:00	CST	Thunderstorm Wind	50 kts. EG	0	0	16.00K	0.00K
LADONIA	RUSSELL CO.	AL	5/31/2004	6:30	CST	Thunderstorm Wind	55 kts. EG	0	0	26.00K	0.00K
OPELIKA	LEE CO.	AL	10/19/2004	12:17	CST	Thunderstorm Wind	50 kts. ES	0	0	8.00K	0.00K
LOACHAPOKA	LEE CO.	AL	10/19/2004	12:27	CST	Thunderstorm Wind	50 kts. EG	0	0	17.00K	0.00K
SALEM	LEE CO.	AL	10/19/2004	12:56	CST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
COUNTYWIDE	LEE CO.	AL	1/13/2005	14:55	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
CENTRAL PORTION	LEE CO.	AL	4/22/2005	15:22	CST	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
COUNTYWIDE	LEE CO.	AL	4/30/2005	5:57	CST	Thunderstorm Wind	52 kts. EG	0	0	4.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	4/30/2005	7:16	CST	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
AUBURN	LEE CO.	AL	4/30/2005	7:23	CST	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
PITTSVIEW	RUSSELL CO.	AL	4/30/2005	7:31	CST	Thunderstorm Wind	52 kts. EG	0	0	8.00K	0.00K
SMITHS	LEE CO.	AL	5/20/2005	14:18	CST	Thunderstorm Wind	52 kts. EG	0	0	7.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/20/2005	14:45	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	3/20/2006	19:05	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K

OPELIKA	LEE CO.	AL	3/20/2006	19:30	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
COUNTYWIDE	RUSSELL CO.	AL	3/20/2006	20:00	CST	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
OPELIKA	LEE CO.	AL	5/10/2006	15:08	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SMITHS	LEE CO.	AL	5/10/2006	15:09	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/10/2006	15:40	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
SMITHS STATION	LEE CO.	AL	7/28/2006	22:01	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	7/28/2006	22:01	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PINE GROVE	LEE CO.	AL	10/11/2006	17:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
SEALE	RUSSELL CO.	AL	6/11/2007	20:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
PEPPERELL	LEE CO.	AL	6/11/2007	21:08	CST-6	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
CHEWACLA	LEE CO.	AL	7/20/2007	13:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SMITHS	LEE CO.	AL	7/20/2007	13:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
(AUO)AUBURN OPELIKA	LEE CO.	AL	1/31/2008	21:10	CST-6	Thunderstorm Wind	51 kts. MG	0	0	5.00K	0.00K
UCHEE	RUSSELL CO.	AL	2/6/2008	8:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
SEALE	RUSSELL CO.	AL	2/17/2008	15:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K

PINE GROVE	LEE CO.	AL	4/4/2008	18:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
BEULAH	LEE CO.	AL	6/11/2008	14:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
KAOLIN	RUSSELL CO.	AL	6/21/2008	18:01	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/11/2008	16:00	CST-6	Thunderstorm Wind	60 kts. EG	0	0	10.00K	0.00K
SHOTWELL	LEE CO.	AL	7/22/2008	13:12	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
AUBURN	LEE CO.	AL	8/7/2008	16:07	CST-6	Thunderstorm Wind	45 kts. EG	0	0	10.00K	0.00K
MITCHELL XRD	LEE CO.	AL	8/7/2008	16:20	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
AUBURN	LEE CO.	AL	8/7/2008	16:20	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
HURTSBORO	RUSSELL CO.	AL	8/7/2008	16:34	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
MC LENDON	RUSSELL CO.	AL	8/7/2008	16:44	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
MOTTS	LEE CO.	AL	8/7/2008	16:57	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PERSONS	RUSSELL CO.	AL	8/7/2008	17:15	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
KAOLIN	RUSSELL CO.	AL	8/7/2008	17:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	4/10/2009	19:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/10/2009	19:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	20.00K	0.00K

AUBURN	LEE CO.	AL	5/3/2009	15:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
OPELIKA	LEE CO.	AL	5/3/2009	15:21	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
PINE GROVE	LEE CO.	AL	5/10/2009	14:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	6/2/2009	16:21	CST-6	Thunderstorm Wind	40 kts. EG	0	0	0.50K	0.00K
CRAWFORD	RUSSELL CO.	AL	6/2/2009	16:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
AUBURN	LEE CO.	AL	6/2/2009	17:30	CST-6	Heavy Rain		0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	6/14/2009	12:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
BEEHIVE	LEE CO.	AL	6/14/2009	12:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	6/14/2009	13:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
BEEHIVE	LEE CO.	AL	6/15/2009	23:36	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
OPELIKA	LEE CO.	AL	6/15/2009	23:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
OPELIKA	LEE CO.	AL	6/28/2009	16:07	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
ROXANA	LEE CO.	AL	6/28/2009	16:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LADONIA	RUSSELL CO.	AL	6/28/2009	16:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MITCHELL XRD	LEE CO.	AL	7/28/2009	14:24	CST-6	Thunderstorm Wind	43 kts. EG	0	0	2.00K	0.00K
SMITHS STATIO	LEE CO.	AL	8/5/2009	14:59	CST-6	Thunderstorm	35 kts.	0	0	1.00K	0.00K

N						Wind	EG				
PEPPERELL	LEE CO.	AL	5/29/2010	12:00	CST-6	Thunderstorm Wind	45 kts. EG	0	0	25.00K	0.00K
LADONIA	RUSSELL CO.	AL	6/19/2010	15:04	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	8/2/2010	16:15	CST-6	Thunderstorm Wind	55 kts. EG	0	0	2.50K	0.00K
SANDFORT	RUSSELL CO.	AL	2/28/2011	18:59	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
AUBURN	LEE CO.	AL	4/4/2011	21:31	CST-6	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
SMITHS STATION	LEE CO.	AL	4/4/2011	21:55	CST-6	Thunderstorm Wind	61 kts. EG	0	0	2.00K	0.00K
SEALE	RUSSELL CO.	AL	4/4/2011	22:08	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	4/4/2011	22:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	7.00K	0.00K
AUBURN	LEE CO.	AL	4/15/2011	17:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	15.00K	0.00K
MOTTS	LEE CO.	AL	5/13/2011	16:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
BEEHIVE	LEE CO.	AL	5/26/2011	14:20	CST-6	Thunderstorm Wind	35 kts. EG	0	0	5.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	5/26/2011	14:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
SEALE	RUSSELL CO.	AL	6/11/2011	15:40	CST-6	Thunderstorm Wind	40 kts. EG	0	0	0.50K	0.00K
LADONIA	RUSSELL CO.	AL	6/17/2011	14:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.75K	0.00K
LADONIA	RUSSELL	AL	6/17/2011	14:25	CST-6	Thunderstorm	40 kts.	0	0	0.50K	0.00K

	CO.					Wind	EG				
OPELIKA	LEE CO.	AL	6/26/2011	17:34	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
RIDGE GROVE	LEE CO.	AL	7/1/2011	14:52	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MOTTS	LEE CO.	AL	7/1/2011	21:26	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/2/2011	17:46	CST-6	Thunderstorm Wind	40 kts. EG	0	0	2.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	7/3/2011	15:06	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
LADONIA	RUSSELL CO.	AL	7/14/2011	12:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SALEM	LEE CO.	AL	10/13/2011	11:29	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MITCHELL XRD	LEE CO.	AL	6/10/2012	14:03	CST-6	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
WHATLEY XRD	LEE CO.	AL	7/3/2012	13:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEULAH	LEE CO.	AL	7/3/2012	13:36	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PRINCE XRD	LEE CO.	AL	7/5/2012	16:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2012	16:47	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2012	16:47	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	7/5/2012	17:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BOTTLE	LEE CO.	AL	7/10/2012	16:55	CST-6	Thunderstorm	50 kts.	0	0	0.00K	0.00K

						Wind	EG				
SMITHS STATION	LEE CO.	AL	9/3/2012	14:25	CST-6	Heavy Rain		0	0	0.00K	0.00K
PEPPERELL	LEE CO.	AL	1/30/2013	13:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MOTTS	LEE CO.	AL	3/5/2013	15:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HURTSBORO	RUSSELL CO.	AL	6/27/2013	18:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	6/28/2013	12:53	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	7/24/2013	12:45	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
PINE GROVE	LEE CO.	AL	7/24/2013	12:46	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	7/24/2013	13:20	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
HATCHECHUBEE	RUSSELL CO.	AL	4/7/2014	7:46	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HUGLEY	RUSSELL CO.	AL	4/29/2014	2:33	CST-6	Thunderstorm Wind	54 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	11/23/2014	14:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COLBERT	RUSSELL CO.	AL	4/25/2015	15:32	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
OSANIPPA	LEE CO.	AL	5/14/2015	18:04	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	5/31/2015	15:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HALAWAKA	LEE CO.	AL	6/24/2015	17:45	CST-6	Thunderstorm	50 kts.	0	0	0.00K	0.00K

						Wind	EG				
SMITHS	LEE CO.	AL	6/24/2015	17:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	6/24/2015	17:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	7/3/2015	20:32	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FLOURNOYS	RUSSELL CO.	AL	7/15/2015	15:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FT MITCHELL	RUSSELL CO.	AL	8/6/2015	19:51	CST-6	Thunderstorm Wind	78 kts. EG	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	12/24/2015	10:27	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
UNLAND	RUSSELL CO.	AL	2/15/2016	19:00	CST-6	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
HUGLEY	RUSSELL CO.	AL	2/15/2016	19:03	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
HUGLEY	RUSSELL CO.	AL	2/15/2016	19:05	CST-6	Thunderstorm Wind	70 kts. EG	0	0	0.00K	0.00K
LOACHAPOKA	LEE CO.	AL	6/17/2016	16:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MC LENDON	RUSSELL CO.	AL	6/26/2016	14:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	7/9/2016	12:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	2/7/2017	14:43	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PEPPERELL	LEE CO.	AL	2/7/2017	14:53	CST-6	Thunderstorm Wind	55 kts. EG	0	1	0.00K	0.00K
GIRARD	RUSSELL	AL	4/3/2017	9:30	CST-6	Thunderstorm	50 kts.	0	0	0.00K	0.00K

	CO.					Wind	EG				
PHENIX CITY	RUSSELL CO.	AL	4/3/2017	9:31	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	4/5/2017	21:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
AUBURN	LEE CO.	AL	6/15/2017	16:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	6/15/2017	17:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	9/22/2017	15:13	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OSWICHEE	RUSSELL CO.	AL	7/3/2018	19:42	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	7/21/2018	17:14	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CRAWFORD	RUSSELL CO.	AL	7/21/2018	17:52	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
J C MEADOWS XRDS	LEE CO.	AL	1/19/2019	16:54	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
UNLAND	RUSSELL CO.	AL	2/12/2019	12:04	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	2/12/2019	12:11	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LADONIA	RUSSELL CO.	AL	2/12/2019	12:16	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	6/7/2019	12:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
GRIFFEN MILL	LEE CO.	AL	6/7/2019	13:07	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEULAH	LEE	AL	6/7/2019	13:	CS	Thunder	50	0	0	0.0	0.0

	CO.			18	T-6	storm Wind	kts. EG			0K	0K
SMITHS STATION	LEE CO.	AL	6/7/2019	13:21	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SMITHS	LEE CO.	AL	8/5/2019	16:49	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
STONEWALL	LEE CO.	AL	8/14/2019	19:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:								2	4	1.232M	22.00K

Lee-Russell Tornado Events

Location	County/Zone	St.	Date	**Type**	**Mag**	Dth	Inj	PrD	CrD
RUSSELL CO.	RUSSELL CO.	AL	3/29/1991	Tornado	F2	0	16	2.500M	0.00K
Opelika	LEE CO.	AL	8/2/1994	Tornado	F0	0	0	50.00K	0.00K
OPELIKA	LEE CO.	AL	7/22/1997	Tornado	F0	0	0	12.00K	0.00K
J C MEADOWS XRDS	LEE CO.	AL	9/28/1998	Tornado	F0	0	0	0.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	9/28/1998	Tornado	F0	0	0	0.00K	2.00K
OPELIKA	LEE CO.	AL	11/24/2004	Tornado	F0	0	0	28.00K	0.00K
OPELIKA	LEE CO.	AL	7/6/2005	Tornado	F0	0	0	34.00K	0.00K
PHENIX CITY	RUSSELL CO.	AL	8/29/2005	Tornado	F0	0	0	1.00K	0.00K
SMITHS	LEE CO.	AL	3/1/2007	Tornado	EF1	0	0	100.00K	0.00K
LADONIA	RUSSELL CO.	AL	3/1/2007	Tornado	EF0	0	0	3.00K	0.00K
UCHEE	RUSSELL CO.	AL	4/11/2007	Tornado	EF1	0	0	5.00K	0.00K

GLENVILLE	RUSSELL CO.	AL	2/17/2008	Tornado	EF2	0	4	120.00K	0.00K
RIDGE GROVE	LEE CO.	AL	2/28/2009	Tornado	EF1	0	0	65.00K	0.00K
SALEM	LEE CO.	AL	2/28/2009	Tornado	EF2	0	3	1.100M	0.00K
ROXANA	LEE CO.	AL	4/10/2009	Tornado	EF0	0	0	2.00K	0.00K
LOACHAPOKA	LEE CO.	AL	4/10/2009	Tornado	EF1	0	0	150.00K	0.00K
MITCHELL XRD	LEE CO.	AL	4/10/2009	Tornado	EF1	0	0	30.00K	0.00K
BUPREE	LEE CO.	AL	4/10/2009	Tornado	EF1	0	0	5.00K	0.00K
UNLAND	RUSSELL CO.	AL	4/10/2009	Tornado	EF1	0	0	10.00K	0.00K
LADONIA	RUSSELL CO.	AL	4/10/2009	Tornado	EF1	0	2	120.00K	0.00K
NUCKOLS	RUSSELL CO.	AL	4/10/2009	Tornado	EF1	0	1	50.00K	0.00K
GIRARD	RUSSELL CO.	AL	4/19/2009	Tornado	EF2	0	0	500.00K	0.00K
CAWATCHEE	LEE CO.	AL	5/23/2009	Tornado	EF0	0	0	100.00K	0.00K
LOACHAPOKA	LEE CO.	AL	11/16/2011	Tornado	EF1	0	2	4.000M	0.00K
ROXANA	LEE CO.	AL	5/13/2012	Tornado	EF0	0	0	0.00K	0.00K
ROXANA	LEE CO.	AL	4/11/2013	Tornado	EF0	0	0	0.00K	0.00K
PRINCE XRD	LEE CO.	AL	4/29/2014	Tornado	EF3	0	13	0.00K	0.00K
HUGLEY	RUSSELL CO.	AL	4/29/2014	Tornado	EF1	0	0	0.00K	0.00K
LOFLIN	RUSSELL CO.	AL	11/17/2014	Tornado	EF1	0	0	0.00K	0.00K
HOOKS	RUSSELL CO.	AL	4/19/2015	Tornado	EF1	0	0	0.00K	0.00K

OSWICHEE	RUSSELL CO.	AL	4/19/2015	Tornado	EF1	0	0	0.00K	0.00K
NUCKOLS	RUSSELL CO.	AL	8/6/2015	Tornado	EF0	0	0	0.00K	0.00K
J C MEADOWS XRDS	LEE CO.	AL	2/15/2016	Tornado	EF0	0	0	0.00K	0.00K
UCHEE	RUSSELL CO.	AL	2/15/2016	Tornado	EF1	0	0	0.00K	0.00K
UNLAND	RUSSELL CO.	AL	2/15/2016	Tornado	EF0	0	0	0.00K	0.00K
ROANOKE JCT	LEE CO.	AL	3/1/2016	Tornado	EF0	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	3/31/2016	Tornado	EF0	0	0	0.00K	0.00K
BEEHIVE	LEE CO.	AL	4/6/2016	Tornado	EF0	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	4/6/2016	Tornado	EF0	0	0	0.00K	0.00K
HUGLEY	RUSSELL CO.	AL	4/6/2016	Tornado	EF1	0	0	0.00K	0.00K
GLENVILLE	RUSSELL CO.	AL	4/6/2016	Tornado	EF0	0	0	0.00K	0.00K
MIDDLE BROOKS XRDS	LEE CO.	AL	11/30/2016	Tornado	EF1	0	0	0.00K	0.00K
BEEHIVE	LEE CO.	AL	1/21/2017	Tornado	EF0	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	1/21/2017	Tornado	EF1	0	0	0.00K	0.00K
MITCHELL XRD	LEE CO.	AL	1/21/2017	Tornado	EF0	0	0	0.00K	0.00K
PEPPERELL	LEE CO.	AL	1/21/2017	Tornado	EF0	0	0	0.00K	0.00K
PRINCE XRD	LEE CO.	AL	1/21/2017	Tornado	EF0	0	0	0.00K	0.00K
SMITHS STATION	LEE CO.	AL	1/21/2017	Tornado	EF1	0	0	0.00K	0.00K
BEEHIVE	LEE CO.	AL	1/22/2017	Tornado	EF0	0	0	0.00K	0.00K

(AUO)AUBURN OPELIKA	LEE CO.	AL	1/22/2017	Tornado	EF1	0	0	0.00K	0.00K
OPELIKA	LEE CO.	AL	7/21/2018	Tornado	EF0	0	0	0.00K	0.00K
PINE GROVE	LEE CO.	AL	11/1/2018	Tornado	EF0	0	0	0.00K	0.00K
BUPREE	LEE CO.	AL	3/3/2019	Tornado	EF4	23	90	0.00K	0.00K
MARVYN	LEE CO.	AL	3/3/2019	Tornado	EF1	0	1	0.00K	0.00K
KAOLIN	RUSSELL CO.	AL	4/14/2019	Tornado	EF0	0	0	0.00K	0.00K

Lee-Russell Tropical Strom, Tropical Depression, and Hurricanes

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD
LEE (ZONE)	LEE (ZONE)	AL	7/10/2005	Tropical Storm	0	0	35.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	7/10/2005	Tropical Storm	0	0	48.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/29/2005	Tropical Storm	0	0	20.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/29/2005	Tropical Storm	0	0	15.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	8/23/2008	Tropical Depression	0	0	5.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	8/23/2008	Tropical Depression	0	0	15.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	11/9/2009	Tropical Depression	0	0	2.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	11/9/2009	Tropical Depression	0	0	2.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	9/11/2017	Tropical Storm	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	9/11/2017	Tropical Storm	0	0	0.00K	0.00K

RUSSELL (ZONE)	RUSSELL (ZONE)	AL	10/10/2018	Tropical Storm	0	0	0.00K	0.00K

Lee-Russell Winter Weather Events

Location	County/Zone	St.	Date	**Type**	Dth	Inj	PrD	CrD
LEE (ZONE)	LEE (ZONE)	AL	12/18/1996	Winter Storm	0	0	15.00K	20.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/18/1996	Winter Storm	0	0	15.00K	20.00K
LEE (ZONE)	LEE (ZONE)	AL	12/29/1997	Winter Storm	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/2/2002	Heavy Snow	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/2/2002	Heavy Snow	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/3/2002	Heavy Snow	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/3/2002	Heavy Snow	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/29/2005	Ice Storm	0	0	25.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/19/2008	Winter Weather	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	3/1/2009	Heavy Snow	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	3/1/2009	Heavy Snow	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	2/12/2010	Heavy Snow	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	2/12/2010	Winter Weather	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	12/15/2010	Winter Weather	0	0	0.00K	0.00K

RUSSELL (ZONE)	RUSSELL (ZONE)	AL	12/15/2010	Winter Weather	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/9/2011	Ice Storm	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/9/2011	Ice Storm	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/28/2014	Winter Storm	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/28/2014	Winter Storm	0	0	0.00K	0.00K
LEE (ZONE)	LEE (ZONE)	AL	1/16/2018	Winter Storm	0	0	0.00K	0.00K
RUSSELL (ZONE)	RUSSELL (ZONE)	AL	1/16/2018	Winter Storm	0	0	0.00K	0.00K

Dams for Lee County

County	Dam Name	Owner Type	Year Completed	NID Height (Ft.)	NID Length (Ft.)	NID Storage	Dam Type
LEE	AUBURN FARM POND NO 1	Public Utility	1946	13	375	125	Earth
LEE	AUBURN FARM POND NO S-3	Public Utility	1946	20	375	96	Earth
LEE	AUBURN FARM POND NO S-6	Public Utility	1947	18	650	210	Earth
LEE	AUBURN FARM POND NO S-8	Public Utility	1947	12	400	63	Earth
LEE	AUBURN FARM POND S-14	Public Utility	1948	15	600	84	Earth
LEE	AUBURN FARM POND STORAGE	Public Utility	1973	16	2000	110	Earth
LEE	RICE	Public Utility	1959	20	430	112	Earth
LEE	C E LEE	Public Utility	1946	33	350	520	Earth
LEE	GEORGE MANN	Public Utility	1971	24	360	158	Earth
LEE	M M JONES	Public Utility	1965	45	1500	324	Earth
LEE	JOHNSON LAKE	Public Utility	1956	15	200	353	Earth
LEE	LAKE OGLETREE NO 1	Local Government	1932	50	250	6200	Earth
LEE	ROY LAZENBY	Public Utility	1961	15	300	52	Earth
LEE	SOUGAHATCHEE	Local Government	1932	43	635	10200	Earth
LEE	LEE COUNTY PUBLIC LAKE	State	1967	29	2050	1700	Earth
LEE	H H WEBB	Public Utility	1966	13	375	100	Earth
LEE	AG ENGINEERING FARM POND	Public Utility	1948	22	450	192	Earth
LEE	DR JAMES BRUCE	Public Utility	1966	50	600	100	Earth
LEE	ALONAME 1	Public Utility	1961	30	250	125	Earth
LEE	JACKIE OSMENT	Public Utility	1969	17	408	61	Earth
LEE	DR JAMES BRUCE NO 3	Public Utility	1966	35	600	292	Earth
LEE	DR JAMES BRUCE NO 2	Public Utility	1966	45	500	100	Earth
LEE	LOUIS MURPHY	Public Utility	1958	42	600	150	Earth
LEE	DR JAMES BRUCE NO 4	Public Utility	1966	26	400	100	Earth
LEE	AUBURN OUTING CLUB	Public Utility	1964	20	300	100	Earth
LEE	E T CONWAY NO 1	Public Utility	1970	28	325	73	Earth
LEE	CHEWACLA STATE PARK	State	1932	28	150	180	Earth
LEE	OGLETREE OUTING CLUB	Local Government	1946	18	450	75	Earth

LEE	OGLETREE NO 2	Public Utility	1916	18	225	173	Earth
LEE	WILMORE	Local Government	1962	25	400	190	Earth
LEE	HAMILTON	Public Utility	1942	12	120	100	Earth
LEE	JACOBS	Public Utility	1944	16	600	67	Earth
LEE	THOMAS CHERRY	Public Utility	1964	32	500	108	Earth
LEE	FRANK R POPE NO 1	Public Utility	1966	30	1000	230	Earth
LEE	FRANK R POPE NO 2	Public Utility	1966	20	300	70	Earth
LEE	SAMFORD BROTHERS NO 1	Public Utility	1954	21	400	140	Earth
LEE	SAMFORD BROS NO 2	Public Utility	1954	19	330	50	Earth
LEE	A N INGRAM	Public Utility	1958	28	350	94	Earth
LEE	W B COGDELL	Public Utility	1959	12	400	50	Earth
LEE	CLYDE POWELL	Public Utility	1965	18	450	60	Earth
LEE	LAKE THEL	Public Utility	1940	23	570	128	Earth
LEE	C L MULLINS	Public Utility	1954	22	430	60	Earth
LEE	SMITHS	Public Utility	1940	20	350	96	Earth
LEE	COUNTRY CLUB	Public Utility	1946	12	500	50	Earth
LEE	REX RANIER	Public Utility	1972	21	750	108	Earth
LEE	G E KIMBROUGH	Public Utility	1964	25	310	32	Earth
LEE	R F NEWMAN	Public Utility	1970	14	225	111	Earth
LEE	PLAINSMAN CLUB	Public Utility	1958	23	450	154	Earth
LEE	DUDLEY	Public Utility	1946	22	400	90	Earth
LEE	SELF	Public Utility	1950	27	600	80	Earth
LEE	HEATH	Public Utility	1954	21	400	170	Earth
LEE	HUDSON	Public Utility	1950	31	540	130	Earth
LEE	KINNETT	Public Utility	1942	17	457	101	Earth
LEE	MITCHELL	Public Utility	1958	21	420	65	Earth
LEE	MULLINS LAKE	Public Utility	1950	16	350	50	Earth
LEE	ALNONAME 2	Public Utility	1950	28	420	70	Earth
LEE	HUBBARD	Public Utility	1953	30	500	60	Earth
LEE	CONDY	Public Utility	1955	25	500	40	Earth
LEE	RE NEWMAN NO 2	Public Utility	1967	19	360	60	Earth
LEE	GULLATTE	Public Utility	1953	40	350	55	Earth
LEE	MURPHY	Public Utility	1948	28	300	70	Earth
LEE	PRATHER	Public Utility	1939	21	337	68	Earth
LEE	FOLMAR	Public Utility	1950	30	575	170	Earth
LEE	HOMER FRANKLIN	Public Utility	1981	18	275	71	Earth

Dams for Russell County

County	Dam Name	Owner Type	Year Completed	NID Height (Ft.)	NID Length (Ft.)	NID Storage	Dam Type
RUSSELL	MULLIN LAKE	Public Utility	1947	28	750	200	Earth
RUSSELL	WADSWORTH LAKE	Public Utility	1946	8	300	50	Earth
RUSSELL	DYKES POND	Public Utility	1958	18	600	122	Earth
RUSSELL	CHATFIELDS POND	Public Utility	1950	15	300	50	Earth
RUSSELL	BUSSEY LAKE	Public Utility	1952	12	2000	96	Earth
RUSSELL	GOLDEN STREAM LAKE	Public Utility	1940	25	550	246	Earth
RUSSELL	WILSON POND	Not Listed	1955	25	848	116	Earth
RUSSELL	LAKE BICKERSTAFF	Public Utility	1954	14	1000	280	Earth
RUSSELL	BUSH POND	Public Utility	1949	30	600	175	Earth
RUSSELL	WILLIAMS LAKE	Public Utility	1948	42	840	230	Earth
RUSSELL	PORTER BRANCH LAKE	Public Utility	1947	28	750	450	Earth
RUSSELL	CARROLL LAKE	Public Utility	1955	24	600	190	Earth
RUSSELL	MOTT LAKE	Public Utility	1947	34	250	110	Earth
RUSSELL	YUCHI LAKE	Public Utility	1941	20	400	170	Earth
RUSSELL	JOHN ONEALL	Public Utility	1971	17	775	336	Earth
RUSSELL	SNYDER POND	Public Utility	1950	20	250	80	Earth
RUSSELL	PARKMAN POND	Public Utility	1951	16	500	65	Earth
RUSSELL	CROUCH POND	Public Utility	1952	20	500	96	Earth
RUSSELL	MOON LAKE	Local Government	1946	40	900	224	Earth
RUSSELL	TORBERTS LAKE	Public Utility	1960	36	650	1800	Earth
RUSSELL	DEEP SOUTH	Public Utility	1961	15	705	181	Earth
RUSSELL	BURKES LAKE	Public Utility	1946	15	400	75	Earth
RUSSELL	B B BURTS	Public Utility	1958	15	575	50	Earth
RUSSELL	LAKE LENORA	Public Utility	1942	20	360	80	Earth
RUSSELL	MARGLOBA	Public Utility	1947	30	400	105	Earth
RUSSELL	WILLOW LAKE	Public Utility	1952	36	350	100	Earth
RUSSELL	BALFORE LAKE	Public Utility	1949	12	400	60	Earth
RUSSELL	SHEPPARD POND	Public Utility	1955	48	450	65	Earth
RUSSELL	KNOWELS POND	Public Utility	1955	35	525	252	Earth
RUSSELL	EDWARDS POND	Public Utility	1939	15	200	58	Earth
RUSSELL	TALBERT	Public Utility	1950	17	375	60	Earth
RUSSELL	GREENE NO 2	Public Utility	1966	41	450	180	Earth
RUSSELL	MATTHEWS	Public Utility	1960	16	400	65	Earth
RUSSELL	ASBURY	Public Utility	1950	23	500	70	Earth
RUSSELL	JAMES MILLS	Public Utility	1965	19	541	100	Earth
RUSSELL	BOBBY JONES	Public Utility	1989	20	1000	234	Earth
RUSSELL	TANNER	Public Utility	1968	15	600	99	Earth

7.5 Emails with Jurisdictions

Email with Barbour County EMA Director

Taylor,
I didn't know this was coming my way and with such short notice I can't do much more then give it a good glance over.
Division B did the first regional mitigation plan in the state 5 years ago (so we are in process of our update.) The one question I have, is each county going to have it's own section listing the mitigation actions they plan to take? Having it separated by county helps keep the focus and gives each county a section that doesn't have so much info that doesn't apply to them, it also makes updating it much easier.
Attached is a draft copy of our original plan from 5 years ago (look at page 111 to get an idea of what I'm talking about), so you can have a look at it. It may be too late to revise into this type format, but it could help down the road.

David M Logan, MBA, MS, ALEM, CLEM
Director, Barbour County EMA
Homeland Security POC

On Thu, Aug 20, 2020 at 9:41 AM

Good morning,

Lee-Russell Council of Governments is working on Phase 1 of the Division D Hazard Mitigation Plan for AEMA/FEMA. As a part of this process FEMA requires us to have the draft reviewed by non-Division D for feedback. This is document is a working draft, so please excuse any minor errors. We are looking for any comments on the document’s structure or of any missing sections. Please review this ASAP, and forward any comments back by Friday.

Thank you,

Taylor V. Esco

Emails with Jim Grout Mayor of Loachapoka

On Tue, Sept 1, 2020 at 7:45 AM

Good morning Jim,

Please give me a call when you have a chance. I am putting together the Hazard Mitigation for Lee-Russell counties, and we need Loachapoka's input in the plan.

Phone Call with Jim

A phone took place with Jim on Tuesday September 1st at 11:30 to discuss how to incorporate Loachaopka in the Hazard Mitigation Plan.

SECTION 5 – MITIGATION STRATEGY

Mitigation Planning Process
5.2 Regional Mitigation Goals
5.3 Regional Mitigation Strategies
5.4 Capabilities Assessment for Local Jurisdictions
5.5 Jurisdictional Mitigation Action Plans
5.5.1 Lee-Russell Council of Governments Mitigation Action Plans
5.5.2 Autauga County Jurisdiction Actions
5.5.3 Elmore County Jurisdiction Actions
5.5.4 Montgomery County Jurisdiction Actions

5.1 Mitigation Planning Process

Local planning stakeholders were asked to review the progress of their previously adopted mitigation goals and to reevaluate those strategies based on updated information from the Risk Assessment and vulnerability to each profile hazard. The goals and strategies were viewed in light of the impact and extent of hazard occurrences in local jurisdictions and the region as a whole.

5.2 Mitigation Goals

Mitigation goals are broad statements that focus on long-term visions to reduce or avoid vulnerabilities to identified hazards within the region. Through the planning process, six primary goals were developed from corresponding goals in previous local mitigation plans. The mitigation goals expected to be achieved by development, adoption, and continuation of this plan include:

1. **PREVENTION**: Manage the development of land and buildings to minimize the risk of life and property loss due to hazard events.
2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.
3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
4. **STRUCTURAL MITIGATION**: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
5. **EMERGENCY SERVICES**: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

5.3 Mitigation Strategies

Mitigation strategies are broad, yet more defined actions that help to further define mitigation goals. A wide range of activities that are aligned with the six-goal categorizations was considered in order to help achieve the established mitigation goals, in particular emphasizing mitigation concerning new and existing buildings and infrastructure. These strategies also provide additional background to addressing any specific hazard concerns. The six-goal categorizations used for mitigation strategies include Prevention, Property Protection, Natural Resource Protection, Structural Mitigation, Emergency Services, and Public Awareness and Education. These are discussed in detail below, as well as identifying appropriate hazard(s) that are mitigated through these approaches.

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment of development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program-NFIP (Flooding)
7. Capital improvements planning (All Hazards)
8. Railroad Crossing Study

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of flood-prone properties (Flooding)
2. Relocation of flood-prone properties (Flooding)
3. Elevation of flood-prone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as a floodplain, wetlands, and steep slopes. Examples of natural resource protection activities include:

1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Sinkholes/Land Subsidence, Wildfire)

Goal #4: Structural Mitigation

Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing the construction of appropriate structures. Examples of structural mitigation protection activities include:

1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (Tornadoes, Extreme Temperatures, Winter Storms)
6. Underground Utilities (Tornadoes, Wildfire, Lighting, Hurricane/Tropical Storm/Depression)

Goal #5: Emergency Services

Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:

1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)
5. Provision of alternative power, e.g. generators (All Hazards)
6. Debris removal (All Hazards)

Goal #6: Public Education and Awareness

Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:

1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)

5.4 Capabilities Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive mitigation strategy by examining existing programs, regulations, resources, and practices. This determination allows a jurisdiction to assess whether mitigation actions are feasible, due to financial resources, political climate, administrative capacity, and other jurisdictional capabilities.

The Alabama Emergency Management Agency (AEMA) Division D is a twelve-county region composed of municipalities with a myriad of governmental powers. The specific planning area for this Phase II Autauga, Elmore, and Montgomery counties Hazard Mitigation Plan is three counties with twelve municipalities. All counties governments are governed by an elected commission.

The mitigation strategies listed in Section 5.3 are framed by the capacity and capabilities of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources.

Communities work together through the county Emergency Management Agency for assistance related to planning for mitigation and to implement specific strategies. Authority overspending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent feather of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, tow communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority.

Table 5.1 summarizes the statutory authority and resources of each jurisdiction and its present use or intended future use of these powers to implement potential actions and types of actions listed in the hazard mitigation plan. The table describes powers or policies that are granted to different types of jurisdictions in general terms, describes the jurisdictions that currently apply those policies in their mitigation efforts, describes the jurisdictions that intend to apply those authorities and policies for future implementation and describes the means by which each jurisdiction will incorporate the mitigation action into its existing powers, authorities, policies, and capabilities.

Table 5.1: Statutory Authority and Resources

Multi-Jurisdictional Hazard Mitigation Plan: Capability Assessment	Authorized for:	Practiced by:	Incorporated through:
Police power: ability to regulate activities of individuals in the jurisdiction for purposes of health, safety, and public welfare	Municipalities	All	Council or Commission action to enact and enforce regulations
Control of public expenditures: ability to acquire property and improve property owned by the jurisdiction; capacity to borrow and expend funds	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Building code enforcement: ability to enforce codes related to building materials and construction standards outside of flood hazard areas	Municipalities	All	Council or Commission action to enact and enforce regulations
Floodplain management authority: ability to regulate development in areas of special flood hazard in compliance with NFIP standards; includes authority to regulate land use and subdivisions inside of flood hazard areas	Municipalities, Counties	All	Council or Commission action to enact and enforce regulations
Purchase properties subject to flooding and maintain as permanent open space	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Capital improvements: ability to plan and implement public infrastructure to mitigate hazards	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Zoning authority: ability to divide political jurisdiction into districts for purposes of regulation buildings and their use, both inside and outside of flood hazard areas	Municipalities	All	Council action to enact and enforce regulations
Subdivision regulations: ability to regulate new developments involving new parcels and infrastructure, both inside and outside flood hazard areas	Municipalities, Counties	All	County Commission or Council action to enact and enforce regulations
Storm water management program: ability to regulate retention, detention, and release of storm water runoff	Municipalities	All	Council action to enact and enforce regulations

Table 5.2 below provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in the Autauga, Elmore, and Montgomery counties. A “Yes” (Y) indicates the item is currently in place and being implemented. A “No” (N) indicates the item is not in place or being implemented. An asterisk (*) indicates the item is currently being developed for future implementation.

Table 5.2: Relevant Plans, Ordinances, and Programs

Jurisdiction	Zoning Ordinance	Code Enforcement	Master Plan (Date)	Certified Floodplain Manager	NFIP Participation	Subdivision Regulations
Autauga County	N	N	N	NA	Y	Y
Town of Autauga	N	N	N	NA	Y	Y
Town of Billingsley	N	N	N	Stephen Bland	N	Y
City of Prattville	Y	Y	2010	Clyde Chambliss	Y	Y
Elmore County	N	N	N	NA	Y	Y
Town of Coosada	N	N	N	NA	Y	Y
Town of Deatsville	N	N	N	Jason Masters	Y	Y
Town of Elmore	N	N	N	NA	Y	Y
Town Eclectic	Y	Y	2016	NA	Y	Y
City of Millbrook	Y	Y	N	NA	Y	Y
City of Prattville	Y	Y	2010	Clyde Chambliss	Y	Y
City of Tallassee	Y	Y	2040**	Cassie Pritchard	Y	Y
City of Wetumpka	Y	Y	2013	Annelise Dodd	Y	Y
Montgomery County	N	N		NA	Y	Y
City of Montgomery	Y	Y	2040**	Zakira Darby	Y	Y
Town of Pike Road	Y	Y	Y	Coey Garyotis	Y	Y

The City of Montgomery and the Town of Tallassee Master/Comprehensive Plans expire on 2040

5.5 Mitigation Actions

This section identifies and analyzes a range of mitigation actions and projects under consideration to achieve the regional mitigation goals for reducing the effects of hazard events for the region at large, as well as each of the jurisdictions within the region. Local planning stakeholders used knowledge and expertise in dealing with natural hazards was invaluable in updating the strategy. The primary considerations used to update and prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, development trends, and economic, environmental issues, and local capabilities to determine the most appropriate plan of action for their jurisdictions. Each action or project listed has accessory information, such as designation of a lead agency, hazard(s) addressed, and potential funding source(s). The following table describes the key elements of the Mitigation Action Plans.

Table 5.3: Mitigation Actions and Projects for Consideration

Jurisdiction Name	
Goal	Category of goal that is met: #1: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events (PREVENTION) #2: Protect structures and their occupants and contents from the damaging effects of hazard events (PROPERTY PROTECTION) #3: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands (NATURAL RESOURCE PROTECTION) #4: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable (STRUCTURAL MITIGATION) #5: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events (EMERGENCY SERVICES) #6: Educate and foster public awareness of hazards and techniques available for mitigation (PUBLIC EDUCATION AND AWARENESS)
Action	Title and description of action to be undertaken
Hazards Addressed	Hazard which the action addresses
Lead Agency	Entity responsible for undertaking the action
Funding Source	Level of funding required for action, where applicable
Priority/Status	Categorization based on the following projected criteria:

Benefit/ Cost Score	The Benefit/Cost score included in the jurisdictional Mitigation Action Plans are considered at the planning level and does not include a full analysis of all costs and benefits associated with action implementation. For example, a mitigation action that scores "High" in benefits and "Low" in costs will be listed as "Moderate" in the plan due to providing a long-term solution, but with a high implementation cost. For some projects, such as routine or ongoing operations conducted with local operating funds and existing staff, this may be the only explicit comparison of costs and benefits. For projects of which grant funding or bond issues may be sought, more in-depth evaluations of costs and benefits may be required. As specific project scopes are detailed, the benefits and costs of an action can be identified with more precision and the benefit-cost ratio (BCR) that results from a full benefit-cost analysis may differ from the planning level Benefit/Cost score presented in the plan. It should be noted that higher scores do not necessarily correspond to high priorities, nor do low scores correspond to low priority projects. An important action with a high priority to a jurisdiction may have a lower Benefit/Cost score because of its complexity, assumed high expense, and other potential costs. Jurisdictions should not be discouraged or deterred from further consideration of actions which have low scores until additional, more specific, evaluations of the costs and benefits has been undertaken. **Low**: Benefits: Projects that only benefit a limited population, or provides short-term benefits / Costs: projects likely to cost over $100,000 and requiring additional funding or staffing outside of normal operations, and is complicated to implement. **Moderate**: Benefits: Projects that would be felt by moderate amount of population in jurisdiction, or solves a problem for several years / Costs: projects that may need additional funding or continued study or staffing outside of normal operations, with estimated costs between $10,000 and $100,000. **High**: Benefits: Projects that benefit many in the jurisdiction that are long-term solutions / Costs: projects that can be implemented by existing personnel with little additional burden on budget and uncomplicated to implement.

Table 5.4: Mitigation Action Plan Autauga County

Autauga County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority /Status	Benefit/Cost Score	Jurisdiction	Status/ Time Frame
6	Disseminate Information pamphlets for County residents explaining precautions to be taken	All	Autauga County EMA, Municipalities, and ARC	Local	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Develop an information website where residents learn how to protect themselves and property	All	Autauga County EMA, CARPDC, HMC	Local	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Cooperate with local media to produce new release on hazard risk & safety.	All	Autauga County EMA, CARPDC, HMC	Local and Grants	High	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Form permanent HMC representatives from various organization and departments to prepare hazards mitigation actions in the County	All	Autauga County EMA, CARPDC, LEPC	Local	High	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
2	Investigate a county fund to facilitate voluntary acquiring, elevating, or retrofitting structures in hazard prone areas	All	Autauga County EMA, CARPDC,	Local and Grants	Low	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Complete**
1	Enforce forest and vegetation management polices	Wildfires and Floods	Autauga County EMA; Municipalities, County, CARPDC	Local	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Enforce sediment and erosion control regulation	Flood	Autauga County EMA, Municipalities,	Local	Medium	High	Autauga County, Autaugaville,	**Completed**

			County, CARPDC				Billingsley, Prattville	
1	Enforce stream dumping regulation	Flood	Autauga County EMA; Municipalities, County, CARPDC	Local	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Enforce wetlands development regulation	Flood	Autauga County EMA; Municipalities, County, CARPDC	Local	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
2	Purchase floodway or repetitive loss structure to eliminate potential for flood damage	Flood	Prattville, Autauga County, CARPDC	Local	High	Low	Autauga County, Prattville	**Completed**
4	Regularly inspect and maintain bridges and culverts	Flood	Municipalities, County	Local and Grants	Medium	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
3	Develop a stream corridor restoration plan	Flood	Municipalities, Autauga County	Local and Grants	Medium	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
2	Relocate critical facilities out of the 100 year floodplain	Flood	Municipalities, Autauga County	Local and Grants	Medium	Low	Autauga County, Autaugaville, Billingsley, Prattville	2030
1	Ensure that all critical facilities have updated emergency response plans	All	Autauga EMA	Local	High	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Develop and maintain an early warning system of weather sirens within the county	Thunderstorms and Tornadoes	Autauga EMA, Municipalities, County	Local and Grants	High	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Encourage and promote citizens to obtain weather radios	Thunderstorm and Tornadoes	Autauga EMA, Municipalities, Autauga County	Local and Grants	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**

1	Enforce floodplain development regulation and continued compliance with the National Flood Insurance Program (NFIP)	Flood	Municipalities, Autauga County	Local and Grants	High	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	2021-2023
1	Prevent the current and future risk of injury / death and damage form natural hazard in Autauga County	Flood	Municipalities, Autauga County	Local	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2020- 2025
3	Promote natural resource planning	All	CARPDC, Municipalities, and Autauga County	Local and Grants	Medium	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Review, evaluate, and discuss designated growth areas in the county, and plans to ensure development will occur out of hazard prone areas	Flood	CARPDC, Municipalities, and Autauga County	Local and Grants	High	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2020- 2025
1	Encourage department responsible for data relating to parcels, centerlines, buildings, addresses, hydrology and hazards to develop and enforce data maintenance policies.	All	Autauga EMA, CARPDC, Tax Assessment, Municipalities	Local and Grants	Medium	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2020- 2025
1	Encourage the development of data sharing policies and agreements between departments and organizations responsible for data creation, management and use.	All	Autauga EMA, CARPDC, Tax Assessment, Municipalities	Local, Municipalities and Grants	Medium	Moderate	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2020- 2025
6	Develop and distribute a list of contact person for	All	Autauga EMA, LEPC	Local	High	High	Autauga County, Autaugaville,	**Completed**

	each organization that may play a part in Emergency response, services, relief, or hazard mitigation						Billingsley, Prattville	
1	Encourage the heads of each department or organization involved in emergency response, service, relief, or hazard mitigation to meet several time a year to discuss mitigation issues.	All	Autauga EMA, LEPC	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Develop a clear chain of command that would be used in the event of a disasters	All	Autauga EMA, LEPC	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Inventory all available equipment and technology used for emergency response, service, and relief to determine deficiency.	All	Autauga EMA	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	Immediate and continuous 2020- 2025
6	Utilize existing school programs to educate on hazard, hazard safety,, and mitigation	Tornadoes, Floods, Thunderstorms	Autauga County EMA, ARC, HMC, Autauga County Board of Education	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Disseminate mail on hazard mitigation for owners in 100 yr floodplain and repetitive loss area	Floods	Autauga County EMA, CARPDC	Local and Grants	Low	HIgh	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Develop information workshops on hazard risks & mitigation for property owners in high risk	Floods	Autauga County EMA, CARPDC	Local and Grants	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Investigate avenues for real estate disclosure for	Flood	Autauga County EMA, CARPDC	Local and Grants	Low	Low	Autauga County, Autaugaville,	**Deleted**

	properties in 100 year floodplain						Billingsley, Prattville	County does not have the funds or resources to continue the pursuit of this action
3	Enforce urban forestry and landscape management policies	Wildfire and Floods	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
3	Develop and implement a vegetative/trees management plan	Wildfires and floods	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Enforce development best management practices	All	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Form permanent HMC of representative from various organization and departments to prepare hazard mitigation action in the County	All	Autauga County EMA, CARPDC	Local and Grants	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
3	Enforce forest and vegetation management policies	Wildfires and floods	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
4	Construct barriers around structures in flood-prone areas	Flood	Municipalities, county	Local and Grants	Low	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
4	Construct dams, levees, or reservoirs to reduce flooding issues	Flood	Municipalities, county	Local and Grants	Low	Low	Autauga County, Autaugaville, Billingsley, Prattville	2021 to 2030
4	Construct levees or floodwalls to protect communities with	Flood	Municipalities, county	Local and Grants	Low	Low	Autauga County, Autaugaville,	2021 to 2030

	repetitive flooding problems						Billingsley, Prattville	
4	Purchase floodway or repetitive loss structure to eliminate potential for flood damage	Flood	Prattville, County, Autauga EMA, CARPDC	Local and Grants	High	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
4	Regularly inspect and maintain bridges and culverts	Flood	Municipalities, county	Local and Grants	High	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Develop a stream corridor restoration plan	Flood	Municipalities, county	Local and Grants	Medium	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Develop program for debris removal and vegetation management along selected streams	Flood	Municipalities, county	Local and Grants	Medium	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Create and maintain a database and map of all critical facilities in the County	All	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Inspect critical facilities regularly to ensure they comply with standard codes and can withstand the impacts of a disaster	All	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	Medium	Low	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Encourage, promote, and fund all critical facilities to be equipped or retrofitted for back-up energy	All	Municipalities, County, Autauga EMA	Local and Grants	High	Medium	Autauga County, Autaugaville, Billingsley, Prattville	2023- 2025
5	Assist municipalities and the county in development of community shelters	All	Municipalities, County, Autauga EMA	Local and Grants	High	Medium	Autauga County, Autaugaville, Billingsley, Prattville	2023- 2025
1	Assist and encourage private citizens and companies in developing safe rooms	Tornados	Municipalities, County, Autauga EMA	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	2023- 2025

1	Encourage public and private schools to re-evaluate structure and re-enforce as required	Tornadoes	Municipalities, County, Autauga EMA	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Offer technical assistance to municipalities in developing, addressing, and enforcing standards for development in floodplain, hillsides, and subdivision in regards to design and environmental	Floods and landslides	CARPDC	Local	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
3	Develop storm water management plans and regulations for those watersheds in the county that do not currently have a plan	Thunderstorms and flood	CARPDC, Municipalities	Local and Grants	High	High	Autauga County, Autaugaville, Billingsley, Prattville	2021-2030
1	Acquire easements or create development buffers in hazard prone areas, specifically 100 year floodplain	Flood	Municipalities	Local and Grants	Low	Low	Autauga County, Autaugaville, Billingsley, Prattville	2021-2030 Post-disaster
3	Promote open spaces preservation	Flood	CARPDC, Autauga EMA, Municipalities	Local and Grants	Medium	High	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2021-2025
1	Require special use permits for hazard prone areas	Flood	County, Municipalities	Local	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Review planned infrastructure to ensure that it will be developed outside of hazard prone areas	Flood	CARPDC, Municipalities, County	Local	High	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Encourage and assist communities to participate in the	Flood	Autauga EMA, CARPDC	Local and Grants	Medium	High	Autauga County, Autaugaville,	Continuous 2021- 2025

	National Flood Insurance Program (NFIP) Community Rating System (CRS)						Billingsley, Prattville	
1	Develop evacuation routes and an evacuation plan to be used in the event of a disaster	All	Municipalities, Autauga EMA	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
1	Encourage departments responsible for data relating to parcels, centerlines, buildings, addresses, hydrology and hazards to develop and enforce data maintenance policies	Flood	Municipalities, County, Autauga EMA, CARPDC	Local and Grants	High	Low	Autauga County, Autaugaville, Billingsley, Prattville	**2021 - 2025**
1	Develop and maintain hazard occurrence database to record information on hazard such as date and time of occurrence, duration, amount of damage, number of injuries and/or deaths	All	Autauga EMA	Local and Grants	Medium	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**2021 - 2025**
1	Develop detailed database on parcels and buildings in and out of the 100 year floodplain, Data should include first flood elevations, number of stories, basement, value of structure, etc	Flood	Autauga EMA, CARPDC, Tax Assessment, Municipalities	Local and Grants	Low	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Work with FEMA to updated current NFIP floodplain maps and determine flood elevations for the County	Flood	Autauga EMA, CARPDC	Local and Grants	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**2021 - 2025**

6	Encourage the heads of each department or organization involved in emergency response, services, relief, or hazard mitigation to meet several times a year to discuss mitigation issues	All	Autauga EMA	Local	High	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Develop a clear chain of command that would be used in the event of a disaster	All	Autauga EMA	Local	Low	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Update emergency management communication systems	All	Autauga EMA	Local and Grants	High	Low	Autauga County, Autaugaville, Billingsley, Prattville	Continuous 2021- 2025
6	Develop informational workshops or programs on hazard mitigation and available funding for organization, departments, elected officials, and volunteers	All	Autauga EMA, CARPDC	Local and Grants	Medium	Medium	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
6	Disseminate information brochures for organization involved in emergency response, services, relief, or hazard mitigation	All	Autauga EMA	Local	Low	High	Autauga County, Autaugaville, Billingsley, Prattville	**Completed**
5	Replace EMA Facilities with a new buildings	All	Autauga EMA,	Local and Grants	Medium	Medium	Autauga County	2021- 2025

Table 5.5: Mitigation Action Strategies for Elmore County

Elmore County Mitigation Action Plan								
Goals	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority /Status	Benefit/Cost Score	Jurisdiction	Status/ Time Frame
1	Integrate the goals and action items from the 2020 Hazard Mitigation Plan into existing regulatory documents and programs, where appropriate. To possibility include: Use the mitigation plan to help the Elmore County and municipalities regarding land use planning, designed to protect life and property; work with jurisdiction and agencies to promote the usage that are more disaster-resistant: Building, tree ordinances, zoning to sub-division regulation.; Integrate the county's mitigation plan into current Capital Improvement Plans (CIP) to ensure that development does not encroach on known hazards areas.; Partner with other organization and governments agencies with similar goals; Involve private businesses throughout the municipalities and Elmore County in mitigation planning; maintain all generators for communication repeater sites and the jail.	All	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee	Local	Low	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025
1	Identify and pursue funding opportunities to develop and implement local and county mitigation activities. To possibility include: Continue to seek funding opportunities for municipal and county government, citizens, and businesses to be able to fund mitigation activist; Allocate county and/or municipal resources and assistance to	All	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee;	Local	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

	mitigation projects, when possible; Develop incentive for municipal and county government, citizens, and businesses to pursue hazard mitigation projects; Partner with other organizations and agencies in Elmore County to identify grant programs and foundations that may support mitigation actives							
1	Map and publicize location in Elmore County that have the highest incidence of high wind events and ensure proper notification of agencies charged with responding to those areas of the potential risk. To possibility include: Educate all pertinent agencies on the process of reporting storm data to the Elmore County EMA; data such as: wind & storm data; maps of the locations within Elmore County that are vulnerable to high winds: injuries, fatalities, property damages; require fire department notifications of new business application that appropriate fire plans have been developed; develop unifying organization to ensure communication and dissemination of all hazards mitigation information; develop partnership between utility providers and municipal/county public works agencies to document known hazards areas to identify public infrastructure and facilities subject to damages or closures during events.	Strong Wind	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee	Local and Grants	High	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	2025
1	Establish a formal role for the Elmore County hazard mitigation committee to develop a sustainable process for implementing, monitoring, and evaluating county-wide mitigation activities. To possibility include: Establish clear roles for participants,	All	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation	Local	Medium	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook,	Continuous and Ongoing 2020- 2025

	meeting regularly to pursue and evaluate implementation of mitigation strategies; Oversee implementation of the mitigation plan; Monitor hazard mitigation implementation by jurisdiction and participating organizations through annual surveys and other reporting methods; Develop updates for Natural Hazards Mitigation Plan based on new information; Conduct a full review of the Hazards Mitigation Plan every 5 years by evaluating mitigation successes, failures, and areas that were not addressed; Provide training for Committee members so they remain current on developing issues in the natural hazard loss reduction field.		Planning Committee				Prattville, Tallassee, and Wetumpka	
1	Identify and pursue opportunities to develop and implement local and county-wide wildfire prevention mitigation activities. To possibly include: encourage local zoning planning entities to work closely with landowners and/or developers who choose to build in the wild/urban interface to identify and mitigate conditions that cause wild/urban interface wildfire hazard such as: limited access for emergency equipment due to width and grade of roadways; inadequate water supplies and the spacing, consistency, and species of vegetation around structure; inadequate fuel breaks, or lack of defensible space; High flammable construction materials; building lots and subdivisions that are not in compliance with state and local land use and fire protection regulation; inadequate entry/escape routes; education of forest management, wildlife management and prescribed burning.	Wildfire	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee, local fire services agencies	local	Medium	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

4, 6	Encourage construction of individual and community safe rooms. To possibly include: coordinate with individuals, municipalities, communities and the county on the funding, management, installation, and granting of individual or community safe rooms; distribute information regarding individual and community safe rooms to the general public. Maintain a database of saferooms installed in the county whether through Hazard Mitigation Funding or not. Develop a mechanism to allow citizens to register their safe room so response agencies can check if a disaster has occurred in the area	All	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee	EMA Grants or Privately Funded	High	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous 2020 to 2022
1, 2,3	Recommend revision to regulations for development within the floodplain, where appropriate. To possibly include: Evaluate elevation requirement for new residential and non-residential structures in the unincorporated floodplain area; explore raising the base elevation requirement for new residential construction to two or three feet above base elevation or greater; identify opportunities to upgrade Federal Insurance Rate Map (F.I.R.Ms), and arrange for Cooperative Technical Partnership mapping upgrades for select areas.	Flood	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee	Local and Grants	High	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook Tallassee, Prattville, and Wetumpka	Continuous 2020 to 2022
1,2,3	Enhance data and mapping for floodplain information within Elmore County and identify and map flood-prone areas outside of designed floodplains. To possibly include: Apply for FEMA's cooperative technical partnership using the 2-foot contour interval floodplain mapping data acquired by Elmore County GIS; use inventory and mapping data to update	Flood	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee, Elmore County	Local and Grants	High	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous 2020 to 2023

	the flood-loss estimates for Elmore County; Encourage the development of floodplain maps for all local streams not currently mapped on Flood Insurance Rate Maps (F.I.R.Ms) or county maps, with special attention focused on mapping rural and unincorporated areas.		Floodplain manager					
3	Develop and implement programs to keep trees from impacting public infrastructure, affecting lives and property during natural hazard/high wind events. To possibly include: identify vegetation mitigation opportunities, especially around power lines in urban areas; encourage adoption of municipal ordinances regarding the planting of new vegetation-preventing planning near power lines and critical infrastructure that could be potentially impacted in the future; discourage the spread of invasive species.	Strong wind	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee, public works, ECHD and ALDOT	Local Municipalities and Grants	Medium	Low	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	2022 to 2025
3, 4	Support/encourage electrical utilities to use underground construction methods where possible to reduce power outages from natural, technological, and human-related (man-made) hazardous events. To possibility include: increase the use of underground utilities where possible	Strong wind	Elmore County EMA, Local Municipal Council, County Commission, Hazard Mitigation Planning Committee, public works, and utilities	Local and Grants	Medium	Low	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025
3, 1	Use technical knowledge of natural ecosystems and events to link natural resource management and land organization to mitigation activities and technical assistance. To possibly include: Review ordinances for opportunities to further enhance protective measures of natural systems and resources through mitigation from natural, technological, and human-related (man-made) hazards; pursue	All	Elmore County EMA, Local Municipal Council, County Commission	Local	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

	vegetation and restoration practices that assist in enhancing and restoring the natural and beneficial function of the watershed.							
3	Encourage implementation of wildlife mitigation activities in a manner consistent with the goals of promoting sustainable ecological management and community stability. To possibly include employ mechanical thinning and prescribed burning to abate the risk of catastrophic fire and restore the more natural regime of high frequency, low-intensity burns; clear trimmings, trees, brush, and other debris completely from sites when preforming routine maintained and landscaping to reduce fire risk.	Wildfire	Elmore County EMA, Local Municipal Council, County Commission, and Elmore County Fire Fighters' Association	Local	Low	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025
4	Develop inventories of at-risk buildings and infrastructure and prioritize mitigation projects. To possibility include: identify critical facilities at risk natural, technological, human-related (man-made) hazardous events; identify critical facilities and infrastructure that are vulnerable to power outages and establish priorities for obtaining the needed backup power generation equipment; continue to develop strategies to mitigate risks to critical facilities and infrastructure or to utilize alternate facilities should natural, technological, or human-related (man-made) hazards alternate facilities o the facilities the question; identify bridges at risk from all hazards.	All	Elmore County EMA, Local Municipal Council, County Commission, and Elmore County Fire Fighters' Association, and public private agencies	Local and grants	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	2020to 2022
4	Identify surface water drainage obstructions for all parts of Elmore County. To possibly include: map culverts in all areas of the county; prepare an inventory of culvert that	Flood	Elmore County EMA, Local Municipal Council, County Commission, and	Local and grants	moderate	moderate	Elmore County, Coosada, Deatsville, Eclectic,	Continuous and Ongoing 2020- 2025

	historically create flooding problems and target them for retrofitting; prepare an inventory of major urban drainage problems, and identify causes and potential mitigation actions for urban drainage problem areas.		Elmore, public works agencies				Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	
1,2,4	Encourage development and enforcement of wind-resistant building construction codes. To possibly include: evaluate current building codes, subdivision regulations and plan development to encourage the construction of individual and/or community safe room in houses, apartment complexes and mobile home parks; evaluate current building codes for efficacy in rotating structures from wind damage.	Strong Wind	Elmore County EMA, Local Municipal Council, County Commission,	Local	High	Low	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025
5	Develop better warning systems. To possibly include: coordinate with appropriate organization to evaluate the need for additional warning systems and enhancement to current warning system; coordinate with appropriate organization to evaluate the need for more river/stream gauges.	All	Elmore County EMA, Local Municipal Council, County Commission,	Local and Grants	High	Low	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025
5,6	Strengthen emergency services preparedness and response by linking emergency services with all-hazards mitigation programs including natural, technological, and human-related (man-made) hazards. To possibly include: Familiarize public officials of requirements regarding public assistance for disaster response; Continue to enhance the countywide emergency medical system; Continue maintenance of emergency transportation routes through communication among the municipal,	All	Elmore County EMA, Local Municipal Council, County Commission, Elmore County Fire Fighters' Association, public/private agencies	Local	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

	county and state departments of transportation or public works; Continue to enhance the Elmore County Emergency Operations Center; Continue to work with local organizations to establish community response teams; Continue to improve the damage reporting system from all local jurisdictions after hazardous events; Continue to improve relationships with local media outlets.; Identify opportunities for partnering with citizens, private contractors, and all jurisdictions to increase availability of equipment and manpower for efficiency of response efforts.; Develop a process to encourage private property owners to upgrade their bridges to support the weight of fire trucks and emergency vehicles. Educate on what the EOC is and how to utilize it to coordinate response to the disaster needs of our citizens and the response agencies and elected officials.							
5	Inventory alternative firefighting water supply sources and encourage the development of additional sources. To possibly include: Advocate for additional water distribution capabilities to be established and installation of additional hydrants for fire protection; Develop a protocol for fire jurisdictions and water districts to communicate all hydrant outages and water shortage information; Improve communication between state, county, and municipal public works agencies to work together to prioritize and identify strategies to deal with water supply problems; Continue to enhance the communications between public utility	Wildfire	Elmore County EMA, Local Municipal Council, County Commission, Elmore County Fire Fighters' Association, public/private agencies	Local and grants	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2022

	providers and emergency services providers to assure rapid response to natural, technological, and human-caused (man-made) hazardous events; continue strategy & bi monthly meeting with Elmore County Fire Association and Alabama Forestry Commission Forest Rangers.							
5	Enhance strategies for debris management events. To possibly include: Development of a Debris Management Plan for all local jurisdictions; Develop coordinated management strategies for clearing roads of fallen trees, and clearing debris from public property, prioritizing critical infrastructure; Identify debris staging, storage, reduction, and disposition sites and obtain required permits.	Strong Wind	Elmore County EMA, Local Municipal Council, County Commission, public/private agencies	Local	Low	high	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	2020- 2022
5	Enhance emergency services to increase the efficiency of wildfire response and recovery activities. To possibly include: Enhance the capability of the fire service resources to better and more efficiently respond to wildfires; Develop the capability to contact at-risk urban/wildland interface residents in all local jurisdictions in Elmore County in the event an evacuation is ordered; Inventory bridges on evacuation routes and assess the bridges for their ability to support fire apparatus ingress; encourage replacement of unstable bridges.	Wildfire	Elmore County EMA, Local Municipal Council, County Commission, Elmore County Fire Fighters' Association, public/private agencies	Local and grants	High	Low	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook Prattville, Tallassee, and Wetumpka	2020-2022
5	Educate agency personnel on federal cost-share and grant programs, mutual aid agreements, and other related programs so the full array of assistance available to local agencies is	Wildlife	Elmore County EMA, Local Municipal Council, County Commission,	Local	High	High	Elmore County, Coosada, Deatsville, Eclectic,	2020-2022

	understood. To possibly include: Investigate potential funding opportunities for individual mitigation projects; Develop, approve, and promote mutual agreements and partnerships to clarify roles and responsibilities and to provide for fire mitigation activities and suppression preparedness; Inform the local jurisdictions of various grant programs and other opportunities to assist in mitigating wildfires ; continue strategy & bi monthly meeting with Elmore County Fire Association and Alabama Forestry Commission Forest Rangers.		Elmore County Fire Fighters' Association, public/private agencies				Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	
6	Develop, enhance, and implement education programs aimed at mitigating all-hazards—natural, technological, and human-related (man-made) hazards, reducing risks to citizens, public agencies, private property owners, businesses, and schools on a county-wide basis. To possibly include: Make the Elmore County All-Hazards Mitigation Plan available to the public by publishing the plan electronically on municipal, county and emergency management websites; Enhance capabilities by creating a website that includes information specific to Elmore County residents, including site-specific hazards information, building codes information, insurance needed for residents, and educational information on damage prevention; Continue to distribute information about natural, technological, and human-related (manmade) hazards related to insurance for property owners in areas identified to be at-risk through hazard mapping; Develop and complete a baseline survey	All	Hazard Mitigation Planning Committee (HMPC)/Multi-Agency Coordination (MAC) Group, Local Municipal Councils, the County Commission, the Elmore County Emergency Management Agency, Elmore County Fire Fighters' Association, all area schools, and other public and private agencies	Local, Municipalities, EMA, Grants	High	Moderate	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

	to gather perceptions of private citizens and the business community regarding natural, technological, and human-related (man-made) hazards risks and identify mitigation needs. Repeat the survey in five years to monitor successes and failures of hazard mitigation programs; Continue to encourage individual and family preparedness through public education projects such as all-hazards preparedness and safety fairs; Develop outreach programs to business organizations that must prepare for natural, technological, and human-related (man-made) hazardous events; Develop adult and child educational programs to be used by local radio and cable stations; Distribute information regarding warning systems to the general public. Use local radio and cable stations as a conduit for advertising public forums; Develop curriculum for school programs and adult education on reducing risk and preventing loss from natural, technological, and human-related (man-made) hazards; Conduct all-hazards awareness programs in schools and community centers and for civic organizations, including natural, technological, and human-related (man-made) hazards; Conduct workshops for public and private sector organizations to raise awareness of mitigation activities and programs; Develop outreach materials for mitigation, preparedness, response and recovery; Designed and Launched Elmore County EMA APP for citizens to refer to for emergency public information and emergency preparedness planning and training.							

6	Enhance outreach and education programs aimed at mitigating wildfire (includes grassfire) hazards and reducing or preventing the exposure of citizens, public agencies, private property owners, and businesses to natural, technological, and human-related (man-made) hazards. To possibly include: Encourage residents to have fire plans and practice evacuation routes; Encourage fire inspections in residential homes by fire departments to increase awareness among homeowners and potential first responders; Encourage the public to evaluate access routes to rural homes for fire fighting vehicles and to develop passable routes if they do not exist; Visit urban interface neighborhoods and rural areas and conduct education and outreach activities; Continue to enhance the relationships between the first responder community at the local level and the Alabama Forestry Commission; Establish neighborhood "drive-through" activities that pinpoint site-specific mitigation activities by fire service personnel to give property owners personal suggestions and assistance; Perform public outreach and information activities at Elmore County fire stations by creating "Wildfire Awareness Week" activities. Fire stations can hold open houses and allow the public to visit, see the equipment, and discuss wildfire mitigation with the station crews.	Wildfire	Hazard Mitigation Planning Committee (HMPC)/Multi-Agency Coordination (MAC) Group, Local Municipal Councils, the County Commission, the Elmore County Emergency Management Agency and the Elmore County Fire Fighters' Association	Local, Municipalities, EMA, Grants	High	High	Elmore County, Coosada, Deatsville, Eclectic, Elmore, Millbrook, Prattville, Tallassee, and Wetumpka	Continuous and Ongoing 2020- 2025

Table 5.6: Mitigation Action Strategies for Montgomery County

Montgomery County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority /Status	Benefit/Cost Score	Jurisdiction	Status/ Time Frame
1	Integrate FEMA HAZUS-MH application for hazard loss estimates within local GIS programs. Maintain up.to-date data within GIS to apply the full loss estimation capabilities of HAZUS	All	MCGIS, MCCEMA, Montgomery City Engineer, Birmingham NWS	HMGP, Local	High	Moderate	Montgomery City/ County	New 2025
5	Request the easement to install community storm shelters within sizeable mobile home parks and subdivision No action has been taken thus far. Officials are still discussing this action.	Hurricane, Tornado, Severe Thunderstorm	City/County Government	Local, CARPDEC (help find possible grant dollars)	Low	Moderate	Montgomery City, Montgomery County , and Pike Road	New 2023 This action is in beginning stages due to staff turnover in local office & government officials.
5	Promote the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Thunderstorm, Hail, Tornado, Hail, High Winds, Strong Winds	City/County Government	Local, CARPDC (help find possible grant dollars)	Medium	Low	Montgomery City/ County	New 2023
6	Identify other environment awareness events to integrate public information on hazard exposure and	All	City/County Engineering	Local, CARPDC (help find possible	Low	High	Montgomery County, City of Montgomery, and Town of Pike Road	New 2024 Is in the beginning

	protection measures. The EMA is working with local Fire Departments on informing the public on hazard exposures and protective measures.			grant dollars)				stages due to staff turnover.
1	Support the establishment of statewide technical assistance program through the Alabama Cooperative Extension System to develop Best Management Practices (BMP) guidelines for channel and drainage system maintenance.	Floods, Flash Flooding	City/County Engineering	Local	Medium	Moderate	ACES, City of Montgomery, Montgomery County, Engineering Mont. & Pike Road	New 2023 This action is in the implementation stage.
5	Install freestanding public safe rooms in vulnerable locations. Install individual safe rooms and/or community shelters at critical facilities and existing schools/ educational facilities. Only individual safe rooms have been constructed thus far; however, the City-County wishes to keep this mitigation action in the plan for the future while looking for additional funding.	Thunderstorm, Hail, Tornado, High Winds, and Strong Wind	City/County, EMA	HMGP	High	Low	Montgomery City, Montgomery County, Pike Road	New 2024 Action is ongoing while looking for additional funding.

2	Create a plan that addresses the major flooding ad washing out of Dozier Road, as well as erosion of the river bank.	Flood, and Flash Flood	EMA, Montgomery County Engineering	HMGP, Local, CARPDC (help find possible grant dollars)	High	Moderate	Montgomery County	New 2023
1	Study the feasibility of a regional greenways demonstration project	Floods/Flash Flooding	CARPDC, City Planning	LOCAL	High	Moderate	Montgomery County, City of Montgomery, and Pike Road	**Deleted** No action taken thus far due to personnel availability and funding
6	Continue the annual Severe Weather Awareness Day.	All	EMA, NWS	Local	High	High	Montgomery County, City of Montgomery, and Pike Road	**Deleted** Will keep the Severe Weather Week done by NWS, if go to one day could cause some confusion with public.
6	Support the Alabama Skywarn Foundation efforts to distribute weather radios to low-income households, especially in rural areas outside of siren coverage areas.	All	AEMA, EMA	HMGP, PDM	High	High	Montgomery County, City of Montgomery, and Pike Road	**Deleted** No funding for this action at local level
5	Purchase/update emergency generators for post-disaster/ emergency mitigation and conduct routine tests for critical	All	EMA, General Services	HMGP, ADECA	High	Moderate	Montgomery County, City of Montgomery, and Pike Road	**Deleted** No generators have been purchased

	facilities to ensure critical facilities and shelters continue operations. This includes a 100KW generator for the City Hall on Vaughn Road and the Town Hall on Pike Road.							thus far due to lack of funds
5	Support the installation of a tornado detection system at the NWS using sonic detection technology developed by the NOAA Research Lab.	All	NWS, EMA	HMGP, PDM	High	Moderate	Montgomery County, City of Montgomery, and Pike Road	**Deleted** No action has been taken on this item during the past five years due to lack of funding and staff turnover.
1	Continue to provide structural projects such as wind retrofits, drainage improvements, reservoirs and retention or detention basins which store excess waters, levees and floodwalls which place barriers between the source of flooding and damage prone properties, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or carry it faster, diversions that	Flooding	Engineering Departments	HMGP, DOT, Local	High	Moderate	Montgomery County, City of Montgomery, and Pike Road	**Deleted**

	redirect high flows to another location and channel maintenance: keeping streams, ditches, and storage basins clear. This is to include the following projects: Highway 110 at Timberlane; Fox Chase Drive; Barnes Road, and Meriwether Road.							
1	Maintain current Flood Insurance Rate Maps in digital format.	Flooding	MPD, MCGIS, CARPDC, City Planner and Engineer	Local	High	Low	Montgomery County, City of Montgomery, and Pike Road	**Completed**
1	Complete a comprehensive inventory of critical facilities within all jurisdictions and maintain in GIS.	All	MPD, MCGIS, EMA, City Planning – General Services	HMGP, Local	High	Low	Montgomery County, City of Montgomery, and Pike Road	**Completed**
1	Identify persons eligible to become a local flood plain manager and train local flood plain managers through programs offered through the State Flood Plain Manager and FEMA's training center in Emmitsburg, Maryland. Patrick Dunson is the local flood plain manager	Flooding	Flood Plain Manager	FPM	High	Low	Montgomery County	**Completed**
6	Maintain a library of technical assistance and guidance materials to	Flooding	Flood Plain Manager	Local	High	Low	Montgomery County, City of Montgomery	**Completed**

	support the local flood plain manager. Materials are maintained at the Montgomery City-County EMA						Montgomery County, City of Montgomery	
6	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	All	EMA, Montgomery City Engineer	Local	High	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
1	Arrange with the Multiple Listing Service (MLS) to require flood plain location disclosure as a condition for each real estate listing.	Flood	EMA, Alabama Association of Realtors	Local	Low	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
6	Obtain free publications from FEMA NWS, USGS, and other federal and state agencies and deposit these materials with local libraries. City/County Managers decided to keep these materials at the EMA. They are available for public use.	All	EMA	Local	High	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
6	Maintain local library repositories with the latest available publications. City/County Managers decided to keep	All	EMA	Local	High	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**

	these materials at the EMA. They are available for public use.							
6	Distribute hazard mitigation brochures to area schools for distribution to students. City/County Managers decided to keep these materials at the EMA. They are available for public use.	All	EMA	Local	High	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
1	Enact and enforce dumping regulations.	Flood	Engineering Departments, Police Department, Sheriff Department, Local Government	Local	High	Moderate	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
3	Enact and enforce erosion and sedimentation control regulations.	Flood	Engineering Departments	Local	High	Moderate	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
5	Purchase, install, and test outdoor warning siren systems.	All	EMA	HMGP, ADECA	High	Low	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
6	Promote the use of weather radios in households and businesses.	All	EMA	Local	High	High	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**
4	Prepare and implement standard operating procedures for drainage system maintenance.	Flood	MCED, MED, ACES	HMGP, ACES	High	Moderate	Montgomery County, City of Montgomery, Town of Pike Road	**Completed**

Section 6 – Plan Maintenance Process

This section of the plan addresses requirements of Interim Final Rule (IFR) Section 201.6(C) (4).
Section Contents

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process
6.2 Hazard Mitigation Plan Incorporation
6.3 Public Awareness/Participation

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process

The Lee-Russell Council of Governments (LRCOG) will facilitate plan maintenance activities with assistance from the AEMA Division D Regional Coordinator, local EMA directors, and other regional planning agencies as their county plans are phased in through the five-year framework of the Hazard Mitigation Plan. Local EMA directors will serve as a liaison to participating jurisdictions with their respective counties through their local processes, such as Local Emergency Planning Committee (LEPC) or similar stakeholder groups. The plan monitoring review process shall be chaired by the elected AAEM representative (currently Ernie --, Autauga County EMA Director), from AEMA Division D. Election of an AAEM representative occurs every summer on an annual basis. Periodic review and revision of the Hazard Mitigation Plan are important to ensure the plan's currency and compliance with applicable regulations and to assess the progress of local mitigation actions. Review and revision of the Hazard Mitigation Plan may occur through the following two procedures:

Annual Review Process

On at least an annual basis, each participating county EMA official shall facilitate a meeting in their respective county and include local jurisdictions and other stakeholders, such as the Local Emergency Planning Committee. The exact meeting process in each participating county will be slightly different. At a minimum, the scope of the annual county-level plan review meeting will be to review and evaluate completed mitigation actions for effectiveness, review status of high-priority or ongoing mitigation actions, discuss possible changes to hazard vulnerability or other elements of the risk assessment, assess any major land-use changes, and discuss any other relevant issue pertaining to the Hazard Mitigation Plan. The general public will be invited to attend this meeting through public outreach, as further described in Section 6.3 below, and encouraged to provide their input into the annual review.

Subsequently, area regional meeting between LRCOG, local EMA officials, AEMA Division D Coordinator, and regional stakeholders will be held to review information collected at the county-level meetings and revise the plan. It is viewed appropriately by the local EMA directors that this meeting shall normally coincide with and AEMA Division D quarterly meeting. Any major revision made to the Hazard Mitigation Plan that affects the region as a whole will be distributed to all jurisdictions for adoption in a public session. Otherwise, any project added to a specific Jurisdictional Mitigation Action Plan will be adopted by that specific jurisdiction in a public session.

Emergency Review Process

In certain instances, such as a disaster occurrence impacting a participation jurisdiction, the full Annual Review Process may not be timely enough to address unforeseen issues created by a particular event in these situations, a county EMA official may facilitate a county-level plan review meeting, similar to the process described above in the Annual Review Process, with the requisite public outreach. Once this meeting is completed, a local amendment may be adopted by a participating jurisdiction that only pertains to the revision of their specific Jurisdictional Mitigation Action Plan in a public session. After any local amendment, the local county EMA official shall submit documentation of the local amendment to the Chair of the plan monitoring and review process.

Five-Year Plan Update

Before the five-year expiration of the Hazard Mitigation Plan, a thorough review, beginning approximately 18 months prior to plan expiration, shall be held to determine any significant changes in the AEMA Division D planning area that may affect the region's vulnerability to hazard impacts, and an evaluation of the mitigation strategy and jurisdictional mitigation action plans developed as part of this process. The remaining AEMA Division D counties will be included in this Regional Plan in a phased process with the goal of having the initial full AEMA Division D plan completed by 2025. This plan update shall incorporate any changes to federal or state regulation that may affect the Hazard Mitigation Plan contents. The plan update process will follow a local-driven, public process, similar to the plan review processes outlined above.

Initial steps will include:

- Attend City Council, Town Commission, and County Commission meetings to provide updates to the jurisdictions on the five-year update. Request their participation in the update process
- Identify and contact key personnel to be a part of the Stakeholder and Technical Advisory Committee
- Conduct effective public engagement strategies
- Schedule committee and public meetings

The five-year update will include:

- Document the planning process including who was involved and their role in the process
- Review the hazard mitigation plan and regulations
- Review current plans, policies, studies, ordinances, and development trends
- Detail the hazards that could potentially impact all jurisdictions
- Assess and assign risk value for all hazards
- Identify all assets and critical facilities in the region
- Estimate the potential losses
- Construct strategies, objectives, actions, and goals to address each hazard
- Review participation in the National Flood Insurance Program
- Continue to maintain and update the document

In addition, multiple state, regional, and local partners will be consulted to provide data or comments in plan formation. These entities include the U.S. Army Corps of Engineers, Fort Benning, Electrical Cooperatives, Alabama Forestry Commission, Geological Survey of Alabama (GSA), Alabama Department of Public Health (ADPH), Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), Alabama Historical Commission (AHC), neighboring county EMA offices, regional academic providers, and private sector entities. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval.

6.2 Hazard Mitigation Plan Incorporation

Once Phase II Hazard Mitigation Plan is "approvable upon adoption" by FEMA, each jurisdiction shall proceed with adoption procedures. Each proposed action listed in the jurisdictional mitigation action plans is assigned to one or multiple lead agencies or departments in order to assign responsibility and accountability of action implementation to specific sources. In addition to the assigned local agency or department, each mitigation action plan also has a priority or status assigned that roughly coincides with an implementation timeline. The local jurisdictions in AEMA Division D will work to seek to provide operational funding to actions that are ongoing and seek outside funding for capital projects that are outside the realm of normal funding during both pre-disaster and post-disaster periods. In the past, all the jurisdictions in Autauga, Elmore, and Montgomery counties have not incorporated the Hazard Mitigation Plan into existing plans, policies, or ordinances.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning organization will provide technical assistance for incorporation, upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan, and will not introduce additional hazard vulnerabilities to the local area and region at-large. Local EMA directors will incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans,

including each county's Emergency Operation Plan and county THIRA. During county-level plan reviews, participation communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The Hazard Mitigation Plan will also be provided to other affected regional planning agencies for consistency with regional planning and economic development activities, as well as local economic development councils.

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

- Town of Eclectic 2016 Comprehensive Plan
- Town of Eclectic Zoning Regulations
- Elmore County Subdivision and Land Development Regulations
- City of Millbrook Zoning Ordinance
- City of Millbrook Subdivision Regulation
- City of Montgomery 2040 Comprehensive Plan
- City of Montgomery SmartCode 2007
- City of Montgomery 2018 Strategic Development Plan
- City of Montgomery 2018 Joint Land Use Plan
- City of Montgomery Subdivision Regulations
- City of Montgomery Zoning Ordinances
- Town of Pike Road Comprehensive Plan
- Town of Pike Road 2014 Constriction and Design Standards Manual
- Town of Pike Road 2017 Zoning Ordinances
- Town of Pike Road SmartCode Version 9.2
- Town of Pike Road Conventional Zoning Ordinances
- Town of Pike Road Subdivision Regulations
- City of Prattville Zoning Ordinance
- City of Prattville 2010 Comprehensive Plan
- City of Prattville Zoning Regulations
- City of Tallassee 2040 Comprehensive Plan
- City of Tallassee of Zoning Ordinances
- City of Wetumpka Zoning Ordinances
- City of Wetumpka Subdivision Regulations

The following are the requirements each jurisdiction in Autauga, Elmore, and Montgomery counties must meet in order to incorporate this hazard mitigation plan into other plans and ordinances.

The Town of Pike Road's planning process for the Town's comprehensive plan consists of reviewing and assessing community needs. The town council may adopt, by resolution, guidelines for conducting public hearings and for receiving input on matters of city planning business and development. It is the Council's duty to approve the planning commission's comprehensive plan. Public hearings shall be conducted for approval of any changes to the plan. An annual report should be submitted to the Town Council and Mayor.

In the City of Montgomery, the Planning Commission and Planning Director and staff, shall revise and update the Comprehensive Long Term Plan as justified by changing circumstances. The Board of Zoning Adjustment shall hear and decide appeals from a decision of the Planning Director made in the performance of his duties. Improvements constructed by the Planning Commission shall be constructed in accordance with approved plans and specifications, and testing guidelines, approved by the city engineer. Along with contacting key personnel to be a part of the Stakeholder and Technical Advisory Committee, the city must conduct effective public engagement

strategies such as schedule committee meetings and hold public hearings. The city council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business.

In the City of Prattville, Alabama it is the Planning Commissions responsibility to continue a positive working relationship with the City of Prattville, the Chamber of Commerce, City Council and Economic Developer. It is their duty to adopt and implement a long range strategic plan. The City Council is to adopt an ordinance requiring decision makers to compare impact of actions with an adopted comprehensive plan. The City Council and Planning Commission shall develop, adopt and enforce a stringent nuisance of ordinance to eliminate old and outdated plans. The City Council and Planning Commission encourage community involvement through public hearings.

The City of Wetumpka's planning process for the city's master plan It shall be the function and duty of the commission, as authorized and empowered by Alabama law, to make and adopt a master plan for the physical development of the said City of Wetumpka, Alabama, including any areas outside its boundaries which, in the commission's judgement, bear relation to the planning of the city. Such plan, with the accompanying maps, plats, charts and descriptive matter, shall show the commission's recommendations for the development of such territory, including, among other things, the general location, character, and extent of streets, viaducts, subways, bridges, waterways, waterfronts, boulevards, parkways, playgrounds, squares, parks, aviation fields, and other public ways, grounds, and open spaces; the general location of public buildings and other public property; general location and extent of public utilities and terminals, whether publicly- or privately-owned or operated, for water, light, transportation, sanitation, communication, power, and other purposes; also the removal, relocation, widening, narrowing, vacating, abandonment, change of use or extension of any of the foregoing ways, grounds, open spaces, buildings, property, utilities, terminals; as well as a zoning plan for the control of the height, area, bulk, location, and use of the buildings and premises. As the work of making the whole master plan progresses, said commission may from time to time adopt and publish a part or parts thereof, any such part to cover one or more major sections or divisions of the city, or one or more of the matters mentioned in subsection or other functional matters to be included in the said plan.

The City of Millbrook's planning commission is authorized and empowered to make and adopt a master plan for the physical development of the city including any areas outside its boundaries which, in the commission's judgment, bear relation to the planning of the city. Such plan, with the accompanying maps, plats, charts and descriptive matter, shall show the commission's recommendations for the development of such territory, including, among other things, the general location, character, and extent of streets, viaducts, subways, bridges, waterways, waterfronts, boulevards, parkways, playgrounds, squares, parks, aviation fields, and other public ways, grounds and open spaces, the general location of public buildings and other public property, the general location and extent of public utilities and terminals, whether publicly or privately owned or operated, for water, light, transportation, sanitation, communication, power, and other purposes; also the removal, relocation, widening, narrowing, vacating, abandonment, change of use or extension of any of the foregoing ways, grounds, or open spaces or extensions of any of the foregoing ways, grounds, open spaces, buildings, property, utilities, or terminals; as well as a zoning plan for the control of the height, area, bulk, location, and use of the buildings and premises.

The Town of Eclectic follows the Code of Alabama under Title 11 Counties and Municipal Corporations Chapter 52 Planning, Zoning and Subdivisions empowers any municipality to create a planning commission. Said planning commission is authorized to make and adopt a master or comprehensive plan for the physical development of the municipality and from time to time may amend or add to the plan. A comprehensive plan's purpose, including any subsequent amendments or updates, is to guide the comprehensive development of the municipality which will, based on its current and future needs, best promote the health, safety and general welfare of the municipality. The

plan should be reviewed periodically, at least every 5 years, for accuracy and concurrence with the current physical and economic environment. Items that have been accomplished should be removed and additional items should be added at this time. An annual report should be submitted by the Planning Commission to the Town Council and Mayor on the implementation status of the plan. Implementation of the Eclectic Comprehensive Plan should be built upon a public/private partnership with the continual support of the Town and respective political leaders who are working for the good of the community as a whole. The Town should use efforts by private sector entities as leverage to aid in implementation as much as possible. Financing and funding of Town initiatives should use a combination of public funds, loans, grants, and incentive programs to reach desired goals. There are several regulatory tools that should be used in conjunction to aid in implementation of the comprehensive plan. These include zoning regulations, subdivision regulations, building regulations, historic district regulations, and overlay or corridor regulations. These regulations are to be created, approved, and enforced by the Eclectic Planning commission, which is the Town's governing arm for planning decisions.

The Town of Deatsville has developed a comprehensive plan. The planning staff, city officials, and local residents work together to create a comprehensive plan, and update the plan as needed. The commission is hereby authorized and empowered to exercise all powers and do all things authorized by the laws of this state as it may deem necessary for its work. The Town of Deatsville will execute public involvement strategies such as schedule committee meetings and hold public hearings. The town council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business. It is the Council's duty to approve the planning commission's comprehensive plan.

The City of Tallassee's comprehensive plan is a policy document used by the Planning Commission and the City Council to guide decisions about such issues as rezoning proposals, the location of new transportation infrastructure, investments in water and sewer improvements, and the development of parks. The Plan is implemented by the City through the Zoning Ordinances and Subdivision Regulations, the City Code, the Capital Improvement Program, and the Annual Budget.

The Town of Autaugaville has developed a comprehensive plan. The planning staff, city officials, and local residents work together to create a comprehensive plan, and update the plan as needed. The town council is hereby authorized and empowered to exercise all powers and do all things authorized by the laws of this state as it may deem necessary for its work. The Town of Autaugaville will execute public involvement strategies such as schedule committee meetings and hold public hearings. The town council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business. It is the Council's duty to approve the planning commission's comprehensive plan.

The Town of Elmore's comprehensive plan's purpose, including any subsequent amendments is to guide the comprehensive development of the municipality which will, based on its current and future needs, best promote the health, safety and general welfare of the municipality. The plan should be reviewed periodically, for accuracy and concurrence with the current physical and economic environment. An annual report should be submitted to the Town Council and Mayor on the implementation status of the plan.

The Town of Coosada's planning process for the Town's Comprehensive Community Master Plan is a collection and review of information, previous plans, studies, and field surveys of the City, in order to provide an assessment of the community relative to the plan. Individual meetings or discussions are conducted to better understand future needs. The Town of Coosada will execute public involvement strategies such as schedule committee meetings and hold public hearings. The town council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business. It is the Council's duty to approve the planning commission's comprehensive plan.

The Town of Billingsley has developed a comprehensive plan in accordance with Autauga County. The city officials and local residents work together to create a comprehensive plan, and update the plan as needed. The town council is hereby authorized and empowered to exercise all powers and do all things authorized by the laws of this state as it may deem necessary for its work. The Town of Billingsley will execute public involvement strategies such as schedule committee meetings and hold public hearings. The town council may adopt, by resolution, procedures for conducting public hearings and for receiving public input on agenda matters of city planning business.

Autauga, Elmore, and Montgomery counties planning process has included public involvement, a county assessment, drafting of a planning concept, vision, goals and recommendations, review and approval by the and County Commission in order to have the hazard mitigation incorporated.

6.3 Public Awareness/Participation

A critical part of maintaining an effective and relevant natural hazard mitigation plan is ongoing public review and comment. Public participation in the hazard mitigation planning process, including monitoring and review of the existing plan, and development and adoption of future plans, is a very important component. Efforts will continue to involve local, state and government agencies, businesses, academia and the general public in the ongoing mitigation planning process to the maximum extent possible.

As described in the Monitoring, Evaluation, and Update process, any significant changes, amendments, or updates to the Hazard Mitigation Plan shall be discussed in public meetings prior to any adoption procedures. Public meetings will be held when any plan modification or major revisions to the plan are required or when otherwise deemed necessary, and will be adopted during a public session. The public will be informed prior to the public hearings and other Hazard Mitigation related meetings through a variety of media sources, including but not limited to: local newspaper advertisements and notices, radio advertising, postings at high traffic community areas, booths at local Severe Weather Expo events, social media, websites, etc. It is important to ensure that the public has the opportunity to be involved with all updates and changes to the hazard mitigation plan as well as the opportunity to voice any comments, questions, and concerns. Consequently, LRCOG and local EMA Directors are dedicated to the direct involvement of its citizens in providing feedback and comments on the plan throughout the five-year implementation cycle. LRCOG and local EMA offices will keep public hard copies and provide hard copies of the Hazard Mitigation Plan to each County Commission office, seats of government in each municipality, and other appropriate public locations, i.e. library, senior citizens center. The plan will also be made available on appropriate websites such as County EMA and LRCOG. Press releases will be published via various media, such as local newspaper advertisements, radio advertising, postings at high traffic community areas, social media, and websites, to inform the general public and stakeholders that the Hazard Mitigation Plan is available for review, where to find the Hazard Mitigation Plan, and how the public can play a role in its creation and future revision. The public hearing will be held to present the final plan to the public before each jurisdiction adopts the plan. The public can voice additional comments and concerns outside of public hearings by emailing or call the staff at LRCOG Planning and Economic department until a better mechanism for recording the public input is created. In the future, workshops and/or lunch and learns will be hosted as a way to continue to engage and educate the public about natural hazard events. These types of events will be used to maintain public engagement, build a relationship with the public, collect information from the public, and inform the public about how to be involved in the next update.

Section 7 – Appendix

This section of the plan is dedicated to the Appendix.

Section Contents

7.1 Appendix A: Survey
7.2 Appendix B: Agendas and Documents
7.3 Appendix C: Briefs, Advertisement, Sign-in Sheets, and Newspapers
7.4 Appendix D: Hazard Events Tables

7.1 Appendix A: Surveys

Community Survey Questions

LEE-RUSSELL COUNCIL OF GOVERNMENTS

2020 Hazard Mitigation Plan Update

2020 Hazard Mitigation Plan Update for Autauga, Elmore, and Montgomery Counties.

The survey will take less than 2 minutes to complete. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

* 1. Do you live or work in one of the following counties: Autauga, Elmore, or Montgomery?

- Yes
- No

* 2. Please type in your zip code. If you work in Autauga, Elmore, or Montgomery County please type in your work zip code.

* 3. Do you live in a flood plain?

- Yes
- No
- I do not know

* 4. Do you have Nation Flood Insurance (NFIP)?

- Yes
- No
- I do not know

* 5. How prepared do you feel for natural hazard events such as tornadoes, floods, or severe storms?

- Very Prepared
- Prepared
- Neither Prepared nor Prepared
- Not Prepared
- Very Unprepared

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* 6. Please Select all that apply. Which resource makes you feel more prepared for a national hazard event?

- [ ] Educational Brochures
- [ ] Community Classes on Natural Hazards
- [ ] Access to Safe Rooms
- [ ] Relocating to a Safer Location
- [ ] Access to Community Shelters
- [ ] Readiness Kit
- [ ] Other (please specify)

* 7. Please select all that apply. Which of the following information sources are the most effective at warning you of approaching storms or natural hazards in your community?

- [ ] Cell Phone Alerts
- [ ] Outdoors Sirens
- [ ] Facebook Posts
- [ ] Telephone
- [ ] Websites
- [ ] Twitter Posts
- [ ] Newspaper
- [ ] Weather Alert Radio
- [ ] Radio
- [ ] TV Coverage
- [ ] Other (please specify)

* 8. Please indicate your personal level of concern about the effects of each natural hazard's potential impact on life and property in your county.

Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	○	○	○	○	○	○
Drought	○	○	○	○	○	○
Earthquakes	○	○	○	○	○	○
Extreme Temperature (Heat or Cold)	○	○	○	○	○	○
Flooding/ Flash Flooding	○	○	○	○	○	○
Hail	○	○	○	○	○	○
High Winds/ Thunderstorms	○	○	○	○	○	○
Landslides	○	○	○	○	○	○
Lightning	○	○	○	○	○	○
Sinkholes/ Land Subsidence	○	○	○	○	○	○
Tropical Depression/ Tropical Storm/ Hurricane	○	○	○	○	○	○
Wildfire	○	○	○	○	○	○
Tornado	○	○	○	○	○	○
Winter Storm	○	○	○	○	○	○

* 9. Do you have experience dealing with the effects of each natural hazard's potential impact on life and/or property in your county.

	Yes	No
Dam Faulire	◯	◯
Drought	◯	◯
Earthquakes	◯	◯
Extreme Temperature (Heat or Cold)	◯	◯
Flooding/ Flash Flooding	◯	◯
Hail	◯	◯
High Winds/ Thunderstorms	◯	◯
Landslides	◯	◯
Lightning	◯	◯
Sinkholes/ Land Subsidence	◯	◯
Tropical Depression/ Tropical Storm/ Hurricane	◯	◯
Wildfire	◯	◯
Tornado	◯	◯
Winter Storm	◯	◯

* 10. Please identify your age range.

- ◯ 18-25
- ◯ 26-35
- ◯ 36-45
- ◯ 46-55
- ◯ 56-65
- ◯ 66-75
- ◯ 75 and Older

* 11. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- Prefer Not to Answer
- White / Caucasian
- Multiple ethnicity / Other (please specify)

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Stakeholder Survey Questions

Autauga County Survey

LEE-RUSSELL COUNCIL OF GOVERNMENTS

Elmore County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Elmore County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Elmore County?

7. Any local information regrading landslides?

8. What is the probability of a dam failure?

- Very Low
- Low
- Medium
- High

9. What would be in the impact of dam failure?

- Minor
- Limited
- Critical
- Catastrophic

10. What is the probability of a drought?

- Very Low
- Low
- Medium
- High

11. What would be in the impact of a drought?

- Minor
- Limited
- Critical
- Catastrophic

12. What is the probability of an earthquake?

- Very Low
- Low
- Medium
- High

13. What would be in the impact of an earthquake?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

15. What would be in the impact of extreme temperature (hot or cold)?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

16. What is the probability of flooding?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

17. What would be in the impact of flooding?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

18. What is the probability of hail?

- Very Low
- Low
- Medium
- High

19. What would be in the impact of hail?

- Minor
- Limited
- Critical
- Catastrophic

20. What is the probability of high winds/ thunderstorms?

- Very Low
- Low
- Medium
- High

21. What would be in the impact of high winds/ thunderstorm?

- Minor
- Limited
- Critical
- Catastrophic

22. What is the probability of landslides?

- Very Low
- Low
- Medium
- High

23. What would be in the impact of landslides?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

24. What is the probability of lightning?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

25. What would be in the impact of lightning?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

26. What is the probability of sinkholes?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

27. What would be in the impact of sink holes?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

30. What is the probability of a tornado?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

31. What would be in the impact of a tornado?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

32. What is the probability of a wildfire?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

34. What is the probability of a winter storm?

- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

Elmore County Survey

LEE-RUSSELL COUNCIL OF GOVERNMENTS

Elmore County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Elmore County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Elmore County?

7. Any local information regrading landslides?

8. What is the probability of a dam failure?

- Very Low
- Low
- Medium
- High

9. What would be in the impact of dam failure?

- Minor
- Limited
- Critical
- Catastrophic

10. What is the probability of a drought?

- Very Low
- Low
- Medium
- High

11. What would be in the impact of a drought?

- Minor
- Limited
- Critical
- Catastrophic

12. What is the probability of an earthquake?

- Very Low
- Low
- Medium
- High

13. What would be in the impact of an earthquake?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

15. What would be in the impact of extreme temperature (hot or cold)?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

16. What is the probability of flooding?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

17. What would be in the impact of flooding?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

18. What is the probability of hail?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

19. What would be in the impact of hail?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

20. What is the probability of high winds/ thunderstorms?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

21. What would be in the impact of high winds/ thunderstorm?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

22. What is the probability of landslides?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

23. What would be in the impact of landslides?

- Minor
- Limited
- Critical
- Catastrophic

24. What is the probability of lightning?

- Very Low
- Low
- Medium
- High

25. What would be in the impact of lightning?

- Minor
- Limited
- Critical
- Catastrophic

26. What is the probability of sinkholes?

- Very Low
- Low
- Medium
- High

27. What would be in the impact of sink holes?

- Minor
- Limited
- Critical
- Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- Very Low
- Low
- Medium
- High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- Minor
- Limited
- Critical
- Catastrophic

30. What is the probability of a tornado?

- Very Low
- Low
- Medium
- High

31. What would be in the impact of a tornado?

- Minor
- Limited
- Critical
- Catastrophic

32. What is the probability of a wildfire?

- Very Low
- Low
- Medium
- High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

34. What is the probability of a winter storm?

- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

Montgomery County Survey

LEE-RUSSELL COUNCIL OF GOVERNMENTS

Montgomery County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Montgomery County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Montgomery County?

7. Any local information regrading landslides?

8. What is the probability of a dam failure?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

9. What would be in the impact of dam failure?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

10. What is the probability of a drought?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

11. What would be in the impact of a drought?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

12. What is the probability of an earthquake?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

13. What would be in the impact of an earthquake?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

15. What would be in the impact of extreme temperature (hot or cold)?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

16. What is the probability of flooding?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

17. What would be in the impact of flooding?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

18. What is the probability of hail?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

19. What would be in the impact of hail?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

20. What is the probability of high winds/ thunderstorms?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

21. What would be in the impact of high winds/ thunderstorm?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

22. What is the probability of landslides?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

23. What would be in the impact of landslides?

- Minor
- Limited
- Critical
- Catastrophic

24. What is the probability of lightning?

- Very Low
- Low
- Medium
- High

25. What would be in the impact of lightning?

- Minor
- Limited
- Critical
- Catastrophic

26. What is the probability of sinkholes?

- Very Low
- Low
- Medium
- High

27. What would be in the impact of sink holes?

- Minor
- Limited
- Critical
- Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

30. What is the probability of a tornado?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

31. What would be in the impact of a tornado?

- ◯ Minor
- ◯ Limited
- ◯ Critical
- ◯ Catastrophic

32. What is the probability of a wildfire?

- ◯ Very Low
- ◯ Low
- ◯ Medium
- ◯ High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

34. What is the probability of a winter storm?

- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

7.2 Appendix B: Agendas and Documents

Division D Multi-Jurisdictional Multi-hazard Mitigation Plan
Overview

Grant Update:

- Lee-Russell Council of Governments (LRCOG) submitted the PDM grant on 12/15/18.
- Lee-Russell Council of Governments submitted requested revisions by AEMA on 1/4/19.
- The PDM grant was submitted to FEMA by the AEMA for review on 1/9/19.
- Alabama Emergency Management Agency has projected notification of funding in fall 2019.

Counties Participating in Division D Multi-jurisdictional Multi-hazard Mitigation Plan:

- Autauga (Feb. 2021), Chambers (June 2022), Chilton (Oct. 2021), Coosa (March 2022), Elmore (2020), Lee (2020), Lowndes (June 2021), Macon (Aug. 2021), Montgomery (Jan. 2021), Russell (2020), and Tallapoosa (June 2021) counties and municipalities as well as other jurisdictions within these 11 counties.

check

check on due dates

Division D Hazard Mitigation Plan Team Members:

- Lee-Russell Council of Governments staff will act as the Lead Organization to manage and facilitate the planning process by working with the Core Planning Team. A LRCOG staff person will serve as the administrator of the PDM grant if funded and will lead the overall mitigation planning effort by working with the core planning team, local subcommittees and other stakeholders to develop and adopt the Divisional Plan. Once the committee meetings and public meetings/surveys are completed and all data collection is finalized, LRCOG staff would compile and consolidate collected information and updates into the draft Divisional Multi-jurisdictional Multi-Hazard Mitigation Plan.
- Hazard Mitigation Core Planning Team will include the Division D Coordinator, the 11 EMA Directors or their designee and LRCOG staff in the development and adoption of the Division D Multi-jurisdiction Multi-hazard Mitigation Plan. The Division D Hazard Mitigation Core Planning Team would also help establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.
- County-level Hazard Mitigation Planning Sub-committee will include but not limited to individuals from local emergency management, education, public safety, utilities, engineering, planning/zoning, GIS, administration, public works, building, or highway departments. The County Hazard Mitigation Planning Sub-Committee meetings would be convened in each county to review and document what changes/impacts/progress has occurred in the past 5 years for inclusion in the updated divisional plan.

Division D Hazard Mitigation Core Planning Team Responsibilities:

- Serving on the Core Planning Team with Division D Coordinator and the 11 EMA Directors or their designee.
- Approving the final Work Program and Schedule.
- Assisting in organizing and attending regular meetings of the Core Planning Team and county-level planning sub-committees. If unable to attend, sending a designee or make myself available to discuss the agenda through phone conversation or in-person meeting with designated LRCOG staff.
- Assisting in developing and conducting an outreach strategy to involve other county-level planning sub-committee members, stakeholders, and the public, as appropriate to represent the Jurisdiction.
- Identifying community resources available to support the planning effort, including meeting spaces, facilitators, and media outlets.
- Representing the jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Providing information and feedback on the jurisdictional and division risk assessment and mitigation strategies and select a course of action to be followed for the communities.
- Providing an assessment of prioritized projects that have been completed or are ongoing, or changes to prioritization.
- Submitting the draft plan to the county-level planning sub-committee for review.
- Working with the members of the Core Planning Team to incorporate all Jurisdiction's comments into the draft plan.

- Submitting the Division D Multi-jurisdiction Multi-hazard Mitigation Plan to the respective governing body for consideration and adoption.
- After adoption, assisting in the coordination process to monitor, evaluate, and work toward plan implementation.
- Assist in documenting the in-kind labor of Core Planning and Sub-committee members for the local match requirement of the grant.

Hazard Mitigation Plan Update Evaluation Process:

1. **Complete grant start up requirements** once funding notification is received.

2. **Review current Hazard Mitigation Plans for each county** -The review of the current approved plans will provide a starting point for identifying areas for improvement that may require more time and resources. Each of the eleven plans will be reviewed for consistency of information within the divisional plan. Additionally, FEMA's Local Mitigation Plan Review Tools from each of the 11 previous plans will be reviewed and recommendations for improvement will be incorporated into the planning process.

3. **Organize Resources and Convene Core Planning Team -** The core planning team will manage the overall plan activities, contribute to the decision making process, review the previous local hazard mitigation plans, finalize requirements for participation in the planning process, and establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.

4. **Organize the County Planning Sub-Committee** - The county-level Planning Sub-Committee would be organized in each county to review the community capabilities, hazard identification, risk assessments, mitigation and plan maintenance strategies of the existing local Hazard Mitigation Plan. During the review, the group would document what changes/impacts/progress has been made in each area for inclusion in the divisional plan.

5. **Create Outreach Strategy for Division D** – The Planning Process Section would be reviewed and evaluated to determine if the planning procedures were effective, was public outreach activities successful in gaining public participation, and is the current level of public support and/or decision maker priorities the same or has it changed related to hazard mitigation. Once reviewed, the planning team would identify any necessary changes or additional strategies that are needed in moving forward with the updated plan. Public outreach efforts will include but not limited to advertisement and invitation to all planning and community meetings, social media outreach, plan website, interactive surveys at stakeholder meetings (i.e. Pollev.com), online surveys (i.e. survey monkey), and phone interviews.

6. **Review Community Capabilities and Previously Approved Hazard Mitigation Plans –** The Capability Assessment Section would be reviewed to determine if community capabilities were documented sufficiently in the previous plans, were there any community capabilities that were missing in terms of administrative, human, technical, and financial resources and if the policies, plans, regulations, or reports listed in the plan were current and up to date.

7. **Conduct Risk Assessment – Hazard Identification, Assessing Risk, and Vulnerabilities** – Hazard Identification and Risks/Vulnerability Assessment would be evaluated to see if the listed hazards and hazard occurrences, probability of future occurrences and the impact on life, property and the community is sufficient or new data is available. Community assets, development trends, population changes, critical facilities, and local mitigation efforts will be updated by utilizing the technical expertise of planning committees, new data sources and existing local plans. Estimates of potential dollar losses and the methodology used to prepare the estimates will be updated from the previous plan.

8. **Identify Mitigation Goals, Action Plan, and Implementation Plan** - Mitigation Strategy Section would be evaluated to determine if the implementation of the community's mitigation strategy was effective and was the strategy revised following any disasters, if the existing mitigation actions were still relevant

and were there obstacles to successful implementation of these actions, if integration with other planning mechanisms occurred and if progress was made in implementing the mitigation action plan. Mitigation Strategy would evaluate each jurisdiction's mitigation strategy particularly in light of experiences gained from the implementation of the previous plan. The 5 year update will assess the previous stated goals and actions, evaluate progress in implementing the action plan, and adjust its actions to address current realities. The mitigation strategy will also be revised to add any new disasters to determine if recommended actions are still appropriate given the impacts of the event.

9. **Plan Maintenance Procedures** would be evaluated to determine how well the plan maintenance procedures established in the previously approved plan worked. An updated blueprint for monitoring, evaluating, updating the mitigation plan within the 5 year cycle, as well as the responsible parties, will be outlined. It will also include new and existing strategies for continued public involvement and incorporation into existing planning mechanisms in each jurisdiction.

10. **Develop and Review the Draft Plan** - The draft plan will be reviewed by Division D Core Planning Team, county subcommittees, other identified stakeholders, and the public during the draft process and prior to plan approval and adoption.

11. **Submission of Draft Plan by AEMA and FEMA for review and approval** - An approved draft plan will be submitted to AEMA/FEMA for their review and comment. All comments/revisions/suggestions received from AEMA/FEMA will be integrated into the final plan and would be in compliance with all current, applicable FEMA Local Planning Guidance and Policies.

12. **Adoption of the Division D Multi-jurisdictional Multi-hazard Mitigation Plan in each jurisdiction** - The final approved plan will be formally adopted by all participating local governments at a regularly scheduled commission/council meeting. Documentation of these approvals will be included in the final Division D Multi-Jurisdictional Hazard Mitigation Plan.

Next Steps:

1. Compile a list of potential members of the County Planning Sub-Committee from each County EMA Director.
2. Start reviewing existing data sources to include the following:
    a. Alabama State Hazard Mitigation Plan
    b. Local Hazard Mitigation Plans and the FEMA's Local Mitigation Plan Review Tools
    c. Emergency Operations Plans
    d. State and Federal Sources of Hazard Information
    e. Planning and Regulatory
    f. Changes in Development

Hazards Identitifed at Division D Meeting

Proposed Division D	Autauga/Chilton/Macon/Montgomery/Tallapoosa	Lee/Russell	Elmore	Chambers	Coosa	Lowndes	State of Alabama
Dam Failure	Thunderstorm	Drought/Heat Wave	Thunderstorms/Severe Thunderstorms	Flooding	Tornadoes	Dam Failure	Dam Failure
Drought	Lightning	Earthquakes	Lightning	Tornadoes	Severe Storms (discusses high winds, lightning)	Drought	Drought
Earthquakes	Hail	Flood	Hail	Severe Storms-hail, lightning	Flooding	Extreme Temperatures	Earthquakes
Extreme Temperature	Tornado	Hail	Tornadoes and High Wind Events	Hurricanes	Winter Storms	Floods	Extreme Temperatures
Flooding	Flood/Flash Flood	Lightning	Flooding (includes Flash Flooding, River Flooding)	Winter Storms/Freezes	Hurricanes	Hail	Flooding
Hail	Drought/Extreme Heat	Sinkholes	Hurricanes and Tropical Storms	Landslides	Droughts	High Winds	Hail
High Winds	Winter Storm/Frost/Freeze/Heavy Snow/Ice Storm/Winter Weather/Extreme Cold	Thunderstorms (Includes Strong Winds)	Extreme Temperatures – Heat and Cold	Sink Holes (Land Subsidence)	Not included: Dam Failure	Landslides	High Winds
Landslides	Hurricane/Tropical Storm/Tropical Depression/High Wind/Strong Wind	Tropical Depression/Tropical Storms/Hurricanes	Winter Storms	Earthquakes	Earthquake	Sinkholes and Subsidence	Landslides
Lightning	Sinkhole/Expansive Soil	Tornadoes	Drought	Droughts/Heat Waves	Extreme Temperatures	Wildfire	Lightning
Sinkholes and Land Subsidence	Landslide	Wildfire	Wildfire	Dam/Levee Failures	Landslides	Winter/Ice Storms	Sea Level Rise and Coastal Land Change
Tropical Storms/Tropical Depressions/Hurricanes	Earthquake	Winter Storms (Includes Ice Storms, Heavy Snow)	Landslides	Does not include: Wildfire	Sinkholes and Land Subsidence	Thunderstorms and Lightning	Sinkholes and Land Subsidence
Tornadoes	Dam/Levee Failure	Not included: Dam Failure	Sinkholes and Land Subsidence		Wildfire	Tropical Storms and Hurricanes	Tsunamis
Wildfire	Wildfire	Landslides	Earthquakes			Not included:	Wildfire
Winter Storms			Dam Failure			Earthquake	Winter Storms
			Dense Fog				
			Celestial Impact (Includes Space Weather)				
			Hazardous Materials				
			Transportation System Failures				
			Epidemiological/Public Health				
			Civil Unrest				
			Adversarial Threats				

Proposed Goals from Division D Meeting

Division 'D' Hazard Mitigation Plan – Proposed Goals:

1. **PREVENTION**: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.

2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.

3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.

4. **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.

5. **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.

6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

HMP Meeting

Please Sign In

Meeting with Department Heads

Wednesday, April 29, 2020

Jimmy Woodall
Robert N. Hulsey
James Strand
Dan White
Ricky Lowery
Chris Ogden
Brian Franklin
Keith Barnett
Luke McGinty
Jake Shamblin
John Thornton
Lee Mayon
David R Brunson

Elmore County Commission

Kenny Holt
District 1

Mack Daugherty
District 2

Troy Stubbs
Chairman, District 3

Bart Mercer
District 4

Earl Reeves
District 5

COVID19 Post SIP Meeting - HMP

April 22, 2020

1. Welcome	Chairman
2. Local COVID-19 Update	EMA Director
3. Government Operations Post SIP	CEOO
4. Local Economy Strategy Post SIP	Chairman
5. Municipal Comments/ Suggestions	Mayors
6. Closing	Chairman

Willis, Lynn Tiffany
Gillespie, Byrd
Davenport
Kelley, Gay, Harper
Powell
Bradshaw for Edgar
Chief of Police for Wetumpka
Art, Cary
Jeff

100 East Commerce Street, Suite 200, Wetumpka, Alabama 36092 Phone (334) 514-5841 Fax (334) 567-1109
www.elmoreco.org

Elmore represented by Comm Mercer, Chairman Stubbs, Richie, Keith

Elmore County Commission

Kenny Holt
District 1

Mack Daugherty
District 2

Troy Stubbs
Chairman, District 3

Bart Mercer
District 4

Earl Reeves
District 5

COVID19 Meeting - HMP

April 4, 2020

1. Governor Ivey Order 4/3/2020;
2. County Plan for 4/6 through 4/30/2020
    a. Facility Access
    b. Essential and nonessential personnel
    c. Emergency Paid Sick Leave (80 hrs) and Paid Leave (80 hrs)
    d. Telework Agreements
    e. Phone Call Protocol
    f. Support for EMA
3. County Plan beyond 4/30/2020
4. Questions/ Comments

Millbrook, Wetumpka, Coosada, Eclectic
Deatsville, Prattville

Stubbs, Mercer, Beyer, Barnett, McCinty

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www.elmoreco.org

Elmore County Commission

Kenny Holt
District 1

Mack Daugherty
District 2

Troy Stubbs
Chairman, District 3

Bart Mercer
District 4

Earl Reeves
District 5

Elmore County Safety Committee Meeting Agenda
March 13, 2020

I. COVID-19
   a. Alabama Event Synopsis/Statistics
   b. Preparations Protocol/Mitigation of Risk
   c. ADPH COVID-19 Response Matrix Recommendations
   d. Workplace Signage
   e. Cleaning/Disinfection Recommendations and Supplies
   f. Coordination of policy-making and community impact considerations
   g. Continuity of Gov't and Operations
   h. Support for Public Health Emergency measures
   i. Messaging to the community

II. Potential Weather Events
   a. Opening safer places
   b. Emergency Contact list for all Dept's

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Elmore County Commission

Kenny Holt
District 1

Mack Daugherty
District 2

Troy Stubbs
Chairman, District 3

Bart Mercer
District 4

Earl Reeves
District 5

COVID19 Meeting

March 13, 2020

1 pm

Mayors

PS 1 of 2

Name	Department/ Organization
Sally Davenport	Town of Eclectic
ANTHONY POWELL	TOWN OF COOSADA
Michael Dozier	Circuit Clerk
Jay Adams	Edgewood Academy
Angela Stockton	Adullam House
Hannah Powell	Adullam House Nursery
Brittany Gentry	Adullam House Christian Academy
Rachel Hardcastle	Adullam House Christian Academy
Ed Reeves	
Greg Willis	
Ed Gumpf	
Ashley Payton	

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Elmore County Commission

Kenny Holt
District 1

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District 2

Troy Stubbs
Chairman, District 3

Bart Mercer
District 4

Earl Reeves
District 5

COVID19 Meeting

March 13, 2020

1 pm

Mayors
PS 2 of 2

Name	Department/ Organization
Stuart Peters	Millbrook / Calhoun Eng.
Clayton Edger	Mayor, Town of Deatsville
Jerry Davis	Mayor City of Wetumpka
Kevin Robbins	City of Wetumpka
LYNN WELDON	City of WETUMPKA
TIFFANY ROBINSON	City of WETUMPKA
Lisa Byrd	City of Prattville
Bill Allegri	City of Prattville
Jason Mann	ECBoE
Richard Dennis	ECBOE
Wade Shipman	Tallassee City Schools
- Jessie Williams & Brock Nolin	
Jay Adams	EDGEWOOD ACADEMY
John Hammock	CITY of Tallassee
CHERYL WORLEY	TOWN of ELMORE
MARGARET WHITE	TOWN of ELMORE
Donna Spreadgins	Elmore Community Hospital
Amanda Hannon	Elmore Community Hospital
JESSICA PALMER	

Audio Detail Report

Audio detail for **'Topic: Elmore County First Responders COVID-19 Update'**: HMP

All sessions in Central Daylight Time (Chicago, GMT-05:00)

Host Detail

Name:	kbarnett kbarnett	Email:	kbarnett@elmoreco.org
Date:	4/2/20	Start time:	4:36 pm
End time:	5:36 pm	Total audio minutes:	338 mins
Type:	HYB	Total Hybrid (VoIP) minutes used:	0 min
Total attendees:	1	Total Hybrid attendees:	0

25 attendees via conference call

page 1 of 2

Session Detail Report

Session detail for **'Topic: Elmore County First Responders COVID-19 Update'**: HMP

All sessions in Central Daylight Time (Chicago, GMT-05:00)

Participant 1

Name:	kbarnett kbarnett	Email:	kbarnett@elmoreco.org
Invited:	No	Registered:	N/A
Date:	4/2/20	Start time:	4:35 pm
End time:	5:35 pm	Duration:	60 mins
Company:		Title:	
Phone Number:		Address 1:	
Address 2:		City:	
State/Province:		Country/region:	
ZIP/Postal Code:		Network joined from:	External

For more detailed information, contact your site administrator.

Page 2 of 2

List of Organization to Send Survey for Public Outreach	
Organization	County
Montgomery Rotary Club	Montgomery
Montgomery Capital Rotary Club	Mongomery
Montgomery Sunrise Rotary Club	Montgomery
Montgomery Sunset Rotary Club	Montgomery
Prattville Rotary Club	Autauga
Prattville-Millbrook Sunrise Rotary Club	Autauga
Wetumpka Rotary Club	Elmore
Tallassee Rotary Club	Elmore
OLLI Program at AUM	Montgomery
Commorados (Retired Seniors)	Elmore
West Elmore County Historical Society	Elmore
Elmore Baptist Association	Elmore
Central Alabama Community Foundation	Elmore & Autauga
Wetumpka Lions Club	Elmore
Leadership Elmore County	Elmore
Millbrook Civitan Club	Elmore
Millbrook Kiwanis Club	Elmore
Millbrook Garden Club	Elmore
Millbrook Men's Club	Elmore
Prime Timers (Retired Seniors)	Elmore
Wetumpka Kiwanis Club	Elmore
Elmore County Republican Party	Elmore
Elmore County Democratic Party	Elmore
Elmore County Economic Development Authority	Elmore
Tallassee Chamber of Commerce	Elmore
Millbrook Area Chamber of Commerce	Elmore
Wetumpka Area Chamber of Commerce	Elmore

7.3 Appendix C: Advertisement



Autauga EMA
May 7 ·

https://www.surveymonkey.com/r/3KWRSLH

Survey takes less than 2 minutes to complete. Information from this survey will help Autauga EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes, and severe storms on life and property. Please answer each question completely and honestly. All answers are confidential. Thank you for your participation.



SURVEYMONKEY.COM

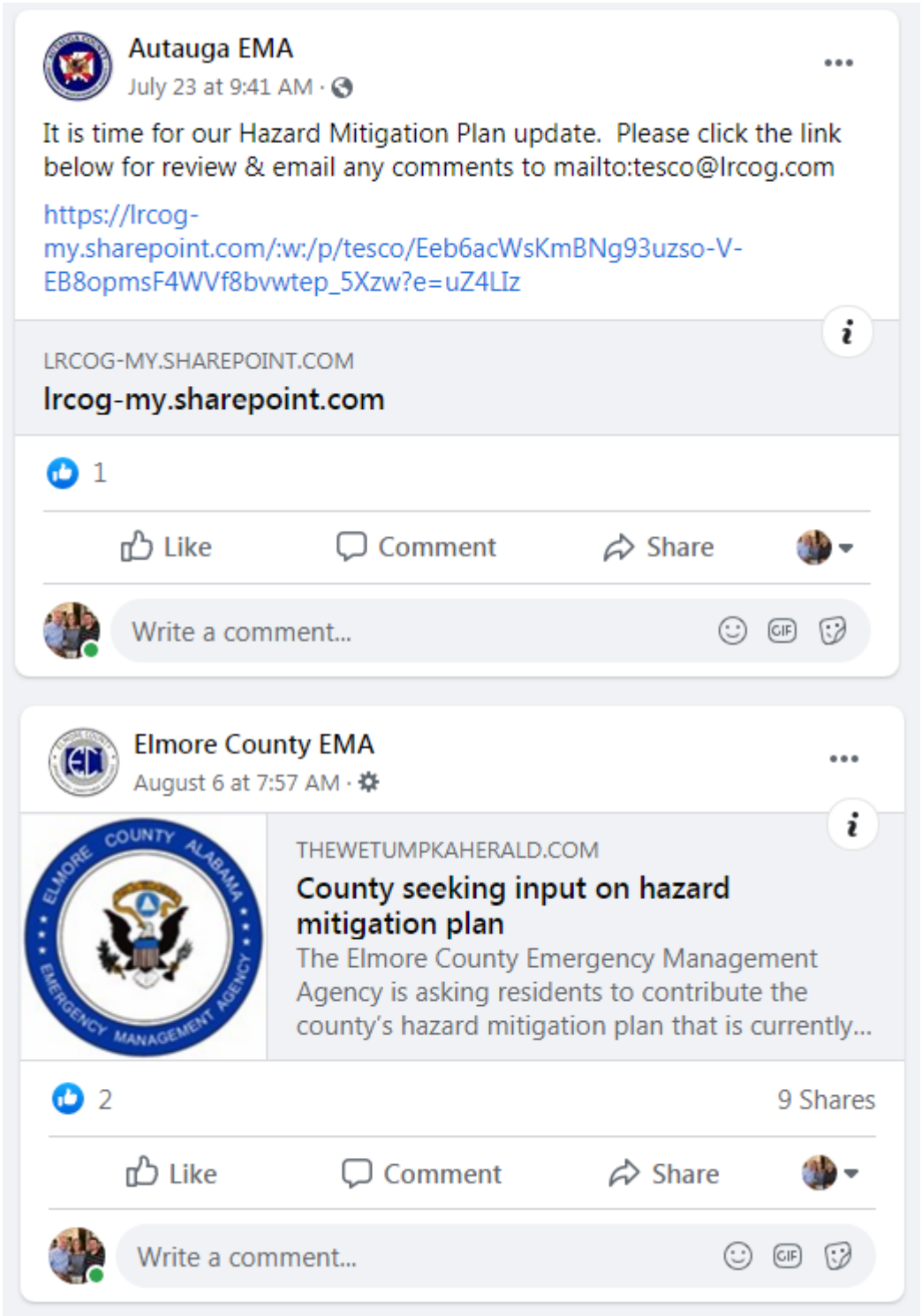
2020 Hazard Mitigation Plan Update

Take this survey powered by surveymonkey.com. Create your own ...

4 3 Shares

Like Comment Share

Write a comment...


Autauga EMA
July 23 at 9:41 AM ·
It is time for our Hazard Mitigation Plan update. Please click the link below for review & email any comments to mailto:tesco@lrcog.com
https://lrcog-my.sharepoint.com/:w:/p/tesco/Eeb6acWsKmBNg93uzso-V-EB8opmsF4WVf8bvwtep_5Xzw?e=uZ4LIz
LRCOG-MY.SHAREPOINT.COM
lrcog-my.sharepoint.com
1
Like
Comment
Share
Write a comment...
Elmore County EMA
August 6 at 7:57 AM ·
THEWETUMPKAHERALD.COM
County seeking input on hazard mitigation plan
The Elmore County Emergency Management Agency is asking residents to contribute the county's hazard mitigation plan that is currently...
2
9 Shares
Like
Comment
Share
Write a comment...

Montgomery Alabama Emergency Management
May 6 ·

Montgomery EMA needs our Montgomery's help. We are working to update our Hazard Mitigation Plan and would like our communities opinion. This survey will take less than 2 minutes to complete. The information from this survey will help your county's Emergency Management Agency develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will hel... See More



SURVEYMONKEY.COM

2020 Hazard Mitigation Plan Update

Take this survey powered by surveymonkey.com. Create your own ...

4 3 Comments 1 Share

Like Comment Share

Most Relevant

Write a comment...

View comments

7.4 Appendix D: Hazard Events Tables

Table 7.4.1 Drought

County/Zone	St.	Date	Type	Dth	Inj	PrD	CrD
AUTAUGA	AL	7/18/2006	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	8/1/2006	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	9/1/2006	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	5/22/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	6/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	7/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	8/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	9/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	10/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	11/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	12/1/2007	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	1/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	2/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	3/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	4/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	5/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	6/1/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	8/5/2008	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	9/21/2010	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	10/1/2010	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	2/22/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	3/1/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	8/2/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	9/1/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	11/1/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	12/1/2011	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	7/3/2012	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	8/1/2012	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	11/20/2012	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	12/1/2012	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	1/1/2013	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	2/1/2013	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	10/18/2016	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	11/1/2016	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	12/1/2016	Drought	0	0	0.00K	0.00K
AUTAUGA	AL	1/1/2017	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/18/2006	Drought	0	0	0.00K	0.00K
ELMORE	AL	8/1/2006	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/1/2006	Drought	0	0	0.00K	0.00K

ELMORE	AL	5/22/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	6/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	8/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	12/1/2007	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	2/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	3/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	4/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	5/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	6/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	8/1/2008	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/14/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/21/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/1/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	12/1/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	12/1/2010	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	2/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	2/4/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	3/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	3/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	4/5/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	4/5/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	5/10/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	6/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	8/2/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	12/1/2011	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	2/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	3/1/2012	Drought	0	0	0.00K	0.00K

ELMORE	AL	4/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	5/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	6/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	7/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	8/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2012	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2013	Drought	0	0	0.00K	0.00K
ELMORE	AL	2/1/2013	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/18/2016	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2016	Drought	0	0	0.00K	0.00K
ELMORE	AL	12/1/2016	Drought	0	0	0.00K	0.00K
ELMORE	AL	1/1/2017	Drought	0	0	0.00K	0.00K
ELMORE	AL	9/24/2019	Drought	0	0	0.00K	0.00K
ELMORE	AL	10/1/2019	Drought	0	0	0.00K	0.00K
ELMORE	AL	11/1/2019	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	7/11/2006	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	8/1/2006	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	9/1/2006	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	5/22/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	6/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	7/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	8/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	9/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2007	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	1/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	2/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	3/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	4/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	5/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	6/1/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	8/5/2008	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	9/21/2010	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/1/2010	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2010	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2010	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2010	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	1/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	2/1/2011	Drought	0	0	0.00K	0.00K

MONTGOMERY	AL	3/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	4/5/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	5/10/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	6/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	7/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	8/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	9/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2011	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	1/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	2/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	3/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	4/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	5/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	6/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	7/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	8/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	9/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2012	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	1/1/2013	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	2/1/2013	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/18/2016	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2016	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	12/1/2016	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	1/1/2017	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	10/8/2019	Drought	0	0	0.00K	0.00K
MONTGOMERY	AL	11/1/2019	Drought	0	0	0.00K	0.00K

Table 7.4.2 Extreme Temperature

County	Date	Time	Type	Dth	Inj	PrD	CrD
MONTGOMERY	1/2/2006	13:00	Heat	0	0	0.00K	0.00K
ELMORE	8/8/2007	12:00	Heat	1	14	0.00K	0.00K
MONTGOMERY	8/8/2007	12:00	Heat	1	49	0.00K	0.00K
AUTAUGA	8/8/2007	12:00	Heat	1	17	0.00K	0.00K
MONTGOMERY	8/1/2010	0:00	Heat	0	0	0.00K	150.00K
ELMORE	6/28/2012	12:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	6/29/2012	12:00	Heat	0	0	0.00K	0.00K
AUTAUGA	6/29/2012	12:00	Heat	0	0	0.00K	0.00K
ELMORE	6/30/2012	12:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	6/30/2012	13:00	Excessive Heat	0	0	0.00K	0.00K
MONTGOMERY	7/1/2012	12:00	Excessive Heat	0	0	0.00K	0.00K
ELMORE	7/1/2012	12:00	Heat	0	0	0.00K	0.00K
AUTAUGA	7/1/2012	12:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	7/3/2012	14:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	7/24/2012	11:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	7/28/2012	11:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	8/1/2012	12:00	Heat	0	0	0.00K	0.00K
MONTGOMERY	8/2/2012	10:00	Heat	0	0	0.00K	0.00K
ELMORE	1/6/2014	23:00	Cold/wind Chill	0	0	0.00K	0.00K
MONTGOMERY	1/6/2014	23:00	Cold/wind Chill	0	0	0.00K	0.00K
AUTAUGA	1/6/2014	23:00	Cold/wind Chill	0	0	0.00K	0.00K

Table 7.4.3: Flood

County	Date	Time	Type	Dth	Inj	PrD	CrD
AUTAUGA CO.	5/10/2006	15:12	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	5/10/2006	15:15	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	11/15/2006	11:45	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	11/15/2006	11:45	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	11/15/2006	12:03	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	1/7/2007	16:45	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	1/7/2007	17:00	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	2/13/2007	19:23	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	3/27/2009	8:00	Flash Flood	0	0	50.00K	0.00K
AUTAUGA CO.	5/7/2009	7:00	Flash Flood	0	0	530.00K	0.00K
MONTGOMERY CO.	5/7/2009	7:00	Flash Flood	1	0	1.800M	0.00K
ELMORE CO.	5/7/2009	7:00	Flash Flood	0	0	4.900M	0.00K
MONTGOMERY CO.	9/16/2009	13:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	9/19/2009	1:00	Flash Flood	0	0	2.00K	0.00K
AUTAUGA CO.	9/19/2009	2:00	Flash Flood	0	0	1.000M	0.00K
ELMORE CO.	5/30/2010	14:25	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	7/9/2013	15:30	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	7/23/2013	14:25	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	7/24/2013	17:45	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	8/14/2013	14:54	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	12/22/2013	17:50	Flood	0	0	0.00K	0.00K

MONTGOMERY CO.	12/22/2013	19:30	Flood	0	0	0.00K	0.00K
AUTAUGA CO.	12/22/2013	20:30	Flood	0	0	0.00K	0.00K
AUTAUGA CO.	4/7/2014	7:15	Flood	0	0	0.00K	0.00K
AUTAUGA CO.	4/7/2014	9:00	Flood	0	0	0.00K	0.00K
AUTAUGA CO.	6/9/2015	18:20	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	12/24/2015	9:30	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	12/24/2015	17:00	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	12/25/2015	0:30	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	12/25/2015	2:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	12/25/2015	6:00	Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	12/27/2015	12:00	Flood	0	0	0.00K	0.00K
AUTAUGA CO.	3/31/2016	22:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	3/31/2016	22:30	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	4/1/2016	0:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	4/1/2016	0:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	1/2/2017	17:30	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	1/2/2017	17:30	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	5/20/2017	19:30	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	5/20/2017	19:30	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	6/18/2017	4:45	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	6/18/2017	6:00	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	6/18/2017	7:00	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	6/18/2017	7:00	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	7/15/2017	20:35	Flash Flood	0	0	0.00K	0.00K

ELMORE CO.	8/10/2017	16:00	Flash Flood	0	0	0.00K	0.00K
AUTAUGA CO.	8/10/2017	16:15	Flash Flood	0	0	0.00K	0.00K
MONTGOMERY CO.	8/10/2017	17:30	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	5/30/2018	2:30	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	5/30/2018	9:00	Flash Flood	0	0	0.00K	0.00K
ELMORE CO.	9/10/2018	17:30	Flash Flood	0	0	0.00K	0.00K
Total				1	0	8.282M	0.00K

Table 7.4.5: Hail

Location	County	Date	Time	Type	Mag	PrD	CrD
WETUMPKA	Elmore	3/20/2006	18:00	Hail	0.75 in.	0.00K	0.00K
PRATTVILLE	Autauga	4/8/2006	8:16	Hail	1.75 in.	0.00K	0.00K
PINE LEVEL	Autauga	4/19/2006	21:14	Hail	1.00 in.	0.00K	0.00K
MILLBROOK	Elmore	4/19/2006	21:16	Hail	1.75 in.	0.00K	0.00K
MILLBROOK	Elmore	4/19/2006	21:27	Hail	0.88 in.	0.00K	0.00K
PRATTVILLE	Autauga	4/19/2006	21:28	Hail	0.75 in.	0.00K	0.00K
MONTGOMERY	Montgomery	4/19/2006	21:42	Hail	0.75 in.	0.00K	0.00K
MILLBROOK	Elmore	8/11/2006	17:00	Hail	0.75 in.	0.00K	0.00K
PRATTVILLE	Autauga	8/11/2006	17:00	Hail	0.88 in.	0.00K	0.00K
MONTGOMERY	Montgomery	9/28/2006	16:00	Hail	0.88 in.	0.00K	0.00K
MT MEIGS	Montgomery	9/28/2006	16:15	Hail	0.75 in.	0.00K	0.00K
WETUMPKA	ELMORE	9/28/2006	16:26	Hail	1.50 in.	0.00K	0.00K
PRATTVILLE	AUTAUGA	2/13/2007	18:40	Hail	0.75 in.	0.00K	0.00K
MONTGOMERY	MONTGOMERY	2/13/2007	18:55	Hail	1.75 in.	0.00K	0.00K
PRATTVILLE	AUTAUGA	4/2/2007	15:46	Hail	0.88 in.	0.00K	0.00K
JONES	AUTAUGA CO.	4/11/2007	14:55	Hail	1.00 in.	0.00K	0.00K
JONES	AUTAUGA CO.	4/11/2007	15:16	Hail	1.75 in.	0.00K	0.00K
PINE LEVEL	AUTAUGA CO.	4/11/2007	15:39	Hail	1.00 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	4/11/2007	15:47	Hail	1.25 in.	0.00K	0.00K
COOSADA	ELMORE CO.	4/11/2007	15:50	Hail	1.00 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	4/11/2007	15:51	Hail	2.75 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	4/11/2007	15:58	Hail	2.75 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	4/11/2007	16:00	Hail	1.75 in.	5.00K	0.00K
TALLASSEE	ELMORE CO.	4/11/2007	16:26	Hail	2.75 in.	0.00K	0.00K
MITYLENE	MONTGOMERY CO.	6/12/2007	13:26	Hail	1.75 in.	0.00K	0.00K
SANTUCK	ELMORE CO.	8/17/2007	16:59	Hail	1.00 in.	0.00K	0.00K
BUTTS MILL	ELMORE CO.	4/4/2008	17:05	Hail	0.88 in.	0.00K	0.00K
MAN	ELMORE CO.	4/4/2008	17:10	Hail	0.88 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	4/11/2008	21:35	Hail	0.88 in.	0.00K	0.00K
CLAUD	ELMORE CO.	4/25/2008	16:55	Hail	1.75 in.	0.00K	0.00K
DUBLIN	MONTGOMERY CO.	7/5/2008	16:20	Hail	1.00 in.	0.00K	0.00K
PINE LEVEL	MONTGOMERY CO.	7/5/2008	16:30	Hail	0.88 in.	0.00K	0.00K

PINE LEVEL	AUTAUGA CO.	2/27/2009	14:00	Hail	1.00 in.	0.00K	0.00K
PINE FLAT	AUTAUGA CO.	2/27/2009	17:50	Hail	1.00 in.	0.00K	0.00K
MONTGOMERY	MONTGOMERY CO.	4/5/2009	5:50	Hail	1.75 in.	0.00K	0.00K
PINEDALE	MONTGOMERY CO.	5/6/2009	12:07	Hail	0.88 in.	0.00K	0.00K
HOPE HULL	MONTGOMERY CO.	5/6/2009	12:09	Hail	0.88 in.	0.00K	0.00K
MERRY	MONTGOMERY CO.	5/6/2009	12:23	Hail	0.88 in.	0.00K	0.00K
HOPE HULL	MONTGOMERY CO.	6/2/2009	15:30	Hail	0.88 in.	0.00K	0.00K
WHITE CITY	AUTAUGA CO.	6/2/2009	16:24	Hail	0.75 in.	0.00K	0.00K
MARBURY	AUTAUGA CO.	6/2/2009	16:24	Hail	0.75 in.	0.00K	0.00K
BUTTS MILL	ELMORE CO.	7/8/2009	14:20	Hail	1.25 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	7/26/2009	16:48	Hail	0.88 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	3/10/2010	15:58	Hail	1.00 in.	0.00K	0.00K
BUTTS MILL	ELMORE CO.	3/10/2010	16:10	Hail	1.00 in.	0.00K	0.00K
CAPITAL HGTS	MONTGOMERY CO.	7/15/2010	16:50	Hail	1.00 in.	0.00K	0.00K
BILLINGSLEY	AUTAUGA CO.	10/24/2010	17:36	Hail	1.00 in.	0.00K	0.00K
PINE LEVEL	AUTAUGA CO.	3/26/2011	14:17	Hail	1.00 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	3/26/2011	14:50	Hail	0.75 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	3/26/2011	14:53	Hail	1.00 in.	0.00K	0.00K
TALLASSEE	ELMORE CO.	3/27/2011	21:19	Hail	1.00 in.	0.00K	0.00K
POSEYS XRDS	AUTAUGA CO.	5/26/2011	13:17	Hail	0.88 in.	0.00K	0.00K
PINE LEVEL	AUTAUGA CO.	5/26/2011	13:22	Hail	1.00 in.	0.00K	0.00K
GARTERS HILL	MONTGOMERY CO.	6/11/2011	14:33	Hail	1.00 in.	0.00K	0.00K
MARTIN LAKE SOUTH	ELMORE CO.	7/3/2011	15:30	Hail	0.88 in.	0.00K	0.00K
MONTGOMERY	MONTGOMERY CO.	1/8/2012	18:34	Hail	1.00 in.	0.00K	0.00K
INDEPENDENCE	AUTAUGA CO.	2/24/2012	10:24	Hail	1.00 in.	0.00K	0.00K
PINE LEVEL	AUTAUGA CO.	2/24/2012	10:36	Hail	0.88 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	3/23/2012	15:05	Hail	0.75 in.	0.00K	0.00K
MARBURY	AUTAUGA CO.	4/5/2012	18:08	Hail	1.00 in.	0.00K	0.00K

AUTAUGAVILLE	AUTAUGA CO.	5/6/2012	9:28	Hail	1.00 in.	0.00K	0.00K
CLAUD	ELMORE CO.	6/14/2012	17:00	Hail	1.75 in.	0.00K	0.00K
MARTIN LAKE SOUTH	ELMORE CO.	3/18/2013	15:58	Hail	1.00 in.	0.00K	0.00K
MARTIN LAKE SOUTH	ELMORE CO.	3/18/2013	16:00	Hail	1.75 in.	0.00K	0.00K
NEW PROSPECT	AUTAUGA CO.	3/18/2013	16:02	Hail	1.75 in.	0.00K	0.00K
CHISHOLM	MONTGOMERY CO.	3/18/2013	16:45	Hail	1.00 in.	0.00K	0.00K
RAMER	MONTGOMERY CO.	3/23/2013	19:19	Hail	0.75 in.	0.00K	0.00K
PINE LEVEL	MONTGOMERY CO.	3/23/2013	19:30	Hail	1.00 in.	0.00K	0.00K
PRATTVILLE	AUTAUGA CO.	4/30/2014	2:30	Hail	0.75 in.	0.00K	0.00K
MILLBROOK	ELMORE CO.	4/30/2014	2:40	Hail	1.00 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	4/30/2014	2:50	Hail	1.00 in.	0.00K	0.00K
FAYS	AUTAUGA CO.	6/8/2014	16:25	Hail	1.00 in.	0.00K	0.00K
TALLASSEE	ELMORE CO.	6/17/2016	15:55	Hail	1.00 in.	0.00K	0.00K
DEXTER	ELMORE CO.	6/22/2018	16:05	Hail	1.00 in.	0.00K	0.00K
TITUS	ELMORE CO.	3/25/2019	16:36	Hail	1.00 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	5/1/2019	15:46	Hail	1.00 in.	0.00K	0.00K
WETUMPKA	ELMORE CO.	5/4/2019	14:57	Hail	1.00 in.	0.00K	0.00K
SANTUCK	ELMORE CO.	5/4/2019	15:02	Hail	1.00 in.	0.00K	0.00K
Totals:						5.00K	0.00K

Table 7.4.4: Thunderstorm

Location	County	Date	Time	Type	Mag	Inj	PrD
WETUMPKA	ELMORE CO.	3/20/2006	18:00	Thunderstorm Wind	50 kts. EG	0	5.00K
MONTGOMERY	MONTGOMERY CO.	3/20/2006	19:10	Thunderstorm Wind	52 kts. EG	0	50.00K
MARBURY	AUTAUGA CO.	4/19/2006	20:58	Thunderstorm Wind	50 kts. EG	0	1.00K
BILLINGSLEY	AUTAUGA CO.	4/19/2006	21:16	Thunderstorm Wind	50 kts. EG	0	5.00K
PRATTVILLE	AUTAUGA CO.	5/10/2006	15:12	Thunderstorm Wind	50 kts. EG	0	10.00K
MILLBROOK	ELMORE CO.	7/22/2006	13:36	Thunderstorm Wind	50 kts. EG	0	2.00K
JONES	AUTAUGA CO.	7/29/2006	17:20	Thunderstorm Wind	50 kts. EG	0	1.00K
WETUMPKA	ELMORE CO.	8/15/2006	16:45	Thunderstorm Wind	50 kts. EG	0	4.00K
PRATTVILLE	AUTAUGA CO.	8/15/2006	16:45	Thunderstorm Wind	50 kts. EG	0	2.00K
TITUS	ELMORE CO.	8/30/2006	16:50	Thunderstorm Wind	50 kts. EG	0	2.00K
TITUS	ELMORE CO.	8/30/2006	16:55	Thunderstorm Wind	50 kts. EG	0	2.00K
MONTGOMERY	MONTGOMERY CO.	1/5/2007	6:23	Thunderstorm Wind	50 kts. EG	0	0.00K
INDEPENDENCE	AUTAUGA CO.	2/13/2007	18:41	Thunderstorm Wind	50 kts. EG	0	3.00K
BOOTH	AUTAUGA CO.	2/13/2007	18:52	Thunderstorm Wind	50 kts. EG	0	3.00K
MONTGOMERY	MONTGOMERY CO.	2/13/2007	19:00	Thunderstorm Wind	50 kts. EG	0	3.00K
PINEDALE	MONTGOMERY CO.	3/1/2007	20:00	Thunderstorm Wind	52 kts. EG	0	0.00K
PRATTVILLE	AUTAUGA CO.	4/4/2007	2:24	Thunderstorm Wind	39 kts. EG	0	2.00K

PIKE ROAD	MONTGOMERY CO.	4/14/2007	15:28	Thunderstorm Wind	52 kts. EG	0	0.00K
GRADY	MONTGOMERY CO.	6/18/2007	17:00	Thunderstorm Wind	30 kts. EG	0	1.00K
MONTGOMERY	MONTGOMERY CO.	6/18/2007	17:55	Thunderstorm Wind	30 kts. EG	0	1.00K
MILLBROOK	ELMORE CO.	6/18/2007	18:12	Thunderstorm Wind	30 kts. EG	0	2.00K
MONTGOMERY	MONTGOMERY CO.	6/30/2007	13:05	Thunderstorm Wind	50 kts. EG	0	2.00K
WALLSBURG	ELMORE CO.	8/17/2007	16:45	Thunderstorm Wind	50 kts. EG	0	5.00K
RAMER	MONTGOMERY CO.	8/17/2007	20:10	Thunderstorm Wind	50 kts. EG	0	5.00K
MONTGOMERY	MONTGOMERY CO.	8/25/2007	16:21	Thunderstorm Wind	50 kts. EG	0	20.00K
AUTAUGAVILLE	AUTAUGA CO.	10/23/2007	0:30	Thunderstorm Wind	50 kts. EG	0	2.00K
MADISON	MONTGOMERY CO.	2/6/2008	7:25	Thunderstorm Wind	50 kts. EG	0	1.00K
PRATTMONT	AUTAUGA CO.	2/12/2008	18:50	Thunderstorm Wind	50 kts. EG	0	5.00K
CHISHOLM	MONTGOMERY CO.	2/12/2008	18:55	Thunderstorm Wind	50 kts. EG	0	20.00K
WARE	ELMORE CO.	2/26/2008	6:50	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTVILLE ARPT	AUTAUGA CO.	2/26/2008	6:50	Thunderstorm Wind	50 kts. EG	0	10.00K
SPRAGUE	MONTGOMERY CO.	2/26/2008	6:50	Thunderstorm Wind	50 kts. EG	0	5.00K
PINE LEVEL	AUTAUGA CO.	3/4/2008	3:40	Thunderstorm Wind	50 kts. EG	0	1.00K

AUTAUGA (ZONE)	AUTAUGA (ZONE)	3/7/2008	4:40	Strong Wind	40 kts. EG	0	5.00K
WARE	ELMORE CO.	4/4/2008	16:55	Thunderstorm Wind	50 kts. EG	0	2.00K
TALLASSEE	ELMORE CO.	4/4/2008	17:14	Thunderstorm Wind	50 kts. EG	0	2.00K
TUCKABATCHIE	ELMORE CO.	4/4/2008	17:50	Thunderstorm Wind	50 kts. EG	0	2.00K
MARTIN LAKE SOUTH	ELMORE CO.	5/8/2008	18:10	Thunderstorm Wind	50 kts. EG	0	3.00K
MONTGOMERY	MONTGOMERY CO.	5/8/2008	18:35	Thunderstorm Wind	87 kts. EG	0	500.00K
JORDAN LAKE	ELMORE CO.	6/9/2008	18:26	Thunderstorm Wind	50 kts. EG	0	2.00K
PRATTMONT	AUTAUGA CO.	6/11/2008	16:40	Thunderstorm Wind	50 kts. EG	0	0.50K
PRATTMONT	AUTAUGA CO.	6/11/2008	16:42	Thunderstorm Wind	50 kts. EG	0	0.50K
PRATTVILLE	AUTAUGA CO.	6/11/2008	16:45	Thunderstorm Wind	50 kts. EG	0	2.00K
PINEDALE	MONTGOMERY CO.	6/11/2008	16:45	Thunderstorm Wind	50 kts. EG	0	2.00K
POSEYS XRDS	AUTAUGA CO.	6/11/2008	17:15	Thunderstorm Wind	50 kts. EG	0	2.00K
FAYS	AUTAUGA CO.	6/28/2008	19:27	Thunderstorm Wind	39 kts. EG	0	0.50K
ROBINSON SPGS	ELMORE CO.	6/28/2008	20:00	Thunderstorm Wind	39 kts. EG	0	0.50K
MULBERRY	AUTAUGA CO.	6/29/2008	15:30	Thunderstorm Wind	50 kts. EG	0	2.00K
PRATTVILLE	AUTAUGA CO.	6/29/2008	16:02	Thunderstorm Wind	50 kts. EG	0	5.00K
(MXF)MAXWELL AFB MNT	MONTGOMERY CO.	6/29/2008	16:05	Thunderstorm Wind	52 kts. MG	0	0.00K

MONTGOMERY	MONTGOMERY CO.	6/29/2008	16:07	Thunderstorm Wind	50 kts. EG	0	2.00K
FRIENDSHIP	MONTGOMERY CO.	7/5/2008	16:20	Thunderstorm Wind	50 kts. EG	0	0.00K
KENT	ELMORE CO.	7/5/2008	17:07	Thunderstorm Wind	50 kts. EG	0	2.00K
ECLECTIC	ELMORE CO.	7/11/2008	16:25	Thunderstorm Wind	50 kts. EG	0	1.00K
AUTAUGAVILLE	AUTAUGA CO.	7/11/2008	17:45	Thunderstorm Wind	50 kts. EG	0	1.00K
BOOTH	AUTAUGA CO.	7/11/2008	17:45	Thunderstorm Wind	50 kts. EG	0	1.00K
CLAUD	ELMORE CO.	7/12/2008	13:12	Thunderstorm Wind	50 kts. EG	0	1.00K
COTTON	ELMORE CO.	7/13/2008	12:45	Thunderstorm Wind	50 kts. EG	0	1.00K
SANTUCK	ELMORE CO.	7/13/2008	12:48	Thunderstorm Wind	45 kts. EG	0	0.50K
WETUMPKA	ELMORE CO.	7/22/2008	17:29	Thunderstorm Wind	40 kts. EG	0	1.00K
BOOTH	AUTAUGA CO.	8/7/2008	14:20	Thunderstorm Wind	50 kts. EG	0	1.00K
PRATTMONT	AUTAUGA CO.	8/7/2008	14:35	Thunderstorm Wind	50 kts. EG	0	1.00K
BUTTS MILL	ELMORE CO.	8/31/2008	17:45	Thunderstorm Wind	40 kts. EG	0	10.00K
MILLBROOK	ELMORE CO.	9/8/2008	16:25	Thunderstorm Wind	30 kts. EG	0	1.00K
MITYLENE	MONTGOMERY CO.	2/18/2009	22:50	Thunderstorm Wind	50 kts. EG	0	1.00K
VIDA	AUTAUGA CO.	2/27/2009	17:21	Thunderstorm Wind	50 kts. EG	0	1.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	3/28/2009	5:25	Strong Wind	35 kts. EG	0	15.00K
AUTAUGAVILLE	AUTAUGA CO.	4/10/2009	19:15	Thunderstorm Wind	40 kts. EG	0	0.50K

PRATTMONT	AUTAUGA CO.	4/10/2009	19:20	Thunderstorm Wind	40 kts. EG	0	1.00K
BOOTH	AUTAUGA CO.	4/10/2009	20:17	Thunderstorm Wind	50 kts. EG	0	2.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	4/13/2009	1:30	Strong Wind	35 kts. EG	0	20.00K
ELMORE (ZONE)	ELMORE (ZONE)	4/13/2009	3:30	Strong Wind	35 kts. EG	0	10.00K
BOOTH	AUTAUGA CO.	5/3/2009	13:47	Thunderstorm Wind	50 kts. EG	0	5.00K
COBBS FORD	ELMORE CO.	5/3/2009	14:08	Thunderstorm Wind	50 kts. EG	0	3.00K
MILLBROOK	ELMORE CO.	5/3/2009	14:08	Thunderstorm Wind	50 kts. EG	0	6.00K
MITYLENE	MONTGOMERY CO.	5/3/2009	14:10	Thunderstorm Wind	50 kts. EG	0	2.00K
MITYLENE	MONTGOMERY CO.	5/3/2009	14:10	Thunderstorm Wind	50 kts. EG	0	10.00K
PINEDALE	MONTGOMERY CO.	5/3/2009	14:15	Thunderstorm Wind	50 kts. EG	0	1.00K
WETUMPKA	ELMORE CO.	5/3/2009	14:20	Thunderstorm Wind	50 kts. EG	0	10.00K
WADSWORTH	AUTAUGA CO.	6/2/2009	16:34	Thunderstorm Wind	50 kts. EG	0	1.00K
INDEPENDENCE	AUTAUGA CO.	6/12/2009	20:37	Thunderstorm Wind	43 kts. EG	0	5.00K
BOOTH	AUTAUGA CO.	6/12/2009	20:48	Thunderstorm Wind	40 kts. EG	0	0.50K
MARBURY	AUTAUGA CO.	6/14/2009	11:46	Thunderstorm Wind	50 kts. EG	0	2.00K
BILLINGSLEY	AUTAUGA CO.	6/14/2009	11:53	Thunderstorm Wind	50 kts. EG	0	2.00K
WADSWORTH	AUTAUGA CO.	6/14/2009	11:55	Thunderstorm Wind	50 kts. EG	0	2.00K
SANTUCK	ELMORE CO.	6/14/2009	12:05	Thunderstorm Wind	55 kts. EG	0	20.00K

INDEPENDENCE	AUTAUGA CO.	6/14/2009	12:08	Thunderstorm Wind	50 kts. EG	0	12.00K
WETUMPKA	ELMORE CO.	6/14/2009	12:09	Thunderstorm Wind	50 kts. EG	0	2.00K
COOSADA	ELMORE CO.	6/14/2009	12:12	Thunderstorm Wind	45 kts. EG	0	0.50K
PRATTMONT	AUTAUGA CO.	6/14/2009	12:13	Thunderstorm Wind	50 kts. EG	0	3.00K
PINEDALE	MONTGOMERY CO.	6/14/2009	12:48	Thunderstorm Wind	50 kts. EG	0	2.00K
TUCKABATCHIE	ELMORE CO.	6/15/2009	23:10	Thunderstorm Wind	50 kts. EG	0	1.00K
MONTGOMERY	MONTGOMERY CO.	6/28/2009	16:10	Thunderstorm Wind	50 kts. EG	0	20.00K
(MXF)MAXWELL AFB MNT	MONTGOMERY CO.	6/28/2009	16:30	Thunderstorm Wind	45 kts. EG	0	0.50K
SYKES MILL	ELMORE CO.	6/28/2009	17:10	Thunderstorm Wind	50 kts. EG	0	2.00K
MILLBROOK	ELMORE CO.	7/5/2009	17:11	Thunderstorm Wind	39 kts. EG	0	1.00K
SANTUCK	ELMORE CO.	7/5/2009	17:16	Thunderstorm Wind	50 kts. EG	0	2.00K
MARTIN LAKE SOUTH	ELMORE CO.	7/5/2009	17:22	Thunderstorm Wind	52 kts. EG	0	0.00K
MILLBROOK	ELMORE CO.	7/26/2009	16:48	Thunderstorm Wind	50 kts. EG	0	0.50K
WETUMPKA	ELMORE CO.	8/4/2009	15:35	Thunderstorm Wind	50 kts. EG	0	10.00K
WETUMPKA	ELMORE CO.	8/5/2009	13:22	Thunderstorm Wind	50 kts. EG	0	10.00K
MAN	ELMORE CO.	8/5/2009	13:40	Thunderstorm Wind	50 kts. EG	0	1.00K
WETUMPKA	ELMORE CO.	8/11/2009	18:05	Thunderstorm Wind	50 kts. EG	0	3.00K
WETUMPKA	ELMORE CO.	1/24/2010	11:00	Thunderstorm Wind	50 kts. EG	0	3.00K

MITYLENE	MONTGOMERY CO.	5/20/2010	18:45	Thunderstorm Wind	50 kts. EG	0	2.00K
PINEDALE	MONTGOMERY CO.	5/28/2010	16:15	Thunderstorm Wind	40 kts. EG	0	1.00K
MITYLENE	MONTGOMERY CO.	6/14/2010	17:45	Thunderstorm Wind	45 kts. EG	0	5.00K
BUTTS MILL	ELMORE CO.	6/15/2010	15:40	Thunderstorm Wind	45 kts. EG	0	3.00K
MARBURY	AUTAUGA CO.	6/15/2010	15:41	Thunderstorm Wind	50 kts. EG	0	3.00K
DEXTER	ELMORE CO.	6/19/2010	14:10	Thunderstorm Wind	50 kts. EG	0	2.00K
CHISHOLM	MONTGOMERY CO.	6/19/2010	14:15	Thunderstorm Wind	50 kts. EG	0	3.00K
TALLASSEE	ELMORE CO.	6/19/2010	14:22	Thunderstorm Wind	39 kts. EG	0	1.00K
SNOWDOUN	MONTGOMERY CO.	6/19/2010	14:30	Thunderstorm Wind	55 kts. EG	0	10.00K
PINE LEVEL	MONTGOMERY CO.	6/19/2010	15:00	Thunderstorm Wind	50 kts. EG	0	3.00K
MARTIN LAKE SOUTH	ELMORE CO.	6/21/2010	13:35	Thunderstorm Wind	50 kts. EG	0	2.00K
ECLECTIC	ELMORE CO.	6/21/2010	13:46	Thunderstorm Wind	60 kts. EG	0	20.00K
ECLECTIC	ELMORE CO.	7/9/2010	13:45	Thunderstorm Wind	40 kts. EG	0	10.00K
MILLBROOK	ELMORE CO.	7/9/2010	18:10	Thunderstorm Wind	50 kts. EG	0	5.00K
WALLSBURG	ELMORE CO.	7/9/2010	19:05	Thunderstorm Wind	55 kts. EG	0	5.00K
WARE	ELMORE CO.	7/23/2010	17:35	Thunderstorm Wind	60 kts. EG	0	3.00K
MARBURY	AUTAUGA CO.	7/26/2010	18:10	Thunderstorm Wind	40 kts. EG	0	25.00K

DEXTER	ELMORE CO.	7/30/2010	16:20	Thunderstorm Wind	55 kts. EG	0	1.00K
NORTH ELMORE	ELMORE CO.	8/4/2010	13:20	Thunderstorm Wind	55 kts. EG	0	5.50K
BOOTH	AUTAUGA CO.	8/22/2010	13:25	Thunderstorm Wind	60 kts. EG	0	3.00K
BONITA	AUTAUGA CO.	10/24/2010	17:25	Thunderstorm Wind	60 kts. EG	0	8.00K
BONITA	AUTAUGA CO.	10/25/2010	3:45	Thunderstorm Wind	60 kts. EG	0	3.00K
MILLBROOK	ELMORE CO.	11/30/2010	10:13	Thunderstorm Wind	50 kts. EG	0	4.00K
ECLECTIC	ELMORE CO.	11/30/2010	10:45	Thunderstorm Wind	45 kts. EG	0	5.00K
WEOKA	ELMORE CO.	2/1/2011	18:45	Heavy Rain		0	0.00K
HOLTVILLE	ELMORE CO.	2/1/2011	18:45	Heavy Rain		0	0.00K
HAYNES	AUTAUGA CO.	3/26/2011	13:57	Thunderstorm Wind	87 kts. EG	0	55.00K
PINE LEVEL	AUTAUGA CO.	3/26/2011	14:22	Thunderstorm Wind	50 kts. EG	0	2.00K
PRATTVILLE	AUTAUGA CO.	3/26/2011	14:45	Thunderstorm Wind	55 kts. EG	0	8.00K
DEATSVILLE	ELMORE CO.	4/4/2011	20:18	Thunderstorm Wind	50 kts. EG	0	0.00K
MILLBROOK	ELMORE CO.	4/4/2011	20:31	Thunderstorm Wind	52 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	4/4/2011	20:37	Thunderstorm Wind	50 kts. EG	0	7.00K
MITYLENE	MONTGOMERY CO.	4/4/2011	20:40	Thunderstorm Wind	52 kts. EG	0	0.00K
AUTAUGAVILLE	AUTAUGA CO.	4/11/2011	19:50	Thunderstorm Wind	50 kts. EG	0	2.00K
PINE LEVEL	AUTAUGA CO.	4/11/2011	20:00	Thunderstorm Wind	50 kts. EG	0	5.00K
PRATTVILLE	AUTAUGA CO.	4/11/2011	20:03	Thunderstorm Wind	50 kts. EG	0	1.00K
COOSADA	ELMORE CO.	4/11/2011	20:12	Thunderstorm Wind	50 kts. EG	0	3.00K

DEVENPORT	MONTGOMERY CO.	4/15/2011	22:45	Thunderstorm Wind	50 kts. MG	0	5.00K
PRATTVILLE	AUTAUGA CO.	5/26/2011	13:00	Thunderstorm Wind	50 kts. EG	0	2.00K
MILLBROOK	ELMORE CO.	5/26/2011	13:12	Thunderstorm Wind	50 kts. EG	0	2.00K
ROBINSON SPGS	ELMORE CO.	5/26/2011	13:21	Thunderstorm Wind	50 kts. EG	0	2.00K
ROLLINS	AUTAUGA CO.	5/26/2011	13:30	Thunderstorm Wind	50 kts. EG	0	6.00K
SYKES MILL	ELMORE CO.	5/26/2011	13:41	Thunderstorm Wind	45 kts. EG	0	0.50K
RIDDLE	ELMORE CO.	6/11/2011	13:45	Thunderstorm Wind	40 kts. EG	0	0.50K
SANTUCK	ELMORE CO.	6/11/2011	14:04	Thunderstorm Wind	50 kts. EG	0	1.00K
WETUMPKA	ELMORE CO.	6/11/2011	14:15	Thunderstorm Wind	50 kts. EG	0	1.00K
PINE FLAT	AUTAUGA CO.	6/17/2011	12:40	Thunderstorm Wind	45 kts. EG	0	0.50K
COOSADA	ELMORE CO.	6/17/2011	12:49	Thunderstorm Wind	45 kts. EG	0	1.00K
PRATTMONT	AUTAUGA CO.	6/17/2011	13:00	Thunderstorm Wind	50 kts. EG	0	2.00K
MILLBROOK	ELMORE CO.	6/17/2011	13:00	Thunderstorm Wind	45 kts. EG	0	0.50K
PINEDALE	MONTGOMERY CO.	6/21/2011	19:38	Thunderstorm Wind	50 kts. EG	0	2.00K
DEATSVILLE	ELMORE CO.	6/26/2011	16:44	Thunderstorm Wind	50 kts. EG	0	2.00K
WETUMPKA	ELMORE CO.	7/2/2011	15:30	Thunderstorm Wind	35 kts. EG	0	1.00K
CLAUD	ELMORE CO.	7/3/2011	15:00	Thunderstorm Wind	50 kts. EG	0	1.00K
MITYLENE	MONTGOMERY CO.	7/14/2011	13:23	Thunderstorm Wind	50 kts. EG	0	2.00K

PERRYS MILL	MONTGOMERY CO.	7/14/2011	13:38	Thunderstorm Wind	50 kts. EG	0	5.00K
MONTGOMERY	MONTGOMERY CO.	8/8/2011	16:35	Thunderstorm Wind	45 kts. EG	0	2.00K
WETUMPKA	ELMORE CO.	8/13/2011	16:20	Thunderstorm Wind	43 kts. EG	0	5.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	9/5/2011	14:36	Strong Wind	39 kts. EG	0	2.00K
ELMORE (ZONE)	ELMORE (ZONE)	9/5/2011	15:18	Strong Wind	39 kts. EG	0	2.00K
ELMORE (ZONE)	ELMORE (ZONE)	9/5/2011	17:19	Strong Wind	35 kts. EG	0	2.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	9/5/2011	20:57	Strong Wind	39 kts. MG	0	2.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	9/5/2011	21:15	Strong Wind	39 kts. EG	0	2.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	9/5/2011	21:15	Strong Wind	39 kts. EG	0	2.00K
AUTAUGAVILLE	AUTAUGA CO.	9/20/2011	13:07	Thunderstorm Wind	50 kts. EG	0	5.00K
DEATSVILLE	ELMORE CO.	9/20/2011	14:30	Thunderstorm Wind	50 kts. EG	0	5.00K
MONTGOMERY	MONTGOMERY CO.	11/16/2011	11:01	Thunderstorm Wind	52 kts. EG	0	2.00K
MONTGOMERY	MONTGOMERY CO.	11/16/2011	11:02	Thunderstorm Wind	52 kts. EG	0	2.00K
CHISHOLM	MONTGOMERY CO.	11/16/2011	11:06	Thunderstorm Wind	52 kts. EG	0	2.00K

MITYLENE	MONTGOMERY CO.	11/16/2011	11:10	Thunderstorm Wind	52 kts. EG	0	2.00K
WARE	ELMORE CO.	11/16/2011	11:27	Thunderstorm Wind	52 kts. EG	0	2.00K
(MGM)MONTGOMERY ARPT	MONTGOMERY CO.	11/22/2011	16:58	Thunderstorm Wind	40 kts. EG	0	5.00K
STATESVILLE	AUTAUGA CO.	12/22/2011	13:34	Thunderstorm Wind	50 kts. EG	0	1.00K
TITUS	ELMORE CO.	12/22/2011	14:16	Thunderstorm Wind	50 kts. EG	0	1.00K
TITUS	ELMORE CO.	12/22/2011	14:23	Thunderstorm Wind	50 kts. EG	0	1.00K
MONTGOMERY	MONTGOMERY CO.	1/8/2012	18:33	Thunderstorm Wind	52 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	3/23/2012	15:12	Thunderstorm Wind	50 kts. EG	0	0.00K
CHISHOLM	MONTGOMERY CO.	3/30/2012	12:25	Thunderstorm Wind	50 kts. EG	0	0.00K
MONTGOMERY	MONTGOMERY CO.	5/31/2012	15:18	Thunderstorm Wind	50 kts. EG	0	0.00K
SPEIGENER	ELMORE CO.	6/5/2012	8:53	Thunderstorm Wind	60 kts. EG	0	0.00K
ECLECTIC	ELMORE CO.	6/11/2012	21:08	Thunderstorm Wind	50 kts. EG	0	0.00K
MAN	ELMORE CO.	6/11/2012	21:50	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	6/14/2012	17:00	Thunderstorm Wind	50 kts. EG	0	0.00K
CLAUD	ELMORE CO.	6/14/2012	17:00	Thunderstorm Wind	50 kts. EG	0	0.00K
FLOYD	ELMORE CO.	6/14/2012	17:02	Thunderstorm Wind	50 kts. EG	0	0.00K
WARE	ELMORE CO.	7/3/2012	14:48	Thunderstorm Wind	50 kts. EG	0	0.00K
FAYS	AUTAUGA CO.	7/3/2012	14:55	Thunderstorm Wind	39 kts. EG	0	2.00K

STATESVILLE	AUTAUGA CO.	7/5/2012	19:32	Thunderstorm Wind	50 kts. EG	0	0.00K
MILLBROOK	ELMORE CO.	7/10/2012	15:08	Thunderstorm Wind	39 kts. EG	1	0.00K
TALLASSEE	ELMORE CO.	7/10/2012	15:54	Thunderstorm Wind	50 kts. EG	0	0.00K
ECLECTIC	ELMORE CO.	7/10/2012	16:00	Thunderstorm Wind	50 kts. EG	0	0.00K
COTTON	ELMORE CO.	7/17/2012	13:50	Thunderstorm Wind	50 kts. EG	0	0.00K
WARE	ELMORE CO.	7/17/2012	14:00	Thunderstorm Wind	50 kts. EG	0	0.00K
NEW PROSPECT	AUTAUGA CO.	7/31/2012	2:15	Thunderstorm Wind	50 kts. EG	0	0.00K
NEW PROSPECT	AUTAUGA CO.	7/31/2012	2:15	Thunderstorm Wind	50 kts. EG	0	0.00K
NEW PROSPECT	AUTAUGA CO.	7/31/2012	2:15	Thunderstorm Wind	50 kts. EG	0	0.00K
WHITE CITY	AUTAUGA CO.	7/31/2012	2:15	Thunderstorm Wind	50 kts. EG	0	0.00K
POSEYS XRDS	AUTAUGA CO.	7/31/2012	2:30	Thunderstorm Wind	50 kts. EG	0	0.00K
MULBERRY	AUTAUGA CO.	7/31/2012	2:50	Thunderstorm Wind	50 kts. EG	0	0.00K
DEVENPORT	MONTGOMERY CO.	12/10/2012	13:22	Thunderstorm Wind	50 kts. EG	0	0.00K
MT MEIGS STATION	MONTGOMERY CO.	12/10/2012	13:31	Thunderstorm Wind	55 kts. EG	0	0.00K
SYKES MILL	ELMORE CO.	12/20/2012	10:33	Thunderstorm Wind	55 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	12/20/2012	10:44	Thunderstorm Wind	55 kts. EG	0	0.00K
PIKE ROAD	MONTGOMERY CO.	12/20/2012	11:05	Thunderstorm Wind	50 kts. EG	0	0.00K
(MGM)MONTGOMERY ARPT	MONTGOMERY CO.	12/25/2012	20:50	Thunderstorm Wind	50 kts. EG	0	0.00K

PRATTMONT	AUTAUGA CO.	12/25/2012	20:53	Thunderstorm Wind	55 kts. EG	0	0.00K
PRATTVILLE JCT	ELMORE CO.	12/25/2012	21:05	Thunderstorm Wind	60 kts. EG	0	0.00K
RAMER	MONTGOMERY CO.	12/25/2012	22:12	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTMONT	AUTAUGA CO.	1/30/2013	6:18	Thunderstorm Wind	50 kts. EG	0	0.00K
FAYS	AUTAUGA CO.	1/30/2013	6:25	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	1/30/2013	10:35	Thunderstorm Wind	50 kts. EG	0	0.00K
TALLASSEE	ELMORE CO.	1/30/2013	11:48	Thunderstorm Wind	50 kts. EG	0	0.00K
MARTIN LAKE SOUTH	ELMORE CO.	3/5/2013	14:52	Thunderstorm Wind	50 kts. EG	0	0.00K
MILLBROOK	ELMORE CO.	3/18/2013	16:30	Thunderstorm Wind	55 kts. EG	0	0.00K
LE GRAND	MONTGOMERY CO.	4/11/2013	18:20	Thunderstorm Wind	55 kts. EG	0	0.00K
PINEDALE	MONTGOMERY CO.	4/11/2013	18:28	Thunderstorm Wind	50 kts. EG	0	0.00K
BOOTH	AUTAUGA CO.	6/17/2013	14:54	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	6/17/2013	15:15	Thunderstorm Wind	50 kts. EG	0	0.00K
SEMAN	ELMORE CO.	6/27/2013	17:05	Thunderstorm Wind	50 kts. EG	0	0.00K
COTTON	ELMORE CO.	6/27/2013	17:18	Thunderstorm Wind	55 kts. EG	0	0.00K
RED HILL	ELMORE CO.	6/27/2013	17:22	Thunderstorm Wind	50 kts. EG	0	0.00K
WADSWORTH	AUTAUGA CO.	6/27/2013	22:00	Thunderstorm Wind	50 kts. EG	0	0.00K
BOOTH	AUTAUGA CO.	6/27/2013	22:40	Thunderstorm Wind	50 kts. EG	0	0.00K

BOOTH	AUTAUGA CO.	6/28/2013	11:50	Thunderstorm Wind	55 kts. EG	0	0.00K
ROBINSON SPGS	ELMORE CO.	6/28/2013	11:53	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	6/28/2013	12:00	Thunderstorm Wind	55 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	6/28/2013	12:10	Thunderstorm Wind	50 kts. EG	0	0.00K
MARTIN LAKE SOUTH	ELMORE CO.	6/28/2013	12:12	Thunderstorm Wind	50 kts. EG	0	0.00K
SNOWDOUN	MONTGOMERY CO.	6/28/2013	12:39	Thunderstorm Wind	55 kts. EG	0	0.00K
BONITA	AUTAUGA CO.	7/23/2013	14:05	Thunderstorm Wind	50 kts. EG	0	0.00K
AUTAUGAVILLE	AUTAUGA CO.	7/23/2013	14:10	Thunderstorm Wind	50 kts. EG	0	0.00K
SNOWDOUN	MONTGOMERY CO.	7/23/2013	14:20	Thunderstorm Wind	50 kts. EG	0	0.00K
JORDAN LAKE	ELMORE CO.	7/23/2013	14:39	Thunderstorm Wind	55 kts. EG	0	0.00K
COBBS FORD	ELMORE CO.	7/23/2013	14:39	Thunderstorm Wind	50 kts. EG	0	0.00K
ROBINSON SPGS	ELMORE CO.	7/23/2013	14:40	Thunderstorm Wind	55 kts. EG	0	0.00K
HOLTVILLE	ELMORE CO.	7/23/2013	14:45	Thunderstorm Wind	50 kts. EG	0	0.00K
MONTGOMERY	MONTGOMERY CO.	7/23/2013	14:50	Thunderstorm Wind	65 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	7/23/2013	14:50	Thunderstorm Wind	54 kts. MG	0	0.00K
COOSADA	ELMORE CO.	7/23/2013	15:10	Thunderstorm Wind	55 kts. EG	0	0.00K
TALLASSEE	ELMORE CO.	7/23/2013	15:20	Thunderstorm Wind	50 kts. EG	0	0.00K
POSEYS XRDS	AUTAUGA CO.	1/11/2014	6:15	Thunderstorm Wind	55 kts. EG	0	0.00K

FORESTER	AUTAUGA CO.	1/11/2014	6:20	Thunderstorm Wind	50 kts. EG	0	0.00K
DEATSVILLE	ELMORE CO.	1/11/2014	6:30	Thunderstorm Wind	55 kts. EG	0	0.00K
WALLSBURG	ELMORE CO.	1/11/2014	7:08	Thunderstorm Wind	55 kts. EG	0	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	4/7/2014	4:40	Strong Wind	40 kts. EG	1	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	4/18/2014	6:50	Strong Wind	39 kts. EG	0	4.00K
RED HILL	ELMORE CO.	6/6/2014	15:28	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTMONT	AUTAUGA CO.	6/10/2014	12:25	Thunderstorm Wind	50 kts. EG	0	0.00K
COOSADA	ELMORE CO.	6/10/2014	12:58	Thunderstorm Wind	50 kts. EG	0	0.00K
FAYS	AUTAUGA CO.	8/18/2014	14:50	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	8/18/2014	15:03	Thunderstorm Wind	50 kts. EG	0	0.00K
VINE HILL	AUTAUGA CO.	10/13/2014	14:05	Thunderstorm Wind	50 kts. EG	0	0.00K
MONTGOMERY	MONTGOMERY CO.	6/24/2015	18:55	Thunderstorm Wind	50 kts. EG	0	0.00K
BUTTS MILL	ELMORE CO.	6/24/2015	19:35	Thunderstorm Wind	50 kts. EG	0	0.00K
LE GRAND	MONTGOMERY CO.	6/24/2015	19:45	Thunderstorm Wind	50 kts. EG	0	0.00K
CLAUD	ELMORE CO.	6/24/2015	19:50	Thunderstorm Wind	50 kts. EG	0	0.00K
CLAUD	ELMORE CO.	7/4/2015	16:30	Thunderstorm Wind	50 kts. EG	0	0.00K
FLOYD	ELMORE CO.	7/4/2015	16:56	Thunderstorm Wind	50 kts. EG	0	0.00K
POSEYS XRDS	AUTAUGA CO.	7/14/2015	20:40	Thunderstorm Wind	50 kts. EG	0	0.00K

BOOTH	AUTAUGA CO.	7/14/2015	20:45	Thunderstorm Wind	50 kts. EG	0	0.00K
BILLINGSLEY	AUTAUGA CO.	7/15/2015	16:19	Thunderstorm Wind	55 kts. EG	0	0.00K
TUCKABATCHIE	ELMORE CO.	7/15/2015	22:05	Thunderstorm Wind	50 kts. EG	0	0.00K
SANTUCK	ELMORE CO.	7/22/2015	17:40	Thunderstorm Wind	50 kts. EG	0	0.00K
KENT	ELMORE CO.	3/31/2016	20:48	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	4/29/2016	19:20	Thunderstorm Wind	50 kts. EG	0	0.00K
SEMAN	ELMORE CO.	6/15/2016	18:44	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	6/17/2016	14:22	Thunderstorm Wind	55 kts. EG	0	0.00K
TALLASSEE	ELMORE CO.	6/17/2016	15:53	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTMONT	AUTAUGA CO.	6/17/2016	16:00	Thunderstorm Wind	50 kts. EG	0	0.00K
MONTGOMERY	MONTGOMERY CO.	6/17/2016	16:25	Thunderstorm Wind	50 kts. EG	0	0.00K
AUTAUGAVILLE	AUTAUGA CO.	7/9/2016	13:50	Thunderstorm Wind	50 kts. EG	0	0.00K
WARE	ELMORE CO.	9/11/2016	14:48	Thunderstorm Wind	58 kts. MG	0	0.00K
COBBS FORD	ELMORE CO.	1/21/2017	7:40	Thunderstorm Wind	50 kts. EG	0	0.00K
CLAUD	ELMORE CO.	1/21/2017	7:50	Thunderstorm Wind	50 kts. EG	0	0.00K
DEATSVILLE	ELMORE CO.	1/22/2017	12:55	Thunderstorm Wind	50 kts. EG	0	0.00K
DEATSVILLE	ELMORE CO.	1/22/2017	12:56	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	3/10/2017	4:12	Thunderstorm Wind	50 kts. EG	0	0.00K
MILLBROOK	ELMORE CO.	3/10/2017	4:16	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTMONT	AUTAUGA CO.	3/10/2017	4:20	Thunderstorm Wind	50 kts. EG	0	0.00K

COOSADA	ELMORE CO.	4/3/2017	7:06	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTVILLE	AUTAUGA CO.	4/5/2017	3:15	Thunderstorm Wind	50 kts. EG	0	0.00K
TALLASSEE	ELMORE CO.	5/20/2017	18:05	Thunderstorm Wind	50 kts. EG	0	0.00K
TALLASSEE	ELMORE CO.	5/20/2017	21:13	Thunderstorm Wind	50 kts. EG	0	0.00K
BILLINGSLEY	AUTAUGA CO.	6/15/2017	14:08	Thunderstorm Wind	50 kts. EG	0	0.00K
HOLTVILLE	ELMORE CO.	6/15/2017	15:55	Thunderstorm Wind	60 kts. EG	0	0.00K
COTTON	ELMORE CO.	6/15/2017	16:04	Thunderstorm Wind	60 kts. EG	0	0.00K
NEMAN	ELMORE CO.	6/15/2017	16:12	Thunderstorm Wind	60 kts. EG	1	0.00K
RED HILL	ELMORE CO.	7/27/2017	14:17	Thunderstorm Wind	50 kts. EG	0	0.00K
ROLLINS	AUTAUGA CO.	3/29/2018	14:45	Thunderstorm Wind	52 kts. EG	0	0.00K
VINE HILL	AUTAUGA CO.	4/3/2018	20:54	Thunderstorm Wind	50 kts. EG	0	0.00K
CLAUD	ELMORE CO.	6/28/2018	14:49	Thunderstorm Wind	50 kts. EG	0	0.00K
BOOTH	AUTAUGA CO.	6/28/2018	15:14	Thunderstorm Wind	50 kts. EG	0	0.00K
MONTGOMERY	MONTGOMERY CO.	6/28/2018	15:20	Thunderstorm Wind	50 kts. EG	0	0.00K
PRATTMONT	AUTAUGA CO.	2/12/2019	10:36	Thunderstorm Wind	50 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	2/12/2019	10:52	Thunderstorm Wind	55 kts. EG	0	0.00K
AUTAUGAVILLE	AUTAUGA CO.	3/3/2019	13:15	Thunderstorm Wind	50 kts. EG	0	0.00K
INDEPENDENCE	AUTAUGA CO.	3/3/2019	13:16	Thunderstorm Wind	50 kts. EG	0	0.00K
TITUS	ELMORE CO.	3/25/2019	16:34	Thunderstorm Wind	50 kts. EG	0	0.00K

CENTRAL EVANS ARPT	ELMORE CO.	3/25/2019	16:50	Thunderstorm Wind	50 kts. EG	0	0.00K
TITUS	ELMORE CO.	4/18/2019	19:38	Thunderstorm Wind	50 kts. EG	0	0.00K
ELMORE	ELMORE CO.	5/4/2019	14:43	Thunderstorm Wind	55 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	5/4/2019	14:51	Thunderstorm Wind	55 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	5/4/2019	14:53	Thunderstorm Wind	55 kts. EG	0	0.00K
WETUMPKA	ELMORE CO.	5/4/2019	14:57	Thunderstorm Wind	55 kts. EG	0	0.00K
(MGM)MONTGOMERY ARPT	MONTGOMERY CO.	6/7/2019	11:36	Thunderstorm Wind	51 kts. MG	0	0.00K
COOSADA	ELMORE CO.	6/7/2019	11:48	Thunderstorm Wind	50 kts. EG	0	0.00K
CHISHOLM	MONTGOMERY CO.	6/7/2019	11:50	Thunderstorm Wind	55 kts. EG	0	0.00K
DUBLIN	MONTGOMERY CO.	8/4/2019	13:04	Thunderstorm Wind	50 kts. EG	0	0.00K
Totals:						3	1.228M

Table 7.4.5: Tornado

Location	County/Zone	St.	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:							3	56	12.689M	0.00K
MULBERRY	AUTAUGA CO.	AL	2/13/2007	18:22	Tornado	EF1	0	0	10.00K	0.00K
PRATTVILLE ARPT	AUTAUGA CO.	AL	2/17/2008	14:58	Tornado	EF3	0	50	10.000M	0.00K
PRATTVILLE ARPT	AUTAUGA CO.	AL	8/25/2008	6:25	Tornado	EF0	0	0	2.00K	0.00K
MARBURY	AUTAUGA CO.	AL	5/23/2009	12:55	Tornado	EF0	0	0	10.00K	0.00K
PRATTVILLE ARPT	AUTAUGA CO.	AL	11/30/2010	9:57	Tornado	EF1	0	0	58.00K	0.00K
PINE LEVEL	AUTAUGA CO.	AL	2/28/2011	17:05	Tornado	EF0	0	0	22.00K	0.00K
INDEPENDENCE	AUTAUGA CO.	AL	4/15/2011	19:48	Tornado	EF1	0	0	440.00K	0.00K
POSEYS XRDS	AUTAUGA CO.	AL	4/15/2011	19:56	Tornado	EF1	0	0	458.00K	0.00K
PINE LEVEL	AUTAUGA CO.	AL	4/15/2011	20:06	Tornado	EF0	0	0	39.80K	0.00K
MULBERRY	AUTAUGA CO.	AL	4/15/2011	20:29	Tornado	EF2	0	0	309.00K	0.00K
MULBERRY	AUTAUGA CO.	AL	4/15/2011	20:29	Tornado	EF1	0	0	39.80K	0.00K
POSEYS XRDS	AUTAUGA CO.	AL	4/15/2011	21:47	Tornado	EF3	3	4	1.240M	0.00K
NEW PROSPECT	AUTAUGA CO.	AL	12/22/2011	14:02	Tornado	EF0	0	0	60.00K	0.00K
VINE HILL	AUTAUGA CO.	AL	3/2/2012	21:32	Tornado	EF1	0	0	0.00K	0.00K
AUTAUGAVILLE	AUTAUGA CO.	AL	10/7/2017	18:31	Tornado	EF1	0	0	0.00K	0.00K
INDEPENDENCE	AUTAUGA CO.	AL	2/7/2018	7:04	Tornado	EF0	0	0	0.00K	0.00K
BILLINGSLEY	AUTAUGA CO.	AL	12/1/2018	15:49	Tornado	EF0	0	0	0.00K	0.00K
MULBERRY	AUTAUGA CO.	AL	1/19/2019	13:54	Tornado	EF0	0	0	0.00K	0.00K
INDEPENDENCE	AUTAUGA CO.	AL	1/19/2019	14:04	Tornado	EF1	0	2	0.00K	0.00K
MULBERRY	AUTAUGA CO.	AL	3/3/2019	13:19	Tornado	EF0	0	0	0.00K	0.00K

BONITA	AUTAUGA CO.	AL	3/14/2019	19:44	Tornado	EF1	0	0	0.00K	0.00K
Totals:							3	56	12.689M	0.00K
WARE	ELMORE CO.	AL	11/15/2006	10:40	Tornado	F1	0	0	25.00K	0.00K
KENT	ELMORE CO.	AL	11/15/2006	11:02	Tornado	F1	0	0	30.00K	0.00K
WETUMPKA	ELMORE CO.	AL	4/11/2007	16:05	Tornado	EF0	0	0	5.00K	0.00K
MILLBROOK	ELMORE CO.	AL	2/17/2008	15:06	Tornado	EF1	0	0	100.00K	0.00K
WARE	ELMORE CO.	AL	8/24/2008	13:07	Tornado	EF0	0	0	0.00K	0.00K
WETUMPKA	ELMORE CO.	AL	11/30/2010	10:23	Tornado	EF0	0	0	35.00K	0.00K
ROBINSON SPGS	ELMORE CO.	AL	2/28/2011	17:10	Tornado	EF0	0	0	55.00K	0.00K
TITUS	ELMORE CO.	AL	4/15/2011	20:27	Tornado	EF0	0	0	12.90K	0.00K
WEOKA	ELMORE CO.	AL	4/15/2011	22:17	Tornado	EF2	0	0	1.330M	0.00K
WALLSBURG	ELMORE CO.	AL	4/27/2011	19:12	Tornado	EF3	6	20	50.000M	0.00K
DEATSVILLE	ELMORE CO.	AL	12/22/2011	14:14	Tornado	EF0	0	0	5.00K	0.00K
SYKES MILL	ELMORE CO.	AL	12/22/2011	14:24	Tornado	EF0	0	0	15.00K	0.00K
ROBINSON SPGS	ELMORE CO.	AL	1/23/2012	7:48	Tornado	EF1	0	0	0.00K	0.00K
WETUMPKA	ELMORE CO.	AL	1/21/2017	7:55	Tornado	EF1	0	0	0.00K	0.00K
MAN	ELMORE CO.	AL	1/21/2017	7:55	Tornado	EF1	0	0	0.00K	0.00K
WARE	ELMORE CO.	AL	1/21/2017	7:57	Tornado	EF0	0	0	0.00K	0.00K
WETUMPKA	ELMORE CO.	AL	1/19/2019	14:52	Tornado	EF2	0	4	0.00K	0.00K
HOLTVILLE	ELMORE CO.	AL	3/14/2019	20:32	Tornado	EF2	0	0	0.00K	0.00K
Totals:							6	24	51.613M	0.00K
FLETA	MONTGOMERY CO.	AL	11/15/2006	9:55	Tornado	F1	0	0	150.00K	0.00K

PINEDALE	MONTGOMERY CO.	AL	11/15/2006	10:25	Tornado	F2	0	6	500.00K	0.00K
DEVENPORT	MONTGOMERY CO.	AL	3/1/2007	14:55	Tornado	EF0	0	2	650.00K	0.00K
PINEDALE	MONTGOMERY CO.	AL	4/10/2009	19:48	Tornado	EF1	0	0	350.00K	0.00K
RAMER	MONTGOMERY CO.	AL	4/19/2009	19:10	Tornado	EF0	0	0	12.00K	0.00K
PINE LEVEL	MONTGOMERY CO.	AL	4/19/2009	19:20	Tornado	EF1	0	0	30.00K	0.00K
CHISHOLM	MONTGOMERY CO.	AL	11/16/2011	11:08	Tornado	EF1	0	0	500.00K	0.00K
WAUGH	MONTGOMERY CO.	AL	12/25/2012	22:29	Tornado	EF1	0	0	0.00K	0.00K
MATHEWS	MONTGOMERY CO.	AL	2/15/2016	16:00	Tornado	EF0	0	0	0.00K	0.00K
PINEDALE	MONTGOMERY CO.	AL	4/6/2016	21:55	Tornado	EF0	0	0	0.00K	0.00K
DOWNING	MONTGOMERY CO.	AL	4/6/2016	22:24	Tornado	EF0	0	0	0.00K	0.00K
LONDON	MONTGOMERY CO.	AL	2/7/2017	13:42	Tornado	EF0	0	0	0.00K	0.00K
GARTERS HILL	MONTGOMERY CO.	AL	4/27/2017	8:03	Tornado	EF1	0	0	0.00K	0.00K
LAPINE	MONTGOMERY CO.	AL	4/22/2018	13:25	Tornado	EF0	0	0	0.00K	0.00K
Totals:							0	8	2.192M	0.00K

Table 7.4.6 Wildfire

Fire #	County	Acres	Reported On	Contained On	Controlled On
20200406-4	Autauga	2	4/6/2020 13:41	4/6/2020 15:55	4/6/2020 15:55
20200328-7	Autauga	2	3/28/2020 13:53	3/28/2020 15:58	3/28/2020 15:58
20200301-17	Autauga	2	3/1/2020 16:45	3/1/2020 17:55	3/1/2020 18:06
20200301-10	Autauga	3	3/1/2020 14:31	3/1/2020 17:02	3/1/2020 17:03
20191010-3	Autauga	0.2	10/10/2019 9:51	10/10/2019 12:55	10/15/2019 8:14
20191004-37	Autauga	1.5	10/4/2019 23:29	10/5/2019 3:03	10/15/2019 8:21
20190925-14	Autauga	3	9/25/2019 16:04	9/25/2019 16:57	9/25/2019 16:57
20190922-18	Autauga	0.3	9/22/2019 15:06	9/22/2019 16:53	9/22/2019 16:53
20190919-7	Autauga	9	9/19/2019 11:31	9/19/2019 13:14	9/19/2019 13:14
20190918-20	Autauga	0.1	9/18/2019 21:37	9/18/2019 23:09	9/18/2019 23:09
20190917-18	Autauga	0.2	9/17/2019 16:24	9/17/2019 17:21	9/17/2019 17:21
20190914-10	Autauga	6.1	9/14/2019 14:20	9/14/2019 17:02	9/14/2019 17:02
20190914-8	Autauga	1.2	9/14/2019 13:28	9/17/2019 15:57	9/17/2019 16:23
20190912-2	Autauga	0.5	9/12/2019 10:29	9/14/2019 19:03	9/14/2019 19:13
20190903-2	Autauga	15	9/3/2019 13:34	9/3/2019 15:28	9/3/2019 15:28
20190822-3	Autauga	60	8/22/2019 14:05	8/22/2019 15:56	9/3/2019 15:28
20190818-8	Autauga	3	8/18/2019 22:58	8/19/2019 1:49	8/21/2019 9:46
20190818-6	Autauga	1	8/18/2019 15:24	8/18/2019 17:43	8/19/2019 11:43
20190816-6	Autauga	0.1	8/16/2019 15:12	8/16/2019 16:08	8/16/2019 16:08
20190815-10	Autauga	5	8/15/2019 18:16	8/15/2019 20:34	8/15/2019 23:18
20190807-1	Autauga	1	8/7/2019 15:38	8/7/2019 17:29	8/7/2019 17:29
20190729-9	Autauga	1	7/29/2019 17:18	7/29/2019 18:39	7/29/2019 18:40
20190711-7	Autauga	1	7/11/2019 16:08	7/11/2019 17:53	7/17/2019 21:30
20190705-5	Autauga	3.4	7/5/2019 14:17	7/5/2019 16:20	7/5/2019 16:20
20190704-4	Autauga	50	7/4/2019 14:47	7/4/2019 18:32	7/9/2019 16:35

20190701-1	Autauga	15	7/1/2019 11:58	7/1/2019 15:53	7/8/2019 17:56
20190601-2	Autauga	2	6/1/2019 13:51	6/1/2019 16:09	6/1/2019 16:09
20190529-1	Autauga	3.5	5/29/2019 14:52	5/29/2019 16:06	5/29/2019 16:06
20190526-1	Autauga	2.5	5/26/2019 14:46	5/26/2019 16:51	5/26/2019 16:52
20190518-1	Autauga	0.75	5/18/2019 12:47	5/18/2019 15:00	5/18/2019 15:00
20190411-4	Autauga	0.5	4/11/2019 16:31	4/11/2019 18:39	4/11/2019 18:39
20190403-17	Autauga	8	4/3/2019 16:45	4/3/2019 18:42	4/3/2019 18:57
20180514-6	Autauga	5	5/14/2018 14:50	5/14/2018 16:36	5/14/2018 17:25
20180502-5	Autauga	30	5/2/2018 20:32	5/2/2018 23:35	5/3/2018 11:51
20180331-5	Autauga	5	3/31/2018 16:43	3/31/2018 18:04	3/31/2018 18:04
20180323-1	Autauga	45	3/23/2018 12:49	3/23/2018 16:12	3/23/2018 16:37
20180305-16	Autauga	15	3/5/2018 20:36	3/5/2018 21:39	3/5/2018 21:48
20180303-27	Autauga	0.1	3/3/2018 23:42	3/4/2018 7:56	3/4/2018 11:12
20180223-5	Autauga	0.1	2/23/2018 15:42	2/23/2018 17:28	2/28/2018 8:50
20180216-4	Autauga	0.1	2/16/2018 16:42	2/16/2018 16:47	2/16/2018 17:55
20180121-7	Autauga	0.5	1/21/2018 13:00	1/21/2018 13:33	1/22/2018 8:56
20180103-6	Autauga	2	1/3/2018 15:28	1/3/2018 16:45	1/3/2018 16:45
20171214-2	Autauga	3	12/14/2017 15:34	12/14/2017 15:37	12/14/2017 15:47
20171125-4	Autauga	2	11/25/2017 21:44	11/26/2017 7:43	11/26/2017 9:34

20171003-5	Autauga	1	10/3/2017 15:08	10/3/2017 16:21	10/3/2017 16:21
20170413-5	Autauga	0.1	4/13/2017 13:51	4/13/2017 15:11	4/13/2017 15:11
20170410-5	Autauga	5	4/10/2017 12:30	4/10/2017 15:46	4/10/2017 15:46
20170320-24	Autauga	2	3/20/2017 16:02	3/20/2017 19:17	3/20/2017 19:17
20170319-18	Autauga	6	3/19/2017 15:54	3/19/2017 18:33	3/19/2017 18:33
20170303-10	Autauga	1	3/3/2017 14:52	3/3/2017 15:56	3/3/2017 15:56
20170225-18	Autauga	5	2/25/2017 15:17	2/25/2017 18:08	2/25/2017 18:09
20170225-16	Autauga	10	2/25/2017 14:37	2/25/2017 17:43	2/25/2017 17:43
20170212-1	Autauga	2	2/12/2017 14:35	2/12/2017 15:37	2/12/2017 15:37
20170210-10	Autauga	5	2/10/2017 16:17	2/10/2017 18:11	2/10/2017 18:11
20170131-9	Autauga	5	1/31/2017 12:36	1/31/2017 14:28	1/31/2017 14:53
20161224-6	Autauga	5	12/24/2016 14:02	12/24/2016 15:45	12/24/2016 15:45
20161112-31	Autauga	3	11/12/2016 14:30	11/12/2016 16:12	11/12/2016 17:26
20161105-31	Autauga	1	11/5/2016 14:44	11/5/2016 16:54	11/5/2016 16:54
20161026-5	Autauga	0.5	10/26/2016 6:21	10/26/2016 8:02	10/26/2016 8:02
20161025-3	Autauga	36.1	10/25/2016 7:30	10/25/2016 15:51	10/26/2016 11:58
20161023-31	Autauga	0.1	10/23/2016 14:20	10/23/2016 14:37	10/23/2016 15:22
20161022-50	Autauga	4	10/22/2016 15:45	10/22/2016 17:01	10/22/2016 17:54

20161018-1	Autauga	0.25	10/18/2016 4:32	10/18/2016 9:39	10/18/2016 9:39
20161015-12	Autauga	4	10/15/2016 13:05	10/15/2016 15:25	10/15/2016 16:13
20161011-51	Autauga	15	10/11/2016 17:19	10/11/2016 20:02	10/11/2016 20:16
20161011-32	Autauga	25	10/11/2016 14:44	10/11/2016 16:44	10/11/2016 17:12
20161009-76	Autauga	2	10/9/2016 16:55	10/9/2016 19:29	10/9/2016 19:45
20161001-15	Autauga	5	10/1/2016 14:43	10/1/2016 16:39	10/1/2016 17:26
20160929-14	Autauga	5	9/29/2016 13:14	9/29/2016 14:36	9/29/2016 15:44
20160928-6	Autauga	15	9/28/2016 12:23	9/28/2016 14:13	9/28/2016 15:06
20160909-13	Autauga	3	9/9/2016 16:13	9/9/2016 17:41	9/9/2016 18:23
20160710-2	Autauga	11	7/10/2016 17:20	7/10/2016 20:39	7/10/2016 20:39
20160704-16	Autauga	1	7/4/2016 15:12	7/4/2016 18:01	7/4/2016 18:01
20160704-1	Autauga	5	7/4/2016 0:14	7/4/2016 3:41	7/4/2016 13:04
20160613-1	Autauga	1	6/13/2016 11:26	6/13/2016 13:29	6/13/2016 13:33
20160610-1	Autauga	15	6/10/2016 11:37	6/10/2016 14:56	6/10/2016 15:44
20160608-3	Autauga	12	6/8/2016 12:41	6/8/2016 14:51	6/8/2016 15:06
20160608-1	Autauga	10	6/8/2016 12:03	6/8/2016 14:49	6/8/2016 15:06
20160531-13	Autauga	0.5	5/31/2016 17:12	5/31/2016 19:17	5/31/2016 19:19
20160523-4	Autauga	1	5/23/2016 14:51	5/23/2016 16:42	5/23/2016 16:43

20160507-3	Autauga	1.5	5/7/2016 15:16	5/7/2016 15:52	5/7/2016 16:00
20160220-1	Autauga	3.5	2/20/2016 11:19	2/20/2016 12:32	2/20/2016 13:38
20160219-26	Autauga	5	2/19/2016 16:22	2/19/2016 18:40	2/19/2016 18:52
20160211-3	Autauga	2	2/11/2016 10:48	2/11/2016 14:43	2/11/2016 15:40
ECR-20151212-004	Autauga	5	12/12/2015 19:25		12/12/2015 22:30
ECR-20151130-001	Autauga	3	11/30/2015 15:48		11/30/2015 17:33
ECR-20150807-002	Autauga	30	8/7/2015 12:11		8/7/2015 17:21
ECR-20150803-002	Autauga	3	8/3/2015 16:09		8/3/2015 17:48
ECR-20150618-001	Autauga	1	6/18/2015 13:48		6/18/2015 14:28
ECR-20150504-001	Autauga	0	5/4/2015 15:06		5/4/2015 16:51
ECR-20150308-005	Autauga	30	3/8/2015 15:38		3/8/2015 18:02
ECR-20150307-003	Autauga	3	3/7/2015 14:59		3/7/2015 17:47
ECR-20150214-008	Autauga	15	2/14/2015 14:37		2/14/2015 17:13
ECR-20150214-007	Autauga	15	2/14/2015 13:55		2/14/2015 17:00
ECR-20150208-003	Autauga	1	2/8/2015 14:06		2/8/2015 15:26
ECR-20150208-002	Autauga	10	2/8/2015 13:22		2/8/2015 16:05
ECR-20150207-007	Autauga	35	2/7/2015 14:14		2/7/2015 18:23
ECR-20150131-001	Autauga	4	1/31/2015 13:19		1/31/2015 14:24

ECR-20150118-003	Autauga	5	1/18/2015 15:11		1/18/2015 18:19
ECR-20141217-001	Autauga	0	12/17/2014 13:15		12/17/2014 13:52
ECR-20141212-001	Autauga	1	12/12/2014 11:53		12/12/2014 16:38
ECR-20141127-001	Autauga	1	11/27/2014 22:53		11/28/2014 1:47
ECR-20141025-001	Autauga	0	10/25/2014 13:33		10/25/2014 15:41
ECR-20141016-001	Autauga	0	10/16/2014 11:13		10/16/2014 11:25
ECR-20141002-001	Autauga	12	10/2/2014 11:18		10/2/2014 13:21
ECR-20140829-002	Autauga	10	8/29/2014 12:38		8/29/2014 13:54
ECR-20140813-001	Autauga	21	8/13/2014 13:31		8/13/2014 15:46
ECR-20140730-001	Autauga	9	7/30/2014 13:54		7/30/2014 15:33
ECR-20140517-001	Autauga	0	5/17/2014 10:34		5/17/2014 11:57
ECR-20140327-006	Autauga	3	3/27/2014 15:04		3/27/2014 15:53
ECR-20140325-005	Autauga	0	3/25/2014 15:54		3/25/2014 17:59
ECR-20140320-001	Autauga	3	3/20/2014 14:53		3/20/2014 16:03
ECR-20140314-001	Autauga	16	3/14/2014 12:27		3/14/2014 13:13
ECR-20140308-003	Autauga	40	3/8/2014 12:20		3/8/2014 14:43
ECR-20140302-002	Autauga	10	3/2/2014 13:16		3/2/2014 15:28
ECR-20140301-003	Autauga	65	3/1/2014 13:24		3/1/2014 17:35

ECR-20140228-002	Autauga	50	2/28/2014 21:00		3/1/2014 1:29
ECR-20140224-001	Autauga	3	2/24/2014 13:37		2/24/2014 14:14
ECR-20140223-002	Autauga	9	2/22/2014 15:25		2/22/2014 17:28
ECR-20140223-004	Autauga	4	2/22/2014 11:33		2/22/2014 13:52
ECR-20140201-001	Autauga	3	2/1/2014 23:03		2/2/2014 1:55
ECR-20140125-007	Autauga	15	1/25/2014 13:03		1/25/2014 16:30
ECR-20140124-003	Autauga	1	1/24/2014 13:20		1/24/2014 16:42
ECR-20140121-001	Autauga	17	1/21/2014 11:26		1/21/2014 12:57
ECR-20140120-002	Autauga	8	1/20/2014 12:38		1/20/2014 15:10
ECR-20140119-005	Autauga	5	1/19/2014 15:45		1/19/2014 16:59
ECR-20140117-003	Autauga	5	1/17/2014 15:14		1/17/2014 16:13
ECR-20131202-001	Autauga	240	12/2/2013 14:34		12/2/2013 16:29
ECR-20131125-003	Autauga	0	11/25/2013 12:01		11/25/2013 12:37
ECR-20131119-002	Autauga	15	11/19/2013 13:48		11/19/2013 14:47
ECR-20131119-001	Autauga	0	11/19/2013 13:20		11/19/2013 13:57
ECR-20131104-002	Autauga	1	11/4/2013 13:07		11/4/2013 14:50
ECR-20130929-001	Autauga	1	9/29/2013 0:46		9/29/2013 9:29
ECR-20130622-001	Autauga	2	6/22/2013 15:34		6/22/2013 17:42

ECR-20130620-001	Autauga	3	6/20/2013 16:21		6/20/2013 16:50
ECR-20130619-001	Autauga	1	6/19/2013 17:16		6/19/2013 20:30
ECR-20130617-001	Autauga	2	6/17/2013 15:36		6/17/2013 16:18
ECR-20130528-002	Autauga	0	5/28/2013 13:04		5/28/2013 13:32
ECR-20130421-001	Autauga	1	4/21/2013 11:49		4/21/2013 14:26
ECR-20130417-001	Autauga	0	4/17/2013 14:27		4/17/2013 14:27
ECR-20130406-001	Autauga	2	4/6/2013 18:47		4/6/2013 20:57
ECR-20130330-001	Autauga	1	3/30/2013 11:20		3/30/2013 13:18
ECR-20130329-007	Autauga	5	3/29/2013 16:11		3/29/2013 17:42
ECR-20130327-003	Autauga	5	3/27/2013 16:38		3/27/2013 17:16
ECR-20130327-002	Autauga	3	3/27/2013 16:10		3/27/2013 17:31
ECR-20130315-001	Autauga	0	3/15/2013 12:32		3/15/2013 13:57
ECR-20130302-002	Autauga	20	3/2/2013 18:12		3/2/2013 22:22
ECR-20130219-002	Autauga	2	2/19/2013 15:10		2/12/2013 16:31
ECR-20130205-001	Autauga	30	2/5/2013 12:59		2/5/2013 16:10
ECR-20121219-001	Autauga	2	12/19/2012 14:57		12/19/2012 15:54
ECR-20121206-001	Autauga	0	12/6/2012 12:15		12/6/2012 12:55
ECR-20121203-004	Autauga	2	12/3/2012 13:41		12/3/2012 14:55

ECR-20121120-001	Autauga	0	11/20/2012 13:25		11/20/2012 14:30
ECR-20121111-004	Autauga	1	11/11/2012 13:57		11/11/2012 16:03
ECR-20121111-002	Autauga	4	11/11/2012 12:56		11/11/2012 15:02
ECR-20121103-003	Autauga	6	11/3/2012 15:51		11/3/2012 18:09
ECR-20121101-006	Autauga	8	11/1/2012 15:32		11/1/2012 15:58
ECR-20121008-001	Autauga	1	10/8/2012 16:10		10/8/2012 18:08
ECR-20120921-001	Autauga	1	9/21/2012 13:33		9/21/2012 14:04
ECR-20120914-001	Autauga	2	9/14/2012 13:39		9/14/2012 15:19
ECR-20120730-002	Autauga	0	7/30/2012 14:50		7/23/2012 16:06
ECR-20120729-001	Autauga	1	7/29/2012 14:50		7/29/2012 16:58
ECR-20120728-001	Autauga	2	7/28/2012 17:54		7/28/2012 19:37
ECR-20120703-002	Autauga	3	7/3/2012 12:41		7/3/2012 14:20
ECR-20120627-002	Autauga	35	6/27/2012 14:42		6/27/2012 21:02
ECR-20120622-002	Autauga	1	6/22/2012 14:34		6/22/2012 15:30
ECR-20120526-001	Autauga	6	5/26/2012 16:38		5/26/2012 17:08
ECR-20120319-001	Autauga	0	3/19/2012 12:42		3/19/2012 14:09
ECR-20120226-002	Autauga	0	2/26/2012 15:52		2/26/2012 17:37
ECR-20120131-002	Autauga	2	1/31/2012 13:17		1/31/2012 14:20

ECR-20120130-003	Autauga	0	1/30/2012 14:10		1/30/2012 16:47
ECR-20111211-001	Autauga	5	12/11/2011 13:51		12/11/2011 16:00
ECR-20111126-001	Autauga	5	11/26/2011 14:05		11/26/2011 15:40
ECR-20111113-001	Autauga	3	11/13/2011 11:19		11/13/2011 13:31
ECR-20111029-006	Autauga	2	10/29/2011 15:08		10/29/2011 16:45
ECR-20110930-001	Autauga	15	9/30/2011 13:33		9/30/2011 14:55
ECR-20110915-003	Autauga	2	9/15/2011 19:53		9/15/2011 21:37
ECR-20110912-003	Autauga	2	9/12/2011 15:45		9/5/2011 17:45
ECR-20110902-005	Autauga	0	9/2/2011 14:28		9/2/2011 16:37
ECR-20110901-003	Autauga	1	9/1/2011 15:34		9/1/2011 17:54
ECR-20110825-003	Autauga	0	8/25/2011 16:18		8/25/2011 16:56
ECR-20110821-002	Autauga	7	8/21/2011 15:40		8/21/2011 17:54
ECR-20110816-001	Autauga	0	8/16/2011 12:07		8/16/2011 13:33
ECR-20110816-002	Autauga	0	8/16/2011 12:07		8/16/2011 16:29
ECR-20110816-003	Autauga	0	8/16/2011 12:07		8/16/2011 13:33
ECR-20110816-004	Autauga	0	8/16/2011 12:07		8/16/2011 13:33
ECR-20110722-001	Autauga	1	7/22/2011 15:20		7/22/2011 16:30
ECR-20110621-003	Autauga	0	6/21/2011 11:35		6/21/2011 12:46

ECR-20110619-002	Autauga	8	6/19/2011 15:56		6/19/2011 17:02
ECR-20110616-005	Autauga	14	6/16/2011 13:18		6/16/2011 17:36
ECR-20110615-003	Autauga	1	6/15/2011 13:17		6/15/2011 13:40
ECR-20110615-001	Autauga	0	6/15/2011 11:47		6/15/2011 12:07
ECR-20110613-004	Autauga	5	6/13/2011 15:06		6/13/2011 16:13
ECR-20110606-003	Autauga	4	6/6/2011 16:45		6/6/2011 20:02
ECR-20110605-001	Autauga	4	6/4/2011 23:03		6/5/2011 2:53
ECR-20110528-001	Autauga	11	5/28/2011 9:10		5/28/2011 13:19
ECR-20110518-002	Autauga	0	5/18/2011 13:24		5/18/2011 14:01
ECR-20110501-001	Autauga	0	5/1/2011 11:37		5/1/2011 12:42
ECR-20110325-003	Autauga	5	3/25/2011 12:45		3/25/2011 14:21
ECR-20110322-007	Autauga	4	3/22/2011 17:10		3/22/2011 18:45
ECR-20110303-008	Autauga	20	3/3/2011 16:33		3/3/2011 18:15
ECR-20110303-007	Autauga	7	3/3/2011 16:25		3/3/2011 18:55
ECR-20110222-010	Autauga	6	2/22/2011 14:23		2/22/2011 17:30
ECR-20110222-008	Autauga	0	2/22/2011 13:49		2/22/2011 14:25
ECR-20110221-004	Autauga	3	2/21/2011 14:46		2/21/2011 16:23
ECR-20110212-004	Autauga	3	2/12/2011 14:58		2/12/2011 17:33

ECR-20110129-001	Autauga	36	1/29/2011 10:47		1/29/2011 12:43
ECR-20101231-005	Autauga	8	12/31/2010 18:09		12/31/2010 19:51
ECR-20101112-003	Autauga	1	11/12/2010 16:23		11/12/2010 17:16
ECR-20101024-002	Autauga	2	10/24/2010 16:00		10/24/2010 17:00
ECR-20101024-001	Autauga	4	10/24/2010 12:44		10/24/2010 15:35
ECR-20101023-007	Autauga	0	10/23/2010 19:20		10/23/2010 20:16
ECR-20101023-006	Autauga	2	10/23/2010 16:21		10/23/2010 19:00
ECR-20101023-004	Autauga	1	10/23/2010 13:36		10/23/2010 16:08
ECR-20101023-003	Autauga	2	10/23/2010 13:35		10/23/2010 16:21
ECR-20101022-004	Autauga	20	10/22/2010 13:44		10/22/2010 18:00
ECR-20101022-002	Autauga	2	10/22/2010 13:03		10/22/2010 16:07
ECR-20101012-003	Autauga	0	10/12/2010 19:57		10/12/2010 21:02
ECR-20101010-003	Autauga	43	10/10/2010 14:27		10/10/2010 17:10
ECR-20101003-002	Autauga	4	10/3/2010 15:32		10/3/2010 17:49
ECR-20101002-001	Autauga	2	10/2/2010 11:10		10/2/2010 12:32
ECR-20100921-002	Autauga	1	9/21/2010 13:39		9/21/2010 16:01
ECR-20100914-002	Autauga	3	9/14/2010 13:45		9/14/2010 15:32
ECR-20100912-002	Autauga	1	9/12/2010 13:37		9/12/2010 13:52

ECR-20100912-001	Autauga	7	9/12/2010 12:17		9/12/2010 15:00
ECR-20100812-002	Autauga	0	8/12/2010 13:39		8/12/2010 15:11
ECR-20100728-005	Autauga	1	7/28/2010 17:19		7/28/2010 17:39
ECR-20100728-003	Autauga	2	7/28/2010 14:47		7/28/2010 17:04
ECR-20100728-001	Autauga	2	7/28/2010 14:44		7/28/2010 17:04
ECR-20100727-002	Autauga	18	7/27/2010 17:38		7/27/2010 20:16
ECR-20100706-003	Autauga	0	7/6/2010 15:13		7/6/2010 15:56
ECR-20100520-001	Autauga	18	5/20/2010 11:56		5/20/2010 14:20
ECR-20100417-002	Autauga	6	4/17/2010 19:55		4/17/2010 22:20
ECR-20100330-005	Autauga	12	3/30/2010 15:36		3/30/2010 16:54
ECR-20100320-004	Autauga	12	3/20/2010 15:49		3/20/2010 18:59
ECR-20100308-010	Autauga	45	3/8/2010 15:04		3/8/2010 16:20
ECR-20100308-008	Autauga	30	3/8/2010 14:32		3/8/2010 16:36
ECR-20100308-007	Autauga	14	3/8/2010 13:42		3/8/2010 15:08
ECR-20100305-001	Autauga	9	3/5/2010 13:26		3/5/2010 15:02
ECR-20100119-001	Autauga	5	1/19/2010 13:06		1/19/2010 14:41
ECR-20100106-002	Autauga	1	1/6/2010 15:15		1/6/2010 16:30
ECR-20090704-007	Autauga	17	7/4/2009 16:21		7/4/2009 16:14

ECR-20090630-004	Autauga	1	6/30/2009 17:25		6/30/2009 19:45
ECR-20090630-003	Autauga	1	6/30/2009 15:06		6/30/2009 19:45
ECR-20090624-001	Autauga	6	6/24/2009 15:37		6/24/2009 18:02
ECR-20090322-002	Autauga	15	3/22/2009 17:38		3/22/2009 19:53
ECR-20090310-003	Autauga	3	3/10/2009 15:24		3/10/2009 16:35
ECR-20090305-006	Autauga	7	3/5/2009 16:24		3/5/2009 17:58
ECR-20090305-004	Autauga	1	3/5/2009 15:03		3/5/2009 17:58
ECR-20090226-011	Autauga	10	2/26/2009 14:18		2/26/2009 16:10
ECR-20090224-004	Autauga	7	2/24/2009 13:55		2/24/2009 15:18
ECR-20090212-007	Autauga	6	2/12/2009 16:00		2/12/2009 16:27
ECR-20090212-003	Autauga	1	2/12/2009 15:10		2/12/2009 17:37
ECR-20090212-004	Autauga	1	2/12/2009 14:58		2/12/2009 16:15
ECR-20090212-005	Autauga	1	2/12/2009 14:58		2/12/2009 16:20
ECR-20090212-006	Autauga	0	2/12/2009 14:58		2/12/2009 16:40
ECR-20090209-003	Autauga	20	2/9/2009 15:47		2/9/2009 17:54
SEL-20081230-003	Autauga	0	12/30/2008 15:17		12/30/2008 15:25
SEL-20081230-002	Autauga	1	12/30/2008 14:37		12/30/2008 15:14
SEL-20081111-005	Autauga	0	11/11/2008 20:14		11/11/2008 22:24

SEL-20081111-001	Autauga	4	11/11/2008 11:15		11/11/2008 12:27
SEL-20081109-001	Autauga	1	11/9/2008 13:53		11/9/2008 15:28
SEL-20081026-001	Autauga	13	10/26/2008 14:21		10/26/2008 14:48
SEL-20081003-001	Autauga	1	10/3/2008 13:37		10/3/2008 15:44
SEL-20080808-003	Autauga	0	8/8/2008 14:49		8/8/2008 16:05
SEL-20080807-002	Autauga	0	8/7/2008 15:26		8/7/2008 19:46
SEL-20080806-002	Autauga	8	8/6/2008 14:13		8/6/2008 16:31
SEL-20080721-003	Autauga	0	7/21/2008 16:03		7/21/2008 17:55
SEL-20080702-001	Autauga	1	7/2/2008 12:15		7/2/2008 13:40
SEL-20080620-002	Autauga	1	6/20/2008 15:00		6/20/2008 16:15
SEL-20080608-004	Autauga	1	6/8/2008 15:00		6/8/2008 16:53
SEL-20080505-001	Autauga	0	5/5/2008 20:40		5/5/2008 21:52
SEL-20080418-002	Autauga	0	4/18/2008 16:53		4/18/2008 19:09
SEL-20080417-002	Autauga	0	4/17/2008 18:31		4/17/2008 19:30
SEL-20080323-004	Autauga	2	3/23/2008 16:34		3/23/2008 18:45
SEL-20080321-002	Autauga	0	3/21/2008 13:31		3/21/2008 13:59
SEL-20080313-002	Autauga	1	3/13/2008 13:20		3/13/2008 15:02
SEL-20080312-001	Autauga	20	3/12/2008 16:27		3/12/2008 18:32

SEL-2008031208-002	Autauga	1	3/12/2008 14:31		3/12/2008 18:52
SEL-20080312-003	Autauga	0	3/12/2008 14:10		3/13/2008 0:45
SEL-20080303-001	Autauga	3	3/3/2008 11:22		3/3/2008 13:40
SEL-20080302-001	Autauga	0	3/2/2008 13:48		3/2/2008 14:22
SEL-20080229-002	Autauga	2	2/29/2008 12:50		2/29/2008 14:49
SEL-20080212-007	Autauga	2	2/12/2008 14:38		2/12/2008 15:34
SEL-20080212-002	Autauga	0	2/12/2008 7:15		2/12/2008 8:13
SEL-20080212-001	Autauga	0	2/12/2008 7:15		2/12/2008 8:13
SEL-20080211-011	Autauga	1	2/11/2008 16:22		2/11/2008 18:05
SEL-20080211-006	Autauga	0	2/11/2008 13:55		2/11/2008 15:30
SEL-20080211-010	Autauga	8	2/11/2008 13:55		2/11/2008 16:22
SEL-20080208-001	Autauga	21	2/8/2008 16:25		2/8/2008 18:00
SEL-20080102-001	Autauga	10	1/2/2008 11:30		1/2/2008 15:03
SEL-20071112-005	Autauga	1	11/12/2007 16:40		11/12/2007 18:54
SEL-20071112-001	Autauga	3	11/12/2007 11:24		11/12/2007 12:39
SEL-20071111-003	Autauga	10	11/11/2007 14:30		11/11/2007 17:01
SEL-20071111-005	Autauga	20	11/11/2007 14:30		11/11/2007 17:01
SEL-20071111-006	Autauga	0	11/11/2007 14:30		11/11/2007 17:01

SEL-20071111-002	Autauga	1	11/11/2007 13:39		11/11/2007 15:48
SEL-20071110-001	Autauga	1	11/10/2007 12:32		11/10/2007 13:50
SEL-20071106-011	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-008	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-005	Autauga	0	11/6/2007 20:30		11/6/2007 21:25
SEL-20071106-012	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-007	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-006	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-009	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-010	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-014	Autauga	0	11/6/2007 20:30		11/6/2007 21:35
SEL-20071106-004	Autauga	0	11/6/2007 19:15		11/6/2007 20:29
SEL-20071017-003	Autauga	0	10/17/2007 14:17		10/17/2007 16:40
SEL-20071014-001	Autauga	3	10/14/2007 18:30		10/14/2007 21:20
SEL-20071001-001	Autauga	1	10/1/2007 11:58		10/1/2007 14:07
SEL-20070930-002	Autauga	26	9/30/2007 15:30		9/30/2007 18:30
SEL-20070930-001	Autauga	0	9/30/2007 13:55		9/30/2007 14:58
SEL-20070929-002	Autauga	27	9/29/2007 14:29		9/29/2007 18:25

SEL-20070920-001	Autauga	0	9/20/2007 12:26		9/20/2007 13:44
SEL-20070910-002	Autauga	6	9/10/2007 15:30		9/10/2007 17:19
SEL-20070826-001	Autauga	1	8/26/2007 13:27		8/26/2007 14:16
SEL-20070825-001	Autauga	0	8/25/2007 14:48		8/25/2007 17:11
SEL-20070824-002	Autauga	40	8/24/2007 9:53		8/24/2007 13:10
SEL-20070823-002	Autauga	0	8/23/2007 14:35		8/23/2007 15:40
SEL-20070821-001	Autauga	0	8/21/2007 14:28		8/21/2007 15:19
SEL-20070819-002	Autauga	6	8/19/2007 17:18		8/19/2007 19:30
SEL-20070817-003	Autauga	2	8/17/2007 9:59		8/17/2007 11:07
SEL-20070817-001	Autauga	0	8/17/2007 7:58		8/17/2007 8:20
SEL-20070816-003	Autauga	1	8/16/2007 17:40		8/16/2007 19:13
SEL-20070815-007	Autauga	0	8/15/2007 17:25		8/15/2007 19:00
SEL-20070814-003	Autauga	1	8/14/2007 15:10		8/14/2007 16:58
SEL-20070811-001	Autauga	0	8/11/2007 13:10		8/11/2007 14:48
SEL-20070804-001	Autauga	0	8/4/2007 10:05		8/4/2007 10:50
SEL-20070730-001	Autauga	2	7/30/2007 14:20		7/30/2007 15:20
SEL-20070724-001	Autauga	0	7/24/2007 15:15		7/24/2007 16:11
SEL-20070705-001	Autauga	1	7/5/2007 17:28		7/5/2007 19:37

SEL-20070625-002	Autauga	2	6/25/2007 15:15		6/25/2007 17:28
SEL-20070623-002	Autauga	2	6/23/2007 15:00		6/23/2007 18:00
SEL-20070613-001	Autauga	0	6/13/2007 10:04		6/13/2007 11:58
SEL-20070611-004	Autauga	10	6/11/2007 15:47		6/11/2007 18:30
SEL-20070611-003	Autauga	1	6/11/2007 15:07		6/11/2007 16:20
SEL-20070611-001	Autauga	0	6/11/2007 13:30		6/11/2007 14:33
SEL-20070607-003	Autauga	2	6/7/2007 13:18		6/7/2007 15:15
SEL-20070607-001	Autauga	0	6/7/2007 8:10		6/7/2007 8:48
SEL-20070606-002	Autauga	36	6/6/2007 11:34		6/6/2007 16:25
SEL-20070605-004	Autauga	1	6/5/2007 20:35		6/6/2007 1:00
SEL-20070531-002	Autauga	0	5/31/2007 7:40		5/31/2007 8:45
SEL-20070530-001	Autauga	0	5/30/2007 16:01		5/30/2007 16:35
SEL-20070526-002	Autauga	1	5/26/2007 10:47		5/26/2007 11:56
SEL-20070525-001	Autauga	2	5/25/2007 17:20		5/25/2007 18:47
SEL-20070523-007	Autauga	0	5/24/2007 15:40		5/24/2007 17:20
SEL-20070523-003	Autauga	1	5/23/2007 15:07		5/23/2007 16:10
SEL-20070521-002	Autauga	0	5/21/2007 14:50		5/21/2007 15:40
SEL-20070520-002	Autauga	2	5/20/2007 14:00		5/20/2007 17:16

SEL-20070510-002	Autauga	2	5/10/2007 11:32		5/10/2007 13:50
SEL-20070508-003	Autauga	0	5/8/2007 16:36		5/8/2007 17:50
SEL-20070506-001	Autauga	12	5/6/2007 20:15		5/7/2007 1:30
SEL-20070503-001	Autauga	0	5/3/2007 13:58		5/3/2007 15:00
SEL-20070501-001	Autauga	37	5/1/2007 15:23		5/1/2007 19:00
SEL-20070429-001	Autauga	2	4/29/2007 19:01		4/29/2007 20:30
SEL-20070428-002	Autauga	6	4/28/2007 18:23		4/28/2007 20:10
SEL-20070428-003	Autauga	5	4/28/2007 18:23		4/28/2007 20:10
SEL-20070423-001	Autauga	0	4/23/2007 20:41		4/24/2007 1:45
SEL-20070419-001	Autauga	1	4/19/2007 16:15		4/19/2007 18:30
SEL-20070325-001	Autauga	0	3/25/2007 14:58		3/25/2007 15:07
SEL-20070324-003	Autauga	4	3/24/2007 16:30		3/24/2007 18:48
SEL-20070323-007	Autauga	0	3/23/2007 15:20		3/23/2007 16:02
SEL-20070323-003	Autauga	0	3/23/2007 12:57		3/23/2007 13:30
SEL-20070323-002	Autauga	0	3/23/2007 12:20		3/23/2007 12:56
SEL-20070321-001	Autauga	4	3/21/2007 3:00		3/21/2007 8:35
SEL-20070319-006	Autauga	0	3/19/2007 13:50		3/19/2007 15:21
SEL-20070319-007	Autauga	0	3/19/2007 13:50		3/19/2007 15:00

SEL-20070319-002	Autauga	9	3/19/2007 13:00		3/19/2007 15:50
SEL-20070318-001	Autauga	16	3/18/2007 16:06		3/18/2007 19:15
SEL-20070314-004	Autauga	13	3/14/2007 15:20		3/14/2007 17:30
SEL-20070314-002	Autauga	16	3/14/2007 12:00		3/14/2007 15:20
SEL-20070313-005	Autauga	3	3/13/2007 16:30		3/13/2007 18:30
SEL-20070313-002	Autauga	2	3/13/2007 12:47		3/13/2007 14:45
SEL-20070311-003	Autauga	2	3/11/2007 13:12		3/11/2007 14:08
SEL-20070310-003	Autauga	55	3/10/2007 14:30		3/10/2007 17:55
SEL-20070308-002	Autauga	12	3/8/2007 12:45		3/8/2007 13:35
SEL-20070306-004	Autauga	0	3/6/2007 18:10		3/6/2007 18:40
SEL-20070306-003	Autauga	0	3/6/2007 12:49		3/6/2007 13:45
SEL-20070305-001	Autauga	1	3/5/2007 14:45		3/5/2007 16:00
SEL-20070228-001	Autauga	5	2/28/2007 11:07		2/28/2007 13:40
SEL-20070226-002	Autauga	1	2/26/2007 14:45		2/26/2007 17:56
SEL-20070224-008	Autauga	0	2/24/2007 16:30		2/24/2007 19:35
SEL-20070224-005	Autauga	6	2/24/2007 16:00		2/24/2007 22:00
SEL-20070224-004	Autauga	2	2/24/2007 15:15		2/24/2007 16:25
SEL-20070224-001	Autauga	9	2/24/2007 13:20		2/24/2007 14:19

SEL-20070222-001	Autauga	1	2/22/2007 14:28		2/22/2007 15:00
SEL-20070219-004	Autauga	2	2/19/2007 13:20		2/19/2007 14:44
SEL-20070219-001	Autauga	2	2/19/2007 11:06		2/19/2007 13:03
SEL-20070217-004	Autauga	8	2/17/2007 19:45		2/17/2007 22:05
SEL-20070217-001	Autauga	5	2/17/2007 17:27		2/17/2007 18:30
SEL-20070216-003	Autauga	1	2/16/2007 15:41		2/16/2007 17:05
Fire #	County	Acres	Reported On	Contained On	Controlled On
20190919-15	Elmore	15	9/19/2019 13:49	9/19/2019 16:03	9/19/2019 17:48
20190914-2	Elmore	10	9/14/2019 12:31	9/14/2019 15:27	9/14/2019 15:27
20190912-5	Elmore	6	9/12/2019 14:01	9/12/2019 15:30	9/12/2019 15:30
20190815-4	Elmore	5	8/15/2019 14:41	8/15/2019 16:50	8/15/2019 16:50
20190325-3	Elmore	2	3/25/2019 13:31	3/25/2019 14:30	3/25/2019 14:30
20180628-3	Elmore	0.1	6/28/2018 17:50	6/28/2018 18:18	6/28/2018 18:18
20170421-1	Elmore	35	4/21/2017 10:05	4/21/2017 13:08	4/21/2017 13:08
20170321-27	Elmore	60	3/21/2017 16:37	3/21/2017 18:44	3/21/2017 18:44
20170320-3	Elmore	6	3/20/2017 10:52	3/20/2017 14:04	3/20/2017 14:04
20170306-15	Elmore	27	3/6/2017 13:37	3/6/2017 16:05	3/6/2017 16:06

20161230-6	Elmore	20	12/30/2016 13:12	12/30/2016 16:47	12/30/2016 17:05
20161116-14	Elmore	9	11/16/2016 13:29	11/16/2016 17:11	11/16/2016 22:55
20161107-25	Elmore	1	11/7/2016 14:31	11/7/2016 17:56	11/7/2016 17:56
20161023-51	Elmore	0.1	10/23/2016 18:01	10/23/2016 19:11	10/25/2016 17:23
20161021-10	Elmore	8	10/21/2016 10:37	10/21/2016 11:51	10/21/2016 16:58
20161021-5	Elmore	8	10/21/2016 9:23	10/21/2016 10:20	10/21/2016 10:23
20161015-13	Elmore	3	10/15/2016 13:14	10/15/2016 15:15	10/15/2016 15:15
20161014-21	Elmore	0.1	10/14/2016 13:21	10/14/2016 14:08	10/14/2016 14:08
20161010-8	Elmore	0.3	10/10/2016 10:33	10/10/2016 12:03	10/10/2016 12:03
20161005-5	Elmore	30	10/5/2016 11:26	10/5/2016 16:40	10/5/2016 16:40
20161004-20	Elmore	2	10/4/2016 14:20	10/4/2016 15:34	10/4/2016 15:56
20161004-10	Elmore	3	10/4/2016 12:25	10/4/2016 12:47	10/4/2016 12:47
20160928-16	Elmore	3	9/28/2016 13:38	9/28/2016 14:11	9/28/2016 14:11
20160907-5	Elmore	9	9/7/2016 15:53	9/7/2016 17:03	9/7/2016 17:03
20160505-3	Elmore	3	5/5/2016 21:38	5/5/2016 23:22	5/5/2016 23:22
20160501-1	Elmore	2	5/1/2016 21:13	5/1/2016 22:14	5/1/2016 22:14
20160405-6	Elmore	4	4/5/2016 14:46	4/6/2016 14:55	4/6/2016 14:56

20160208-16	Elmore	100	2/8/2016 19:26	2/9/2016 1:40	2/9/2016 1:40
ECR-20160106-001	Elmore	20	1/6/2016 18:21		1/6/2016 22:32
ECR-20150508-001	Elmore	2	5/8/2015 14:26		5/8/2015 16:12
ECR-20150507-005	Elmore	0	5/7/2015 20:48		5/7/2015 22:00
ECR-20150402-003	Elmore	2	4/2/2015 21:30		4/2/2015 23:54
ECR-20150329-001	Elmore	8	3/29/2015 13:47		3/29/2015 16:35
ECR-20150318-005	Elmore	2	3/18/2015 16:59		3/18/2015 18:22
ECR-20150215-001	Elmore	30	2/15/2015 12:33		2/15/2015 14:29
ECR-20150214-001	Elmore	30	2/14/2015 13:20		2/14/2015 15:46
ECR-20150130-002	Elmore	25	1/30/2015 13:59		1/30/2015 15:21
ECR-20150121-003	Elmore	0	1/21/2015 14:03		1/21/2015 14:56
ECR-20141215-001	Elmore	0	12/15/2014 10:41		12/15/2014 11:25
ECR-20141213-008	Elmore	1	12/13/2014 20:44		12/13/2014 21:38
ECR-20141212-007	Elmore	0	12/12/2014 20:10		12/12/2014 22:35
ECR-20141212-009	Elmore	0	12/12/2014 20:10		12/12/2014 22:35
ECR-20141201-002	Elmore	7	12/1/2014 12:10		12/1/2014 13:48
ECR-20141110-002	Elmore	1	11/10/2014 16:24		11/10/2014 17:52

ECR-20141021-002	Elmore	30	10/21/2014 14:39		10/14/2014 17:12
ECR-20141007-001	Elmore	8	10/7/2014 16:46		10/7/2014 20:30
ECR-20141005-001	Elmore	0	10/5/2014 13:48		10/5/2014 16:03
ECR-20140917-001	Elmore	0	9/17/2014 15:23		9/17/2014 16:52
ECR-20140327-009	Elmore	4	3/27/2014 20:25		3/27/2014 22:31
ECR-20140327-002	Elmore	12	3/27/2014 12:57		3/27/2014 15:23
ECR-20140322-001	Elmore	13	3/22/2014 17:51		3/22/2014 20:17
ECR-20140310-003	Elmore	23	3/10/2014 15:40		3/10/2014 17:39
ECR-20140301-001	Elmore	1	3/1/2014 9:43		2/28/2014 11:21
ECR-20140224-004	Elmore	0	2/24/2014 14:40		2/24/2014 15:42
ECR-20140125-012	Elmore	15	1/25/2014 19:08		1/25/2014 20:59
ECR-20140125-008	Elmore	35	1/25/2014 13:16		1/25/2014 15:56
ECR-20140121-003	Elmore	6	1/21/2014 15:17		1/21/2014 16:57
ECR-20140103-001	Elmore	20	1/3/2014 11:35		1/3/2014 15:00
ECR-20131110-001	Elmore	19	11/10/2013 15:54		11/10/2013 19:38
ECR-20130513-001	Elmore	9	5/13/2013 14:02		5/13/2013 16:46
ECR-20130508-001	Elmore	2	5/8/2013 21:06		5/9/2013 1:03

ECR-20130316-004	Elmore	3	3/16/2013 13:46		3/16/2013 16:54
ECR-20130304-007	Elmore	175	3/4/2013 12:59		3/4/2013 21:45
ECR-20121205-003	Elmore	3	12/5/2012 15:06		12/5/2012 16:55
ECR-20121030-007	Elmore	1	10/30/2012 15:35		10/30/2012 17:31
ECR-20120927-001	Elmore	1	9/27/2012 11:58		9/27/2012 17:05
ECR-20120927-002	Elmore	4	9/27/2012 11:58		9/27/2012 17:05
ECR-20120426-001	Elmore	9	4/26/2012 12:33		4/26/2012 16:08
ECR-20120318-004	Elmore	2	3/18/2012 15:48		3/18/2012 19:37
ECR-20120209-002	Elmore	0	2/9/2012 18:52		2/9/2012 20:40
ECR-20111108-002	Elmore	6	11/8/2011 15:30		11/8/2011 18:18
ECR-20111029-005	Elmore	0	10/29/2011 14:33		10/29/2011 19:20
ECR-20111029-004	Elmore	0	10/29/2011 14:21		10/29/2011 18:15
ECR-20111007-004	Elmore	0	10/7/2011 14:29		10/7/2011 15:25
ECR-20110828-001	Elmore	9	8/28/2011 10:43		8/28/2011 13:56
ECR-20110701-001	Elmore	0	7/1/2011 7:47		7/1/2011 9:45
ECR-20110609-001	Elmore	1	6/9/2011 13:38		6/9/2011 15:06
ECR-20110607-002	Elmore	1	6/7/2011 13:38		6/7/2011 15:52

ECR-20110602-001	Elmore	1	6/2/2011 13:56		6/2/2011 15:23
ECR-20110526-001	Elmore	97	5/26/2011 7:29		5/26/2011 15:40
ECR-20110518-001	Elmore	39	5/18/2011 13:08		5/18/2011 16:57
ECR-20110506-001	Elmore	1	5/6/2011 13:35		5/6/2011 15:40
ECR-20110425-001	Elmore	4	4/25/2011 12:43		4/25/2011 14:44
ECR-20110404-002	Elmore	4	4/4/2011 16:43		4/4/2011 19:24
ECR-20110403-001	Elmore	0	4/3/2011 13:38		4/3/2011 16:22
ECR-20110324-003	Elmore	5	3/24/2011 11:56		3/24/2011 13:27
ECR-20110324-002	Elmore	3	3/24/2011 11:41		3/24/2011 15:16
ECR-20110317-003	Elmore	4	3/17/2011 19:23		3/17/2011 22:10
ECR-20110312-003	Elmore	7	3/12/2011 15:15		3/12/2011 17:55
ECR-20110304-004	Elmore	17	3/4/2011 12:06		3/4/2011 15:10
ECR-20110303-012	Elmore	50	3/3/2011 17:23		3/3/2011 21:53
ECR-20110224-015	Elmore	65	2/24/2011 18:13		2/24/2011 23:08
ECR-20110222-015	Elmore	1	2/22/2011 14:56		2/22/2011 16:10
ECR-20110217-005	Elmore	4	2/17/2011 12:22		2/17/2011 13:55
ECR-20110217-003	Elmore	1	2/17/2011 11:42		2/17/2011 12:45

ECR-20110216-007	Elmore	0	2/16/2011 15:53		2/16/2011 17:00
ECR-20110213-005	Elmore	3	2/13/2011 15:28		2/13/2011 18:22
ECR-20110128-002	Elmore	33	1/28/2011 14:53		1/28/2011 16:26
ECR-20101210-001	Elmore	0	12/10/2010 14:15		12/10/2010 15:45
ECR-20101007-005	Elmore	0	10/7/2010 15:10		10/7/2010 15:55
ECR-20101007-002	Elmore	0	10/7/2010 12:41		10/7/2010 13:52
ECR-20100923-006	Elmore	4	9/23/2010 14:54		9/23/2010 17:00
ECR-20100922-001	Elmore	3	9/22/2010 11:25		9/22/2010 12:30
ECR-20100904-001	Elmore	0	9/4/2010 12:41		9/4/2010 13:49
ECR-20100705-001	Elmore	3	7/5/2010 13:16		7/5/2010 15:00
ECR-20100513-001	Elmore	1	5/13/2010 14:15		5/13/2010 16:22
ECR-20100414-009	Elmore	4	4/14/2010 16:18		4/14/2010 17:38
ECR-20100406-009	Elmore	3	4/6/2010 16:27		4/6/2010 17:50
ECR-20100405-006	Elmore	30	4/5/2010 19:39		4/6/2010 0:23
ECR-20100330-004	Elmore	10	3/30/2010 16:42		3/30/2010 17:49
ECR-20100320-005	Elmore	30	3/20/2010 17:56		3/20/2010 21:04
ECR-20100316-001	Elmore	3	3/16/2010 13:25		3/16/2010 15:22

ECR-20100308-005	Elmore	4	3/8/2010 12:13		3/8/2010 14:58
ECR-20100227-001	Elmore	30	2/27/2010 14:12		2/27/2010 20:00
ECR-20100225-002	Elmore	4	2/25/2010 14:42		2/25/2010 16:36
ECR-20090323-003	Elmore	1	3/23/2009 13:37		3/23/2009 14:30
ECR-20090221-001	Elmore	21	2/21/2009 13:15		2/21/2009 15:49
ECR-20090207-002	Elmore	9	2/7/2009 12:44		2/7/2009 14:45
ECR-20090127-001	Elmore	1	1/27/2009 13:58		1/27/2009 15:22
ECR-20090121-002	Elmore	2	1/21/2009 14:45		1/21/2009 15:46
MGM-20081208-001	Elmore	0	12/8/2008 13:01		12/8/2008 13:42
MGM-20081203-002	Elmore	1	12/3/2008 13:49		12/3/2008 14:40
MGM-20081006-002	Elmore	26	10/6/2008 14:13		10/6/2008 16:10
MGM-20081003-004	Elmore	2	10/3/2008 12:27		10/3/2008 14:48
MGM-20080709-001	Elmore	2	7/9/2008 13:04		7/9/2008 15:17
MGM-20080704-002	Elmore	5	7/4/2008 16:38		7/4/2008 21:10
MGM-20080621-002	Elmore	1	6/21/2008 12:17		6/21/2008 15:18
MGM-20080609-006	Elmore	0	6/9/2008 18:06		6/9/2008 19:10
MGM-20080507-001	Elmore	4	5/7/2008 14:53		5/7/2008 15:36

MGM-20080502-001	Elmore	5	5/2/2008 22:27		5/3/2008 1:12
MGM-20080423-002	Elmore	3	4/23/2008 12:38		4/23/2008 14:26
MGM-20080409-001	Elmore	0	4/9/2008 13:45		4/9/2008 15:52
MGM-20080327-009	Elmore	0	3/27/2008 17:10		3/27/2008 19:22
MGM-20080310-001	Elmore	0	3/10/2008 14:18		3/10/2008 16:31
MGM-20080219-002	Elmore	5	2/19/2008 13:57		2/19/2008 17:40
MGM-20080210-008	Elmore	9	2/10/2008 17:49		2/10/2008 20:27
MGM-20080210-004	Elmore	46	2/10/2008 14:11		2/10/2008 17:49
MGM-20080209-002	Elmore	5	2/9/2008 16:05		2/9/2008 17:46
MGM-20080102-002	Elmore	0	1/2/2008 14:34		1/2/2008 15:55
MGM-20071115-002	Elmore	0	11/15/2007 14:48		11/15/2007 17:32
MGM-20071101-001	Elmore	0	11/1/2007 14:50		11/1/2007 16:24
MGM-20071014-001	Elmore	2	10/14/2007 11:40		10/14/2007 15:25
MGM-20071013-005	Elmore	15	10/13/2007 17:20		10/13/2007 22:36
MGM-20070930-001	Elmore	0	9/30/2007 11:13		9/30/2007 16:35
MGM-20070825-001	Elmore	2	8/25/2007 23:51		8/25/2007 15:16
MGM-20070824-005	Elmore	15	8/24/2007 16:45		8/24/2007 21:40

MGM-20070822-004	Elmore	7	8/22/2007 15:53		8/22/2007 19:35
MGM-20070822-001	Elmore	94	8/22/2007 13:26		8/22/2007 22:31
MGM-20070821-004	Elmore	0	8/21/2007 13:40		8/21/2007 14:11
MGM-20070724-002	Elmore	9	7/24/2007 13:43		7/24/2007 16:32
MGM-20070724-001	Elmore	1	7/24/2007 12:50		7/24/2007 14:24
MGM-20070723-002	Elmore	0	7/23/2007 16:30		7/23/2007 18:40
MGM-20070716-001	Elmore	0	7/16/2007 12:32		7/16/2007 12:50
MGM-20070701-003	Elmore	196	7/1/2007 16:15		7/2/2007 17:25
MGM-20070626-002	Elmore	0	6/26/2007 13:40		6/26/2007 18:16
MGM-20070623-001	Elmore	0	6/23/2007 13:14		6/23/2007 15:54
MGM-20070612-002	Elmore	0	6/12/2007 15:29		6/12/2007 17:25
MGM-20070611-002	Elmore	2	6/11/2007 12:43		6/11/2007 13:28
MGM-20070603-005	Elmore	3	6/3/2007 17:57		6/3/2007 20:05
MGM-20070603-007	Elmore	0	6/3/2007 17:57		6/3/2007 20:05
MGM-20070529-001	Elmore	8	5/29/2007 7:49		5/29/2007 12:00
MGM-20070529-002	Elmore	3	5/29/2007 7:49		5/29/2007 12:00
MGM-20070529-004	Elmore	108	5/29/2007 7:49		5/29/2007 19:49

MGM-20070529-005	Elmore	108	5/29/2007 7:49		5/29/2007 20:02
MGM-20070529-006	Elmore	2	5/29/2007 7:49		5/29/2007 7:49
MGM-20070528-004	Elmore	0	5/28/2007 15:39		5/28/2007 15:45
MGM-20070528-002	Elmore	0	5/28/2007 15:16		5/28/2007 15:45
MGM-20070528-003	Elmore	0	5/28/2007 15:16		5/28/2007 15:45
MGM-20070528-005	Elmore	0	5/28/2007 15:16		5/28/2007 15:45
MGM-20070528-011	Elmore	0	5/28/2007 15:16		5/28/2007 15:45
MGM-20070525-001	Elmore	0	5/25/2007 2:16		5/25/2007 6:07
MGM-20070524-002	Elmore	70	5/24/2007 16:34		5/24/2007 20:30
MGM-20070523-005	Elmore	0	5/23/2007 15:39		5/23/2007 16:34
MGM-20070523-003	Elmore	5	5/23/2007 11:32		5/23/2007 13:43
MGM-20070522-001	Elmore	1	5/22/2007 14:10		5/22/2007 17:05
MGM-20070520-007	Elmore	0	5/20/2007 17:19		5/20/2007 17:37
MGM-20070520-006	Elmore	28	5/20/2007 15:27		5/20/2007 17:18
MGM-20070518-005	Elmore	2	5/18/2007 14:22		5/18/2007 16:20
MGM-20070509-006	Elmore	0	5/9/2007 17:01		5/9/2007 18:05
MGM-20070325-008	Elmore	12	3/25/2007 14:26		3/25/2007 16:34

MGM-20070319-003	Elmore	47	3/19/2007 23:52		3/19/2007 18:16
MGM-20070313-003	Elmore	68	3/13/2007 13:24		3/13/2007 15:58
MGM-20070310-008	Elmore	2	3/10/2007 16:20		3/10/2007 17:50
MGM-20070307-016	Elmore	4	3/7/2007 15:14		3/7/2007 18:10
MGM-20070304-003	Elmore	0	3/4/2007 18:03		3/4/2007 19:43
MGM-20070228-006	Elmore	1	2/28/2007 13:20		2/28/2007 14:48
MGM-20070224-004	Elmore	6	2/24/2007 15:04		2/24/2007 16:54
MGM-20070219-003	Elmore	1	2/19/2007 13:00		2/19/2007 14:50
MGM-20070210-002	Elmore	4	2/10/2007 14:53		2/10/2007 15:55
Fire #	County	Acres	Reported On	Contained On	Controlled On
20200315-6	Montgomery	2	3/15/2020 14:20	3/15/2020 16:34	3/16/2020 9:11
20200202-2	Montgomery	3.6	2/2/2020 14:14	2/2/2020 15:08	2/2/2020 15:08
20191011-8	Montgomery	0.5	10/11/2019 12:03	10/11/2019 13:30	10/11/2019 13:30
20191005-11	Montgomery	3.3	10/5/2019 13:01	10/5/2019 16:31	10/5/2019 16:31
20190921-21	Montgomery	1.5	9/21/2019 17:04	9/21/2019 17:05	9/21/2019 17:05
20190921-20	Montgomery	5.3	9/21/2019 17:03	9/21/2019 17:04	9/21/2019 17:04
20190921-10	Montgomery	2	9/21/2019 14:22	9/21/2019 17:03	9/21/2019 17:03

20190918-6	Montgomery	2.1	9/18/2019 11:32	9/18/2019 13:43	9/18/2019 13:43
20190917-2	Montgomery	0.5	9/17/2019 9:22	9/17/2019 9:39	9/17/2019 9:39
20190911-6	Montgomery	0.5	9/11/2019 16:25	9/11/2019 19:56	9/13/2019 10:53
20190226-1	Montgomery	2	2/26/2019 11:48	2/26/2019 12:30	2/26/2019 12:30
20190205-1	Montgomery	0.1	2/5/2019 11:07	2/5/2019 11:09	2/5/2019 11:20
20181212-1	Montgomery	0.1	12/12/2018 11:55	12/12/2018 12:06	12/12/2018 12:06
20180514-1	Montgomery	3	5/14/2018 12:56	5/14/2018 15:35	5/14/2018 15:35
20180418-9	Montgomery	2.5	4/18/2018 17:25	4/18/2018 21:01	4/20/2018 14:38
20180325-3	Montgomery	1.5	3/25/2018 13:28	3/26/2018 10:53	3/26/2018 10:53
20180323-10	Montgomery	25	3/23/2018 20:53	3/23/2018 23:46	3/26/2018 10:52
20180301-1	Montgomery	0.5	3/1/2018 11:52	3/1/2018 13:00	3/1/2018 13:00
20180203-9	Montgomery	5	2/3/2018 14:18	2/3/2018 16:14	2/3/2018 16:14
20180121-17	Montgomery	5	1/21/2018 15:16	1/21/2018 16:55	1/21/2018 16:55
20171018-1	Montgomery	0.5	10/18/2017 13:45	10/18/2017 14:02	10/18/2017 14:02
20170828-2	Montgomery	3	8/28/2017 12:26	8/28/2017 12:55	8/28/2017 12:55
20170818-2	Montgomery	1	8/18/2017 12:30	8/18/2017 13:18	8/18/2017 13:18
20170511-4	Montgomery	0.1	5/11/2017 18:17	5/11/2017 19:17	5/11/2017 19:17

20170430-2	Montgomery	26.6	4/30/2017 11:39	4/30/2017 13:49	4/30/2017 13:49
20170421-4	Montgomery	0.5	4/21/2017 13:46	4/21/2017 14:49	4/21/2017 14:49
20170410-8	Montgomery	2.3	4/10/2017 14:01	4/10/2017 14:44	4/10/2017 14:44
20170402-4	Montgomery	15.6	4/2/2017 12:54	4/2/2017 15:08	4/2/2017 15:08
20170327-4	Montgomery	5.4	3/27/2017 20:27	3/28/2017 0:21	3/28/2017 11:26
20170323-10	Montgomery	0.5	3/23/2017 12:20	3/23/2017 12:50	3/23/2017 12:50
20170131-31	Montgomery	11.3	1/31/2017 15:10	1/31/2017 18:12	1/31/2017 18:12
20170117-1	Montgomery	3	1/17/2017 11:45	1/17/2017 14:15	1/17/2017 14:15
20170116-3	Montgomery	8.3	1/16/2017 12:25	1/16/2017 14:51	1/16/2017 17:10
20170114-10	Montgomery	14.3	1/14/2017 13:51	1/14/2017 17:25	1/14/2017 17:25
20161216-4	Montgomery	1.5	12/16/2016 15:44	12/16/2016 18:32	12/16/2016 18:32
20161208-3	Montgomery	2	12/8/2016 15:08	12/8/2016 15:08	12/8/2016 16:20
20161202-5	Montgomery	0.5	12/2/2016 16:52	12/3/2016 9:46	12/3/2016 9:46
20161128-73	Montgomery	29	11/28/2016 15:32	11/28/2016 19:02	11/28/2016 19:02
20161127-24	Montgomery	7	11/27/2016 23:41	11/28/2016 1:54	11/28/2016 1:58
20161125-20	Montgomery	1	11/25/2016 20:54	11/25/2016 23:42	11/25/2016 23:42
20161124-19	Montgomery	2	11/24/2016 15:16	11/24/2016 16:52	11/24/2016 16:53

20161112-22	Montgomery	19.2	11/12/2016 12:00	11/12/2016 14:53	11/12/2016 21:20
20161105-51	Montgomery	6.1	11/5/2016 21:38	11/5/2016 23:28	11/5/2016 23:32
20161105-25	Montgomery	13.2	11/5/2016 13:50	11/5/2016 16:07	11/5/2016 16:18
20161105-22	Montgomery	5	11/5/2016 13:21	11/5/2016 14:52	11/5/2016 15:54
20161104-6	Montgomery	0.5	11/4/2016 10:16	11/4/2016 11:06	11/4/2016 11:06
20161102-20	Montgomery	1.5	11/2/2016 15:15	11/2/2016 16:38	11/2/2016 16:38
20161031-32	Montgomery	1	10/31/2016 16:09	10/31/2016 16:52	10/31/2016 16:52
20161025-36	Montgomery	37.6	10/25/2016 16:17	10/25/2016 20:37	11/4/2016 0:36
20161024-38	Montgomery	9.1	10/24/2016 16:18	10/24/2016 17:34	10/24/2016 17:34
20161024-30	Montgomery	21.4	10/24/2016 15:16	10/24/2016 18:37	10/24/2016 18:37
20161014-50	Montgomery	1	10/14/2016 17:03	10/14/2016 17:22	10/14/2016 17:22
20161014-34	Montgomery	25.2	10/14/2016 14:36	10/14/2016 17:12	10/14/2016 17:16
20161010-26	Montgomery	5.4	10/10/2016 13:32	10/10/2016 15:11	10/10/2016 15:11
20161007-21	Montgomery	0.5	10/7/2016 11:49	10/7/2016 12:16	10/7/2016 12:16
20161005-35	Montgomery	45	10/5/2016 14:54	10/5/2016 16:38	10/5/2016 16:40
20161003-26	Montgomery	5.6	10/3/2016 15:20	10/3/2016 17:02	10/3/2016 17:23
20160929-29	Montgomery	32	9/29/2016 15:33	9/29/2016 18:05	9/29/2016 18:05

20160925-19	Montgomery	78	9/25/2016 17:15	9/25/2016 19:56	9/25/2016 19:56
20160911-1	Montgomery	0.2	9/11/2016 14:30	9/11/2016 15:25	9/11/2016 18:46
20160817-2	Montgomery	2	8/17/2016 16:36	8/18/2016 10:35	8/18/2016 10:36
20160725-4	Montgomery	4	7/25/2016 13:31	7/25/2016 15:49	7/25/2016 15:49
20160404-12	Montgomery	8	4/4/2016 19:22	4/4/2016 20:53	4/4/2016 20:53
20160211-4	Montgomery	4	2/11/2016 11:45	2/11/2016 12:36	2/12/2016 16:23
20160119-2	Montgomery	2	1/19/2016 19:12	1/19/2016 21:45	1/20/2016 6:53
ECR-20151020-001	Montgomery	0	10/20/2015 13:30		10/20/2015 13:50
ECR-20150915-001	Montgomery	2	9/15/2015 17:04		9/15/2015 18:57
ECR-20150804-001	Montgomery	3	8/4/2015 14:53		8/4/2015 17:05
ECR-20150623-001	Montgomery	0	6/23/2015 10:28		6/23/2015 10:48
ECR-20150513-002	Montgomery	3	5/13/2015 18:00		5/6/2015 10:37
ECR-20150513-001	Montgomery	0	5/13/2015 16:46		5/13/2015 17:48
ECR-20150507-003	Montgomery	5	5/7/2015 16:34		5/7/2015 19:16
ECR-20150423-001	Montgomery	2	4/23/2015 18:06		4/23/2015 20:55
ECR-20150320-001	Montgomery	0	3/20/2015 16:43		3/20/2015 17:20
ECR-20150121-001	Montgomery	1	1/21/2015 11:51		1/21/2015 11:56

ECR-20150120-004	Montgomery	3	1/20/2015 15:23		1/20/2015 15:52
ECR-20150120-002	Montgomery	2	1/20/2015 14:15		1/20/2015 14:51
ECR-20150117-001	Montgomery	2	1/17/2015 12:07		1/17/2015 13:26
ECR-20150106-002	Montgomery	2	1/6/2015 15:04		1/6/2015 16:38
ECR-20150106-001	Montgomery	2	1/6/2015 14:25		1/6/2015 15:10
ECR-20141220-001	Montgomery	1	12/20/2014 19:48		12/20/2014 21:30
ECR-20141216-002	Montgomery	5	12/16/2014 19:11		12/16/2014 20:45
ECR-20141213-004	Montgomery	2	12/13/2014 13:05		12/13/2014 15:45
ECR-20141213-003	Montgomery	2	12/13/2014 13:01		12/13/2014 13:25
ECR-20141211-001	Montgomery	0	12/11/2014 14:00		12/11/2014 14:45
ECR-20141209-004	Montgomery	0	12/9/2014 12:30		12/9/2014 13:00
ECR-20141201-001	Montgomery	3	12/1/2014 10:27		12/1/2014 13:09
ECR-20141129-001	Montgomery	2	11/29/2014 13:15		11/29/2014 14:45
ECR-20141110-001	Montgomery	2	11/10/2014 11:36		11/10/2014 12:03
ECR-20141031-001	Montgomery	1	10/31/2014 12:36		10/31/2014 13:20
ECR-20141021-003	Montgomery	2	10/21/2014 17:36		10/21/2014 18:06
ECR-20141010-002	Montgomery	0	10/10/2014 15:30		10/10/2014 16:06

ECR-20140903-002	Montgomery	1	9/3/2014 17:07		9/3/2014 18:29
ECR-20140714-001	Montgomery	2	7/14/2014 16:25		7/30/2014 17:36
ECR-20140410-002	Montgomery	1	4/10/2014 14:55		4/10/2014 15:50
ECR-20140314-003	Montgomery	10	3/14/2014 13:56		3/14/2014 15:23
ECR-20140310-001	Montgomery	5	3/10/2014 12:45		3/10/2014 13:51
ECR-20140119-003	Montgomery	5	1/19/2014 13:05		1/19/2014 15:00
ECR-20131218-001	Montgomery	2	12/18/2013 12:00		12/18/2013 12:29
ECR-20131125-008	Montgomery	2	11/25/2013 19:17		11/25/2013 20:50
ECR-20131125-002	Montgomery	1	11/25/2013 11:00		11/25/2013 11:58
ECR-20131113-003	Montgomery	2	11/13/2013 18:10		11/6/2013 20:24
ECR-20131106-001	Montgomery	10	11/6/2013 14:45		11/6/2013 16:31
ECR-20131023-001	Montgomery	6	10/23/2013 11:41		10/23/2013 14:05
ECR-20130718-001	Montgomery	0	7/18/2013 14:40		7/18/2013 15:12
ECR-20130530-002	Montgomery	0	5/30/2013 22:28		5/30/2013 23:56
ECR-20130329-001	Montgomery	64	3/29/2013 13:22		3/29/2013 14:57
ECR-20130320-001	Montgomery	0	3/20/2013 12:50		3/20/2013 13:00
ECR-20130318-003	Montgomery	12	3/18/2013 15:52		3/18/2013 16:29

ECR-20130310-008	Montgomery	26	3/10/2013 15:36		3/10/2013 17:38
ECR-20130309-012	Montgomery	130	3/9/2013 17:02		3/10/2013 11:00
ECR-20130308-005	Montgomery	8	3/8/2013 16:50		3/8/2013 18:13
ECR-20130308-003	Montgomery	0	3/8/2013 13:41		3/8/2013 15:26
ECR-20130307-002	Montgomery	2	3/7/2013 13:39		3/7/2013 14:32
ECR-20130107-001	Montgomery	3	1/7/2013 14:02		1/7/2013 15:43
ECR-20121209-002	Montgomery	4	12/9/2012 14:47		12/9/2012 16:46
ECR-20121102-001	Montgomery	1	11/2/2012 13:31		11/2/2012 15:26
ECR-20121031-003	Montgomery	3	10/31/2012 14:47		10/31/2012 16:12
ECR-20121029-003	Montgomery	5	10/29/2012 14:25		10/29/2012 16:04
ECR-20120926-001	Montgomery	3	9/26/2012 9:05		9/26/2012 11:53
ECR-20120710-002	Montgomery	45	7/10/2012 16:02		7/10/2012 18:26
ECR-20120706-002	Montgomery	7	7/6/2012 15:42		7/6/2012 17:43
ECR-20120621-002	Montgomery	0	6/21/2012 14:10		6/21/2012 14:26
ECR-20120320-008	Montgomery	25	3/20/2012 17:30		3/20/2012 21:38
ECR-20120317-004	Montgomery	3	3/17/2012 17:26		3/17/2012 19:41
ECR-20120103-001	Montgomery	3	1/3/2012 9:14		1/3/2012 10:11

ECR-20111214-001	Montgomery	2	12/14/2011 13:35		12/14/2011 13:46
ECR-20111021-001	Montgomery	1	10/21/2011 12:10		10/21/2011 14:07
ECR-20110914-001	Montgomery	0	9/14/2011 14:59		9/14/2011 15:17
ECR-20110903-001	Montgomery	3	9/3/2011 11:37		9/3/2011 12:11
ECR-20110831-001	Montgomery	0	8/31/2011 14:37		8/31/2011 15:18
ECR-20110828-005	Montgomery	5	8/28/2011 14:33		8/28/2011 16:31
ECR-20110827-002	Montgomery	35	8/27/2011 15:00		8/27/2011 17:11
ECR-20110817-001	Montgomery	6	8/17/2011 16:12		8/17/2011 17:22
ECR-20110702-001	Montgomery	219	7/2/2011 17:04		7/2/2011 22:37
ECR-20110615-006	Montgomery	4	6/15/2011 15:14		6/15/2011 16:10
ECR-20110615-005	Montgomery	1	6/15/2011 14:52		6/15/2011 15:19
ECR-20110614-002	Montgomery	165	6/14/2011 16:20		6/14/2011 18:57
ECR-20110607-004	Montgomery	3	6/7/2011 16:48		6/7/2011 18:57
ECR-20110604-002	Montgomery	18	6/4/2011 15:19		6/4/2011 18:11
ECR-20110527-001	Montgomery	65	5/27/2011 15:52		5/27/2011 16:27
ECR-20110521-002	Montgomery	3	5/21/2011 12:18		5/21/2011 14:22
ECR-20110324-006	Montgomery	4	3/24/2011 13:17		3/24/2011 14:01

ECR-20110322-005	Montgomery	22	3/22/2011 16:44		3/22/2011 18:18
ECR-20110212-005	Montgomery	30	2/12/2011 15:50		2/12/2011 17:34
ECR-20110129-002	Montgomery	25	1/29/2011 11:07		1/29/2011 13:30
ECR-20110123-001	Montgomery	8	1/23/2011 12:30		1/23/2011 14:14
ECR-20101120-001	Montgomery	10	11/20/2010 13:13		11/20/2010 14:44
ECR-20101114-002	Montgomery	6	11/14/2010 14:26		11/14/2010 15:58
ECR-20101023-005	Montgomery	27	10/23/2010 16:09		10/23/2010 18:25
ECR-20101022-001	Montgomery	0	10/22/2010 12:01		10/22/2010 12:39
ECR-20101015-006	Montgomery	2	10/15/2010 15:50		10/15/2010 17:42
ECR-20101012-002	Montgomery	1	10/12/2010 17:04		10/12/2010 18:59
ECR-20101008-003	Montgomery	0	10/8/2010 16:00		10/8/2010 16:44
ECR-20101006-002	Montgomery	1	10/6/2010 14:16		10/6/2010 15:13
ECR-20101004-002	Montgomery	0	10/4/2010 13:31		10/4/2010 13:41
ECR-20101001-001	Montgomery	0	10/1/2010 7:25		10/1/2010 7:54
ECR-20101001-003	Montgomery	0	9/30/2010 16:15		9/30/2010 18:30
ECR-20100923-002	Montgomery	15	9/23/2010 12:35		9/23/2010 14:28
ECR-20100921-006	Montgomery	2	9/21/2010 18:55		9/21/2010 20:42

ECR-20100920-001	Montgomery	0	9/20/2010 11:09		
ECR-20100918-005	Montgomery	10	9/18/2010 19:13		9/18/2010 22:17
ECR-20100910-001	Montgomery	2	9/10/2010 15:54		9/10/2010 16:34
ECR-20100910-002	Montgomery	1	9/10/2010 15:54		9/10/2010 17:45
ECR-20100909-005	Montgomery	3	9/9/2010 15:08		9/9/2010 15:56
ECR-20100908-001	Montgomery	3	9/8/2010 15:40		9/8/2010 16:42
ECR-20100907-004	Montgomery	3	9/7/2010 15:55		9/7/2010 16:50
ECR-20100907-002	Montgomery	3	9/7/2010 12:34		9/7/2010 14:15
ECR-20100413-006	Montgomery	1	4/13/2010 15:49		4/13/2010 16:43
ECR-20100405-002	Montgomery	1	4/5/2010 13:36		4/5/2010 14:57
ECR-20100329-002	Montgomery	10	3/29/2010 13:30		3/29/2010 17:02
ECR-20100323-001	Montgomery	8	3/23/2010 14:54		3/23/2010 15:46
ECR-20100127-001	Montgomery	6	1/27/2010 16:00		1/27/2010 17:45
ECR-20090827-001	Montgomery	20	8/27/2009 16:00		8/27/2009 16:30
ECR-20090310-001	Montgomery	4	3/10/2009 13:36		3/10/2009 14:27
MGM-20081208-002	Montgomery	5	12/8/2008 13:11		12/8/2008 14:14
MGM-20081118-001	Montgomery	3	11/18/2008 13:32		11/18/2008 15:30

MGM-20080628-001	Montgomery	2	6/28/2008 12:00		6/28/2008 12:19
MGM-20080618-001	Montgomery	1	6/18/2008 9:00		6/18/2008 10:23
MGM-20080616-001	Montgomery	0	6/16/2008 15:55		6/16/2008 16:20
MGM-20080501-003	Montgomery	2	5/1/2008 18:42		5/1/2008 19:00
MGM-20080424-002	Montgomery	3	4/24/2008 14:15		4/24/2008 16:12
MGM-20080325-003	Montgomery	2	3/25/2008 16:11		3/25/2008 17:22
MGM-20080317-008	Montgomery	0	3/17/2008 14:10		3/17/2008 15:02
MGM-20080317-006	Montgomery	5	3/17/2008 13:35		3/17/2008 15:32
MGM-20080303-002	Montgomery	4	3/3/2008 11:51		3/3/2008 13:30
MGM-20080302-004	Montgomery	10	3/2/2008 13:59		3/2/2008 15:51
MGM-20080220-001	Montgomery	3	2/20/2008 13:22		2/20/2008 14:32
MGM-20080210-005	Montgomery	15	2/10/2008 14:34		2/10/2008 17:42
MGM-20080115-002	Montgomery	1	1/15/2008 14:30		1/15/2008 15:28
MGM-20071015-006	Montgomery	12	10/15/2007 18:13		10/15/2007 20:40
MGM-20071010-003	Montgomery	2	10/10/2007 13:35		10/10/2007 15:50
MGM-20071007-001	Montgomery	8	10/7/2007 12:20		10/7/2007 14:54
MGM-20070825-002	Montgomery	6	8/25/2007 13:24		8/25/2007 15:35

MGM-20070821-001	Montgomery	24	8/21/2007 13:45		8/21/2007 15:35
MGM-20070805-001	Montgomery	2	8/5/2007 21:24		8/5/2007 23:08
MGM-20070628-002	Montgomery	3	6/28/2007 21:59		6/29/2007 0:15
MGM-20070610-004	Montgomery	0	6/10/2007 16:20		6/10/2007 17:34
MGM-20070610-001	Montgomery	5	6/10/2007 14:18		6/10/2007 15:59
MGM-20070607-003	Montgomery	0	6/7/2007 13:34		6/7/2007 13:51
MGM-20070531-004	Montgomery	37	5/31/2007 12:42		5/31/2007 14:40
MGM-20070526-002	Montgomery	6	5/26/2007 10:48		5/26/2007 13:40
MGM-20070522-006	Montgomery	10	5/22/2007 16:29		5/22/2007 18:33
MGM-20070507-003	Montgomery	1	5/7/2007 14:25		5/7/2007 15:28
MGM-20070430-002	Montgomery	4	4/30/2007 18:48		4/30/2007 20:07
MGM-20070321-007	Montgomery	110	3/21/2007 14:00		3/21/2007 18:35
MGM-20070319-002	Montgomery	0	3/19/2007 11:47		3/19/2007 13:31
MGM-20070314-003	Montgomery	30	3/14/2007 12:40		3/14/2007 14:30
MGM-20070227-005	Montgomery	7	2/27/2007 16:06		2/27/2007 16:14
MGM-20070219-006	Montgomery	9	2/19/2007 14:18		2/19/2007 15:41

Table 7.4.7: Winter Storm

Location	County/Zone	St.	Date	Type	PrD	CrD
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	1/19/2008	Winter Weather	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	1/19/2008	Winter Weather	0.00K	0.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	12/15/2010	Winter Weather	0.00K	0.00K
MONTGOMERY (ZONE)	MONTGOMERY (ZONE)	AL	12/15/2010	Winter Weather	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	12/15/2010	Winter Weather	0.00K	0.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	2/9/2011	Winter Weather	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	2/9/2011	Winter Weather	0.00K	0.00K
MONTGOMERY (ZONE)	MONTGOMERY (ZONE)	AL	1/28/2014	Winter Storm	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	1/28/2014	Winter Storm	0.00K	0.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	1/28/2014	Winter Storm	0.00K	0.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	12/8/2017	Winter Storm	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	12/8/2017	Winter Storm	0.00K	0.00K
AUTAUGA (ZONE)	AUTAUGA (ZONE)	AL	1/16/2018	Winter Storm	0.00K	0.00K
ELMORE (ZONE)	ELMORE (ZONE)	AL	1/16/2018	Winter Storm	0.00K	0.00K
MONTGOMERY (ZONE)	MONTGOMERY (ZONE)	AL	1/16/2018	Winter Storm	0.00K	0.00K

Table 7.4.8: Dams Locations

Dam Name	County	Owner Type	NID Height	NID Storage	Dam Type	Purpose	Hazard Potential	Year Completed
PICKERING LAKE DAM	Autauga	Public	0 ft	0 acre feet	Earth	Recreation	High	NA
CIRCLE A RANCH	Autauga	Public	35 ft	158 acre feet	Earth	Recreation	Significant	1966
CAMP TUKABATCHEE LAKE	Autauga	Public	22 ft	61 acre feet	Earth	Recreation	Low	1951
O Dell Lake	Autauga	Public	0 ft	0 acre feet	Earth	Recreation	Significant	NA
R M PENDERGRASS	Autauga	Public	17 ft	50 acre feet	Earth	Recreation	Significant	1936
UNDERWOOD LAKE	Autauga	Public	29 ft	146 acre feet	Earth	Recreation	Significant	1956
JIM ADAMS LAKE DAM	Autauga	Public	15 ft	240 acre feet	Earth	Recreation	Low	1976
CRYSTAL LAKE	Autauga	Public	18 ft	50 acre feet	Earth	Recreation	High	1941
IDLEWILD LAKE	Autauga	Public	22 ft	123 acre feet	Earth	Recreation	Significant	1954
PRATTVILLE LAKE	Autauga	Public	27	86 acre feet	Earth	Recreation	Significant	1920
PRATTVILLE INDUSTRIAL BOARD WASTE DAM	Autauga	Public	20 ft	496 acre feet	Earth	Other	low	1976
W T Palmer	Autauga	Public	17 ft	64 acre feet	Earth	Fish and Wildlife Pond	Significant	1965
UPCHURCH LAKE	Autauga	Public	18 ft	51 acre feet	Earth	Recreation	Low	1967
M A RICKARD	Autauga	Public	17 ft	56 acre feet	Earth	Recreation	low	1958
BLACKWELL LAKE DAM NUMBER TWO	Elmore	Public	20 ft	50 acre feet	Earth	Recreation	Low	1963
BLACKWELL LAKE DAM NUMBER ONE	Elmore	Public	21 ft	56 acre feet	Earth	Recreation	Low	1963
WHETSTONE	Elmore	Public	27 ft	80 acre feet	Earth	Recreation	Low	1957
B G POWELL LAKE DAM	Elmore	Public	19 ft	61 acre feet	Earth	Recreation	Low	1961
G C WHITE	Elmore	Public	24 ft	89 acre feet	Earth	Fish and Wildlife Pond	Low	1977
CHARLES BEARD	Elmore	Public	15 ft	18 acre feet	Earth	Fish and Wildlife Pond	Significant	1970
MARTIN	Elmore	Public	168 ft	1,622,000 acre feet	Gravity	Flood Control	High	1926
Jordan	Elmore	Public	125 ft	235,000 acre feet	Gravity	Hydroelectric	High	1928
WALTER BOULDIN SADDLE DIKE	Elmore	Public	10 ft	48,000 acre feet	NA	Hydroelectric	High	1967
PIGOEN ROOST CREEK	Elmore	Public	45 ft	48,000 acre feet	Earth	Hydroelectric	High	1967

WALTER BOULDIN	Elmore	Public	174 ft	48,000 acre feet	Gravity	Hydroelectric	High		1967
SPIEGNER	Elmore	Public	23 ft	2,070 acre feet	Earth	Recreation	High		1953
MERRITT JORDAN	Elmore	Public	14 ft	130 acre feet	earth	Fish and Wildlife Pond	NA		1957
W A WILLIAMSON	Elmore	Public	32 ft	144 acre feet	Earth	Recreation	NA		1955
PARAVIGNI DAM	Elmore	Public	10 ft	50 acre feet	Earth	Recreation	Low		1961
CROMMELIN LAKE DAM	Elmore	Public	18 ft	64 acre feet	Earth	Other	NA		1940
FITZPATRICK	Elmore	Public	37 ft	326 acre feet	Earth	Recreation	Low		1934
H M CHRISTIAN	Elmore	Public	21 ft	69 acre feet	Earth	Fish and Wildlife Pond	Significant		1973
POUNDSTONE	Elmore	Public	12 ft	77 acre feet	Earth	Recreation	low		1954
KNIGHT LAKE DAM	Elmore	Public	19 ft	58 acre feet	Earth	Recreation	Low		1960
MAIER LAKE DAM	Elmore	Public	31 ft	67 acre feet	Earth	Recreation	Low		1972
DANNZ DAVIS LAKE DAM	Elmore	Public	21 ft	50 acre feet	Earth	Recreation	Low		1970
NOLEN DAVIS LAKE DAM NUMBER TWO	Elmore	Public	26 ft	92 acre feet	Earth	Other	Low		1968
DAVIS	Elmore	Public	25 ft	83 acre feet	Earth	Recreation	Low		1970
STEWART	Elmore	Public	25 ft	79 acre feet	Earth	Recreation	low		1958
NOLEN DAVIS LAKE DAM NUMBER ONW	Elmore	Public	26 ft	92 acre feet	Earth	Other	Low		1968
WINGARD LAKE DAM	Elmore	Public	25 ft	56 acre feet	Earth	Recreation	low		1960
R H LAMB LAKE DAM	Elmore	Public	0 ft	0 acre feet	Earth	Recreation	Significant	NA	
O M WILSON	Elmore	Public	14 ft	128 acre feet	Earth	Fish and Wildlife Pond	Significant		1967
ANNIE T GREGORY LAKE DAM	Elmore	Public	26 ft	77 acre feet	Earth	Recreation	Low		1955
YATES	Elmore	Public	87 ft	54,000 acre feet	Gravity	Hydroelectric	High		1928
THURLOW	Elmore	Public	62 ft	18,250 acre feet	Gravity	Hydroelectric	High		1930
D W RUTLAND	Montgomery	Public	22 ft	121 acre feet	Earth	Recreation	Significant	NA	
C H WARNER	Montgomery	Public	12 ft	66 acre feet	Earth	Recreation	Significant		1950
BAGGETT	Montgomery	Public	9 ft	63 acre feet	Earth	Recreation	Low		1947
ELGIN	Montgomery	Public	17 ft	114 acre feet	Earth	Recreation	Significant		1948
SUGGS	Montgomery	Public	7 ft	210 acre feet	Earth	Recreation	Low		1946

WALLLOCK	Montgomery	Public	28 ft	126 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1968
DAVIS NO 1	Montgomery	Public	12 ft	252 acre feet	Earth	Recreation	Low		1948
MADDOX	Montgomery	Public	17 ft	68 acre feet	Earth	Recreation	Low		1970
SILVERMAN & DYKES	Montgomery	Public	18 ft	92 acre feet	Earth	Fish and Wildlife Pond	Low		1989
DR BILL CAUTHEN	Montgomery	Public	18 ft	112 acre feet	Earth	Fish and Wildlife Pond	Low		1975
NEWELL LAKE	Montgomery	Public	9 ft	67 acre feet	Earth	Grade Stabilization	High	NA	
FARM BUREAU	Montgomery	Public	15 ft	58 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant		1946
FISHER	Montgomery	Public	12 ft	53 acre feet	Earth	Recreation	Significant		1969
FRANK DAVIS	Montgomery	Public	12 ft	54 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1948
DAVIS NO 4	Montgomery	Public	21 ft	116 acre feet	Earth	Recreation	Low		1952
DAVIS NO 5	Montgomery	Public	18 ft	108 acre feet	Earth	Recreation	Low		1952
DUGGAR	Montgomery	Public	13 ft	273 acre feet	Earth	Fire Protection, Stock, or Small Fish	High		1961
LASSIER	Montgomery	Public	15 ft	105 acre feet	Earth	Recreation	low		1954
SIMS NO 1	Montgomery	Public	15 ft	105 acre feet	Earth	Recreation	Significant		1957
SIMS NO 2	Montgomery	Public	22 ft	99 acre feet	Earth	Recreation	Significant		1960
PIRTLE	Montgomery	Public	15 ft	173 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1945
FAULKNER	Montgomery	Public	17 ft	85 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant		1935
EDWARD MYERS	Montgomery	Public	8 ft	50 acre feet	Earth	Recreation	Significant		1948
C H WARNER POND	Montgomery	Public	11 ft	25 acre feet	Earth	Fish and Wildlife Pond	Significant		1981
HILL & HILL	Montgomery	Public	15 ft	132 acre feet	Earth	Fish and Wildlife Pond	Low		1950
FLOWERS	Montgomery	Public	15 ft	45 acre feet	Earth	Recreation	Significant		1953

WEIL	Montgomery	Public	19 ft	109 acre feet	Earth	Fish and Wildlife Pond	Low		1957
NUTSON NO 3	Montgomery	Public	22 ft	121 acre feet	Earth	Recreation	low		1947
NUTSON NO 1	Montgomery	Public	21 ft	126 acre feet	Earth	Recreation	Low		1945
HILL	Montgomery	Public	19 ft	95 acre feet	Earth	Recreation	low		1950
CAUTHEN NO 1	Montgomery	Public	20 ft	80 acre feet	Earth	Recreation	Significant		1950
UNDERWOOD NO 1	Montgomery	Public	20 ft	210 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1950
UNDERWOOD NO 2	Montgomery	Public	22 ft	198 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1953
HUBIE CAUTHEN NO 1	Montgomery	Public	20 ft	120 acre feet	Earth	Fish and Wildlife Pond	Low		1967
HUBIE CUTHEN NO 2	Montgomery	Public	18 ft	99 acre feet	Earth	Recreation	low		1969
HUBIE CAUTHEN	Montgomery	Public	17 ft	69 acre feet	Earth	Fish and Wildlife Pond	low		1969
DAVIS NO 3	Montgomery	Public	26 ft	325 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1950
DAVIS NO 2	Montgomery	Public	21 ft	326 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1950
VONGOL NO 1	Montgomery	Public	15 Fft	75 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1960
VONGOL NO 2	Montgomery	Public	18 ft	108 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1952
LECROY	Montgomery	Public	10 ft	50 acre feet	Earth	Recreation	Significant		1960
MCBRIDE	Montgomery	Public	10 ft	75 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1950
HERMAN GIBSON	Montgomery	Public	15 ft	135 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1953
HERMAN GIBSON NO 2	Montgomery	Public	17 ft	77 acre feet	Earth	Recreation	Significant		1954
SPEARS RHODES DAM	Montgomery	Public	0 ft	0 acre feet	Earth	Recreation	Significant	NA	

WYLIE HILL NO 2	Montgomery	Public	13 ft	98 acre feet	Earth	Recreation	Low	1958
WYLIE HILL NO 1	Montgomery	Public	12 ft	120 acre feet	Earth	Recreation	Low	1953
PAT MCINTYRE	Montgomery	Public	11 ft	108 acre feet	Earth	Fish and Wildlife Pond	Low	1978
ARRINGTON NO 1	Montgomery	Public	22 ft	121 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1949
ARRINGTON NO 2	Montgomery	Public	20 ft	120 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1968
W C GIBSON	Montgomery	Public	12 ft	60 acre feet	Earth	Recreation	Low	1954
EVAN DAM	Montgomery	Public	14 ft	79 acre feet	Earth	Fish and Wildlife Pond	low	1977
C E SELLERS	Montgomery	Public	29 ft	319 acre feet	Earth	Recreation	Low	1967
STRICKLAND	Montgomery	Public	15 ft	95 acre feet	Earth	Fish and Wildlife Pond	low	1968
DOUG CHAPMAN	Montgomery	Public	15 ft	105 acre feet	Earth	Fish and Wildlife Pond	Significant	1979
C E NEAL	Montgomery	Public	25 ft	150 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1954
MORRIS DEES	Montgomery	Public	23 ft	150 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1952
FANNIN	Montgomery	Public	14 ft	140 acre feet	Earth	Recreation	low	1958
JAMES SKYES	Montgomery	Public	14 ft	28 acre feet	Earth	Fish and Wildlife Pond	Significant	1981
JACK WOOL	Montgomery	Public	15 ft	96 acre feet	Earth	Recreation	Significant	1955
GUZ PUGH	Montgomery	Public	14 ft	81 acre feet	Earth	Recreation	Significant	1950
C E SELLERS NO 2	Montgomery	Public	26 ft	78 acre feet	Earth	Recreation	Low	1968
C E SELLERS NO 3	Montgomery	Public	21 ft	105 acre feet	Earth	Recreation	low	1968
C E SELLERS NO 4	Montgomery	Public	22 ft	165 acre feet	earth	Recreation	low	1963
T S TURNIPSEED DAM	Montgomery	Public	12 ft	156 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant	1969
WYLIE HILL NO 1	Montgomery	Public	13 ft	98 acre feet	Earth	Recreation	low	1958
WYLIE HILL NO 2	Montgomery	Public	12 ft	120 acre feet	Earth	Recreation	Low	1958

MORRIS DEES NO 2	Montgomery	Public	13 ft	78 acre feet	Earth	Recreation	Low		1953
KIRKEY	Montgomery	Public	14 ft	141 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1939
ALLISON	Montgomery	Public	9 ft	83 acre feet	Earth	Recreation	Low		1955
W. E. WATERS	Montgomery	Public	12.5 ft	175 acre feet	Earth	Fish and Wildlife Pond	low		1988
W C GRAY	Montgomery	Public	13 ft	130 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1954
BROOKS NO 2	Montgomery	Public	15 ft	53 acre feet	Earth	Recreation	low		1955
W R TUNIPSEED	Montgomery	Public	13 ft	90 acre feet	Earth	Recreation	Significant		1953
DR JOHN KIMBROUGH	Montgomery	Public	16 ft	212 acre feet	Earth	Fish and Wildlife Pond	low		1979
GEORGE H OWENS	Montgomery	Public	16 ft	88 acre feet	Earth	Fish and Wildlife Pond	low		1971
W J SORRELL	Montgomery	Public	10 ft	55 acre feet	Earth	Recreation	Significant		1949
LEE MERRIWEATHER	Montgomery	Public	12 ft	62 acre feet	Earth	Recreation	Low		1948
SHIRLEY	Montgomery	Public	11 ft	66 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1950
DABSS LAKE	Montgomery	Public	13 ft	68 acre feet	Earth	Flood Control	High	NA	
EC LANE LAKE	Montgomery	Public	4 ft	51 acre feet	NA	Flood Control	high	NA	
SCOTT DAM	Montgomery	Public	0 ft	0 acre feet	earth	Recreation	Significant	NA	
A W DALE	Montgomery	Public	8 ft	80 acre feet	Earth	Recreation	Low		1952
FREEMAN	Montgomery	Public	12 ft	144 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1954
BELSER	Montgomery	Public	14 ft	140 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1940
GERALD WALLACE NO 2	Montgomery	Public	18 ft	90 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1959
GERALD WALLACE NO 1	Montgomery	Public	19 ft	190 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1959
FRANK RUTLAND NO 1	Montgomery	Public	12 ft	96 acre feet	Earth	Recreation	Significant		1935

FRANK RUTLAND NO 2	Montgomery	Public	12 ft	180 acre feet	Earth	Recreation	Low	1955
MCCLURKIN NO 2	Montgomery	Public	11 ft	126 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1955
MCCLURKIN NO 3	Montgomery	Public	15 ft	90 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1953
FRANK RUTLAND POND	Montgomery	Public	19 ft	501 acre feet	Earth	Fish and Wildlife Pond	low	1986
FRANK RUTLAND POND NO 1	Montgomery	Public	12 ft	96 acre feet	Earth	Recreation	Significant	1935
FRANK RUTLAND POND NO 2	Montgomery	Public	12 ft	180 acre feet	Earth	Recreation	low	1955

East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan: Phase Two

August 2020

A Hazard Mitigation Plan for AEMA Division D Counties: Autauga County, Elmore County, Montgomery County

Prepared For:
Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery

Prepared By:
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1.9 Integration with Existing Plans

1.1 Introduction

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is a plan that details the multitude of hazards that affect the Alabama Emergency Management Agency (AEMA) Division D area. The Phase II, which is covered in this plan, will be adopted by the following jurisdictions Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town of Tallassee, Town of Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery.

Alabama Emergency Management Agency (AEMA) Division D region will include the following counties when it is complete: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lowndes, Macon, Montgomery, and Tallapoosa counties and the jurisdictions within these counties. The remaining counties were addressed in Phase I or will be addressed in Phase III.

This plan fulfills the requirements set forth by the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires counties to formulate a hazard mitigation plan in order to be eligible for mitigation grants made available by the Federal Emergency Management Agency (FEMA).

Each county in AEMA Division D has an existing multi-jurisdictional hazard mitigation plan. This plan will compile information from each of those existing plans and documents the incorporation of hazard mitigation objectives into the region. The AEMA Division D is diverse in terms of development and physical geography, but many of the hazards affecting the region have similar impacts throughout the area. A community must deal with localized threats such as flooding, wildfires, or sinkholes as well as the hazard that do not have geographical limitations like tornadoes, hail, or high winders. A regional hazard mitigation plan can encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts. Local Emergency management agencies in the counties have a responsibility for both urban and rural areas of varying population density.

1.2 Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a hazard mitigation plan as a condition of receiving federal disaster assistance. These plans should be approved by FEMA and updated every five years.

1.2.1 Funding

Funding for the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan was made available through the Hazard Mitigation Grant Program (HMGP), under Disaster Recovery Declaration 1971 (DR-1971). Supplemental funding was supplied by the county commissions of Autauga, Elmore, and Montgomery counties and the Lee-Russell Council of Governments.

1.2.2 Purpose

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an effort to evaluate and identify all prioritized hazards which may affect AEMA Division D. It presents mitigation strategies that address the hazards identified. This plan is only one of many steps jurisdictions in

Autauga, Elmore, and Montgomery counties will take to protect the welfare of residents by achieving a safer environment for its residents.

1.2.3 Multi-Jurisdictional Plan Adoption

Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery are the eligible jurisdictions to adopt Phase II of the Hazard Mitigation Plan when it is deemed "approvable pending adoption" by the Federal Emergency Management Agency (FEMA). The plan can also be adopted by but not limited to the following: regional planning councils and local governing bodies, including municipal councils, county commissions, and local school districts.

The jurisdiction in the remaining AEMA Division D counties is not eligible to adopt Phase II of the AEMA Division D Hazard Mitigation Plan. Those counties covered in Phase I (Lee and Russell) or Phase III (Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa) of the Division D Hazard Mitigation plan. At the conclusion of the three-phased process, the plan will be compiled to create a regional AEMA Division D Hazard Mitigation Plan with the same deadline/update cycle.

1.2.4 Multi-Jurisdictional Planning Process

Each eligible local jurisdiction, Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery, provided participation in the development of this regional hazard mitigation plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee.

The jurisdiction that will be included in Phases I and Phase III followed or will follow the same process.

Each eligible local jurisdiction, Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery, participated in the development of the plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee and were involved in the updated hazard mitigation planning process. Participants include but are not limited to local government leaders, members of law enforcement, first responders, school boards, and public utilities. The previous hazard mitigation plan and a presentation were distributed to the participant stakeholders along with surveys for feedback identifying hazards, risks, vulnerabilities, and strategies. A list of stakeholders can be found in Table 1.2. Each participating jurisdiction was represented by personnel that performed a variety of functions including review of the plan at various stages during its drafting, attending meetings and updates on plan progress and contents, and providing feedback, comments, and consultation during the plan's drafting stages. Refer to Table 1.1 and Table 1.2 for the summary of each jurisdictions' involvement, name the representatives from each jurisdiction involved in the

plan, and how involved each jurisdiction was during Phase II. Threats are assessed for each jurisdiction so that hazards affecting one jurisdiction are considered to have an equal impact or potential impact on assets located in those jurisdictions. It is assumed those hazards affecting a specific jurisdiction will have a similar impact on school systems and utilities of the jurisdiction.

1.2.5 Hazard Mitigation Plan Process

At the beginning of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan a Division D Core Team was developed through interaction between AEMA Division D EMA Directors, the AEMA Division D Coordinator, and the Lee-Russell Council of Governments. Members of the AEMA Division D Core Team developed county-level planning subcommittees primarily based on past Hazard Mitigation Plan update participants and the Local Emergency Planning Committees. The teams reviewed previous county-wide local hazard mitigation plans and development of the plan requirements and hazards for Division D Region.

The AEMA Division D Core Team developed the phased process of preparing the Regional Hazard Mitigation Plan based upon the staggered deadlines for each jurisdiction. The AEMA Division D Core Team met to compare the identified hazards in each individual jurisdiction plan in order to reach a consensus of the identified Regional Hazard Profiles. The AEMA Division D Core Team also met to discuss Division D Mitigation Goals/Strategies based on these items found in each individual jurisdiction plan. The meetings took place on July 29th and September 19th, 2019.

The July 20th, 2019 meeting included discussion of the following:

- Meet with other Division D leaders
- Introduction to hazard mitigation in the region
- Established core planning team responsibilities
- Identified deadlines
- Updated and outlined the evaluation process
- Organize the process

The September 19th, 2019 meeting included discussion of the following:

- Compared goals and hazards in Division D
- Identified goals for Division D
- The Lee-Russell council of local governments (LRCOG) was in charge of the planning process.

Phase II of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan was developed through the cooperation between Autauga County EMA, Elmore County EMA, Montgomery County EMA, the AEMA Division D Coordinator, and Lee-Russell Council of Governments, as well as stakeholders representing organization such as county commissions, local governments, local school districts, local utility boards, or law enforcement.

The natural hazard that threatens and impacts the jurisdiction in Autauga, Elmore, and Montgomery counties were identified by the Division D Core Team, as well as noted in previous county-level hazard plans. The mitigation actions from the previous county-level hazard plans were identified and presented to the stakeholders, local EMA directors, and participating

jurisdictions for reviewed and approved. These hazard and mitigation actions were updated to reflect current information, such as hazard frequency and severity, available on natural hazard events in Autauga, Elmore, and Montgomery counties. Risk analysis was conducted using historical data estimates of magnitude and extent of damage from events. Results were presented to stakeholders and participating jurisdictions in print format, electronically and in hard copy, and were reviewed in a series of local meetings.

Stakeholders participated and helped facilitate the planning process by:

- Attend scheduled meetings, or if unable to attend, send a designee or make themselves available to discuss the agenda through a phone conversation, email, or in-person meeting.
- Represent their jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Collecting and reviewing information on their jurisdiction's conditions and resources
- Facilitating the development of a comprehensive range of mitigation alternatives
- Recommending selected alternatives for action
- Facilitating information exchange among participating jurisdictions, acting as liaisons to eligible entities of each jurisdiction
- Provide an assessment of prioritized projects that have been completed or are ongoing or changes to prioritization.

The Hazard Mitigation Plan and the Hazard Mitigation Plan Action Strategies were sent to each participant of the county-level subcommittee prior to the meetings held in 2019. The scope of the meetings was to assess the progress of each jurisdiction's mitigation goals and objectives and to determine recent hazard events and how they affected the jurisdictions. From these meetings, hazard profiles were consolidated, updated for the regional scope of the plan, and risk analysis updates were conducted using historical and local documentation. Plan drafts were distributed to stakeholders and local jurisdictions for review and the plan draft was discussed in the realm of public meetings before submission to AEMA and FEMA.

The October 10th and October 17th meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Benefits of Mitigation Planning
- Legal Regulations for Local Hazard Mitigation
- Plan Requirements
- Core Planning Team for Division D
- Responsibilities, Processes, Timeline
- Hazards Introduced
- Risk Index

The October 31st and November 5th meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Plan Requirements, Process, and Timeline
- Role of Stakeholders and Technical Advisors
- Benefits of Mitigation Planning

- Mission Statement
- Hazard Identified
- Historical Hazard Events Recap

February 1st to March 1st Made contact with EMA directors

- Reached out to local EMA directors
- Received Stakeholder Contact List

March 23rd to April 10th Contacted Stakeholders

- Emailed :Stakeholders surveys and PowerPoints
- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Division D Goals
- How to Measure Community Resilience
- Hazards Ranked
- Recap Past Hazards Events

April 20th to May 29th Community Engagement

- Setup Survey for Community Participation
- Collected and Analyzed Data Collected

The July 20th – August 20th Public Comment Period

- Briefed the public on updates to the plan
- Received feedback on the Plan
- Posted Draft on Facebook and Website

Table 1.1: AEMA Division D Core Team

Organization	Contact
Autauga County EMA	Ernie Baggett
Bullock County EMA	Josh Powell
Chambers County EMA	Jessica Yeagar
Chilton County EMA	Derrick Wright
Coosa County EMA	Terri Q. Hale
Elmore County EMA	Keith Barnett
Lee County EMA	Rita Smith
Lowndes County EMA	David Butts
Macon County EMA	Frank Lee
Montgomery County EMA	Christina Thornton
Russell County EMA	Robert “Bob” Franklin
Tallapoosa County EMA	Jason Moran
AEMA Division D Coordinator	Monique Smith
Lee-Russell Council of Governments	Lisa Sandt/Tracie Hadaway

Source: Alabama Emergency Management Agency, County EMA Director

Table 1.2:Phase Two Regional Hazard Mitigation Plan subcommittee

Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Autauga County Representatives						
Crystal Ousley	Autauga County	Autauga County Sheriff's Office	Administrative Assistant	X	X	X
Melissa Carpenter	Autauga County	Autauga County 911	Director of Emergency Communications	X	X	X
Mel Johnson	Autauga County	Southern Baptist Churches of Autauga County	Lead Mission Stratigest	X	X	X
Cyndi Tereszkiewicz	Autauga County	ADPH	Emergency Preparedness Director for East Central District	X	X	X
Steven Moreland	Autauga County	Medline Ind	Sr Warehouse Manager	X	X	X
Michael Whaley	Autauga County	Prattville Fire Department	Deputy Fire Chief	X	X	X
Becky Brooker	Autauga County	United Ways	Executive Director	X	X	
Cecil Boatwright	Autauga County	TENSKA	Operations Manager	X	X	
Braxotn Guinn	Autauga County	Alagasco	Area Manager	X	X	
Chad Uter	Autauga County	Tenkinc		X	X	
Cheri O'Dell	Autauga County	Feeding America	Human Resources and Compliance Manager	X	X	
Chip Hicks	Autauga County	Baptist Hospital	System Director of Safety and Security	X	X	
Clay McConnell	Autauga County	Southern Co	Director	X	X	
Clyde Chambliss	Autauga County	Chambliss Engineering	Principle Engineer	X	X	
Curtis Stoudarmire	Autauga County	Town of Autaugaville	Mayor of Autaugaville	X	X	X

Dale Gady	Autauga County	Town of Autaugaville	Public Works	X	X	X
David Chandler	Autauga County	Town of Billingsley	Chief	X	X	X
Edgar Carr	Autauga County	Team Rubicon	Grant Writer	X	X	
Elizabeth Ransom Wells	Autauga County	Alabama Department of Public Health	Health Services Administrator	X	X	X
David Folwer	Autauga County	City of Prattville Police Dep	Captain/ Patrol Division Commander	X	X	
Grady Springer	Autauga County	ADEM	Senior Environmental Scientist	X	X	
Greg Davis	Autauga County	International Paper	Plant Manager	X	X	
Greg Sallas	Autauga County	International Paper	HSSE Manager	X	X	
Jack Lewis	Autauga County	Dixie Paper Line	Plant Manager	X	X	
Jim Delair	Autauga County	Graham Packaging	Plant Manager	X	X	
John Gray	Autauga County	Home Depot	Store Manager	X	X	
Linda Chandler	Autauga County	Baptist First	President	X	X	
Mark Oswalt	Autauga County	International Paper	Safety Supervisor	X	X	
Marty Roney	Autauga County	Ganett	Reporter	X	X	
Mel Johnson	Autauga County	Autauga Baptist	Pastor	X	X	
Mike Surles	Autauga County	Autauga County Rescue Squad	Squad Captain	X	X	
Onya Myhand	Autauga County	DHR	Director	X	X	
Allen Owens	Autauga County	City of Prattville	Chief Administrator	X	X	
Patrick Aman	Autauga County	Williams	Senior Operations Manager	X	X	
Rick Teague	Autauga County	Southern Co	Wastewater Director	X	X	
Robby Anderson	Autauga County	City of Prattville	City Engineer	X	X	
Sheriff Joe Sedinger	Autauga County	Autauga County	County Sheriff	X	X	
Spence Agee	Autauga County	Autauga County Schools	Superintendent	X	X	

Tammy Price	Autauga County	Alabama Department of Public Health	Administrative Assistant	X	X	
Mark Thompson	Autauga County	City of Prattville	Chief of Police	X	X	
Tim Reynolds	Autauga County	Alabama Department of Public Health	Emergency Preparedness Team	X	X	
Will McEntyre	Autauga County	Southern Co	Consultant	X	X	
Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Elmore County Representatives						
Al Hannon	Elmore County	Buyck FD	Fire Chief	X	X	
Rusty Monfee	Town of Coosada	Town of Coosada VFD	Fire Chief	X	X	
Charles Ellis	Town of Deatsville	Town of Deatsville VFD	Fire Chief	X	X	
Josh Dorminey	City of Eclectic	City of Eclectic Fire Department	Fire Chief	X	X	
Brandon Cardwell	Town of Elmore	Town of Elmore VFD	Fire Chief	X	X	
Phillip Hethcox	Elmore County	Emerald Mountain VFD	Fire Chief	X	X	
Stephen Cooper	Elmore County	Friendship VFD	Fire Chief	X	X	
Aaron Moore	Elmore County	Holtville/Slapout VFD	Fire Chief	X	X	
Larry Warren	Elmore County	Kowligia VFD	Fire Chief	X	X	
Keith Barnes	Elmore County	Lightwood VFD	Fire Chief	X	X	
Larry Brown	City of Millbrook	City of Millbrook Fire Department	Fire Chief	X	X	
Lamar Jones	Elmore County	Real Island VFD	Fire Chief	X	X	
Chad Moore	Elmore County	Red Hill VFD	Fire Chief	X	X	
Joe Lambrecht	Elmore County	Redland VFD	Fire Chief	X	X	
Tommy Sanford	Elmore County	Santuck VFD	Fire Chief	X	X	

Chris Moore	Elmore County	Semen VFD	Fire Chief	X	X	
Eric Jones	City of Tallassee	City of Tallassee Fire Department	Fire Chief	X	X	
TJ Hartley	Elmore County	Titus VFD	Fire Chief	X	X	
Greg Willis	City of Wetumpka	City of Wetumpka Fire Department	Fire Chief	X	X	
Terry Wilkerson	Elmore County	Windermere VFD	Fire Chief	X	X	
Larry Brown	Elmore County	ECFFA	President	X	X	
Terry Brown	Elmore County	Prattville FD	Fire Chief	X	X	
Jerry Plyler	Elmore County	Haynes Ambulance	EMS	X	X	
Sheriff Bill Franklin	Elmore County	Elmore County Sheriff Department	Sheriff	X	X	
Leon Smith Jr.	Town of Coosada	Coosada Police Department	Police Chief	X	X	
Robert Head	City of Eclectic	Eclectic Police Department	Police Chief	X	X	
P K Johnson	City of Millbrook	Millbrook Police Department	Police Chief	X	X	
Mark Thompson	City of Prattville	Prattville Police Department	Police Chief	X	X	
Matt Higgins	City of Tallassee	Tallassee Police Department	Police Chief	X	X	
Greg Benton	City of Wetumpka	Wetumpka Police Department	Police Chief	X	X	
Steve Morgan	Elmore County	Chief of Security Russell Lands	Chief of Security	X	X	
Richard Dennis	Elmore County	Elmore County BOE	Superintendent	X	X	
Wade Shipman	City of Tallassee	Tallassee BOE	Superintendent	X	X	
Rechel Harboth	Elmore County	Adullum House School	Principal	X	X	
Jon Chapman	Elmore County	Chapman Academy	Principal	X	X	
Jay Adams	Elmore County	Edgewood Academy	Headmaster	X	X	
Geppeda Rogers	New Life Cristian	New Life Cristian Academy	Principal	X	X	

Ron Mitchell	City of Prattville	Prattville Christian Academy	Principal	X	X	
John Lopez	Elmore County	Victory Baptist School	Administrator	X	X	
Name	Elmore County	Agency		X	X	
Annette Funderburk	Elmore County	JF IngrahamTechnical College	President	X	X	
Richie Beyer	COO - Elmore County	COO - Elmore County Commission	Chief Operating Officer	X	X	
Luke McGuinty	Elmore County Hwy	Elmore County Hwy Dept	Chief Engineer	X	X	
Adam Graham	Chief Mapper for	Chief Mapper for Elmore County	Chief Mapper	X	X	
Lynn Justiss	Elmore County	Elmore County E-911	Executive Director	X	X	
Chad Shaw	Elmore County	Central Elmore Water	On-Staff Water System Engineer	X	X	
Jennifer Lyle	Elmore County	Eclectic Water	Office Manager	X	X	
Billy Eddins	Elmore County	Elmore Water	General Manager	X	X	
David Popham	Elmore County	5 Star Water	Plant Manager	X	X	
Steve Dennis	Elmore County	Friendship-VFD, Water, 911	Manager	X	X	
Bob Cramer	Elmore County	Holtville Water Authority	Manager	X	X	
Allen Guy	Elmore County	Marbury WS	Director	X	X	
Micheal Harris	Elmore County	Millbrook Water	Director	X	X	
Bob Ingram	City of Tallassee	Tallassee Waste Water	Director	X	X	
Ken Champion	Elmore County	Tri Community WW	Operator	X	X	
Chris Bowar	Elmore County	Wetumpka Water	Superintendant	X	X	
Jeannie Ward	Town of Coosada	Town of Coosada - Town Clerk	Town Clerk	X	X	
Sandi Bradshaw	Town of Deatsville	Town of Deatsville - Cerk	Town Clerk	X	X	

Deborah Rowe	Town of Eclectic	Town of Eclectic - Town Clerk	Town Clerk	X	X	
Cheryl Worley	Town of Elmore	Town of Elmore Town Clerk	Town Clerk	X	X	
Gina Williams	City of Millbrook	City of Millbrook - City Clerk	Town Clerk	X	X	
Whitney Moon	City of Tallassee	City of Tallassee - Clerk	Town Clerk	X	X	
Julie Creel	City of Wetumpka	City of Wetumpka Clerk	Town Clerk	X	X	
Mayor Anthony Powell	Town of Coosada	Mayor Town of Coosada	Mayor	X	X	
Mayor Claton Edgar	Town of Deatsville	Mayor of Deatsville	Mayor	X	X	
Mayor Gary Davenport	City of Eclectic	Mayor of Eclectic	Mayor	X	X	
Mayor White	Town of Elmore	Mayor Town of Elmore	Mayor	X	X	
Mayor Al Kelley	City of Millbrook	Mayor City of Millbrook	Mayor	X	X	
Mayor Bill Gillesie	City of Prattville	Mayor City of Prattville	Mayor	X	X	
Mayor Johnny Hammock	City of Tallassee	Mayor City of Tallassee	Mayor	X	X	
Mayor Jerry Willis	City of Wetumpka	Mayor City of Wetumpka	Mayor	X	X	
Brandon Harris	City of Millbrook	Millbrook Public Works	Street Superintendent	X	X	
James Garner	City of Tallassee	Tallassee Public Works	Director	X	X	
Tex Grier	City of Wetumpka	Wetumpka Public Works	Director	X	X	
Kristina Heale	Elmore County's Toll	Elmore County's Toll Bridge Manager	Bride Manager	X	X	
Sim Allen	Elmore County	Emerald Mountain Airport	Airport Owner	X	X	
Lynn Wheldon	City of Wetumpka	City of Wetumpka Airport	Airport Director	X	X	

April Sells	Elmore County	Poarch Band of Creek Indians PCI	Fire & Emergency Management Director	X	X	
Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Montgomery County						
Steven L. Reed	City of Montgomery	City of Montgomery	Mayor		X	
Robert E. Smith Jr.	City of Montgomery	City of Montgomery	Director of Montgomery		X	
Jerry Russell	City of Montgomery	City of Montgomery	Chief Code Enforcement		X	
Patrick Dunson	City of Montgomery	City of Montgomery	Engineering and Environmental Services		X	
Gordon Stone	Town of Pike Road	Town of Pike Road	Mayor		X	
Jonathan Smith	Town of Pike Road	Town of Pike Road	Planner		X	
Lowell Thomas	Town of Pike Road	Town of Pike Road	Building Inspector		X	
Rickey Derrico	Montgomery County	AAA Cooper Transportation	Manager	X	X	
Keith Fallin	Montgomery County	Acme Brick Company	Plant Manager	X	X	
Ken Sexton	Montgomery County	Acme Propane	Acme Propane Gas Owner	X	X	
Chris Crutchfield	Montgomery County	Agri-Afc	Marketing Manager	X	X	X
Heather Hastings	Montgomery County	Airgas USA, LLC	Area Branch Operations Coordinator	X	X	
Judi Anderson	Montgomery County	The Andersons ALACO Lawn	Plant Manager	X	X	
Ryan Wilson	Montgomery County	Alabama Power Company-District Crew Headquarters	Senior Engineer Tech	X	X	
Edward Kelly	Montgomery County	ALDOT Southeast Region	District Administrator	X	X	
Greg Prim	Montgomery County	AL-34142_Charter Communications	Senior District ISP	X	X	
MaryDee Wisdom	Montgomery County	ANG, 232nd CCS	Installation Emergency Manager	X	X	

Holly Brosius	Montgomery County	Berry Global Films, LLC	Environmental Health and Safety Manager	X	X	
Bobby Golson	Montgomery County	API Heat Transfer/Thermasys	Manager	X	X	
Justin Presley	Montgomery County	Averitt Express	Service Center Director	X	X	
Haber Vickers	Montgomery County	Birmingham Hide and Tallow, INC	Vice President	X	X	
Keith Bazzle	Montgomery County	Buffalo Rock Company	Division Manager	X	X	
Doug Jones	Montgomery County	CSC Distribution, Inc.	Maintenance/Building Services Manager	X	X	X
Stacy Williams	Montgomery County	CSX Transportation, Inc.	Terminal Manager	X	X	
Gordy McAllaster	Montgomery County	DENSO Manufacturing	Plant Manager	X	X	
James Pearson	Montgomery County	Fleischmann's Vinegar Co, Inc.	Plant Manager	X	X	
James Jinright	Montgomery County	Flower's Bakery	VP Operations	X	X	
Tina Williamson	Montgomery County	Hager Companies	Safety/Environmental Manager	X	X	
Wakesia Minor	Montgomery County	Herff Jones, LLC.	Human Resources Manager	X	X	
Ronald Bishop	Montgomery County	Hyundai Motor Manufacturing Alabama, LLC	Environmental Coordinator	X	X	
Steve Chromey	Montgomery County	Jay R. Smith Mfg. Co.	General Manager	X	X	X
Danny Davis	Montgomery County	Kinpak	Vice President of Manufacturing/Operations	X	X	
Bobbi L. Tenborg	Montgomery County	Lowe's of Montgomery	Environmental Compliance Supervisor	X	X	
Alan Little	Montgomery County	Mount Scrap Material Co.	Manager	X	X	
Carl Rufus	Montgomery County	Murphy Oil USA Inc.	Manager	X	X	
Terry DeWolf	Montgomery County	Nalco	Plant Manager	X	X	

Phillip Edwards	Montgomery County	Premier Tech Chronos	Director of Engineering and Project Management	X	X	
Brad Wegner	Montgomery County	Progress Rail Services	Operations Leader	X	X	
Rick Norton	Montgomery County	Pumpelly Oil Acquistion	Strategic Pricing Manager	X	X	
Kenneth Gardner	Montgomery County	Rheem Manufacturing Company	Plant Engineer Manager	X	X	
Jeff Frye	Montgomery County	Saia Motor Freight, LLC	Manager	X	X	
John Roberts	Montgomery County	SCP Distributors, LLC	Operations Manager	X	X	
Kenneth Burleson	Montgomery County	Sunbelt Rentals	Manager	X	X	
Daniel Sansom	Montgomery County	Home Depot	Store Manager	X	X	
Ed Clapp	Montgomery County	Thermalex, Inc.	Manager	X	X	
Norma Wood	Montgomery County	United Rentals Branch	Operations Manager	X	X	
David Hirsch	Montgomery County	US Foods	Manager	X	X	
David LaLumia	Montgomery County	Vecenergy	Director	X	X	
Randy Hammond	Montgomery County	W&W-AFCO Steel	Plant Manager	X	X	
Jeff Young	Montgomery County	Sam's Club (Walmart)	Store Manager	X	X	
Ed Watkins	Montgomery County	Whitfield Foods	VP/Food Safety-Quality-Compliance Director	X	X	
David Westmeyer	Montgomery County	Windstream Montgomery	Manager	X	X	
Kenneth Hardman	Montgomery County	WestRock Montgomery Corrugated Plant	Gerneral Manager	X	X	X
Judi Anderson	Montgomery County	The Andersons, Inc.	Operations Manager	X	X	X
Jared Pierce	Montgomery County	Hertz Corporation	General Manager	X	X	X
Ursula Dreher	Montgomery County	Hyundai Motor Manufacturing Alabama, LLC	Environmental Specialist	X	X	X

Randall Harrell	Montgomery County	Alabama Department of Transportation	Environmental Coordinator	X	X	X
John Abner	Montgomery County	Nalco an Ecolab Company	Plant Engineer	X	X	X
Marvin Vickers	Montgomery County	Birmingham Hide and Tallow Co. Inc	Vice President	X	X	X
Latitia Stiener	Montgomery County	Delta Airlines	Station Manager	X	X	X
DANIEL DEFEE	Montgomery County	Buckeye Partners, LP	Operations Manager	X	X	X
Rick Norton	Montgomery County	Reladyne	Operations Manager	X	X	X
Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Toya Stiles	Dallas County	Dallas County EMA	EMA Director		X	
Elliott Jones	Crenshaw County	Crenshaw County EMA	EMA Director		X	
Herb Reeves	Pike County	Pike County	EMA Director		X	

1.3 Public and Other Stakeholder Involvement

The presence of community engagement is an important element to consider during the planning process because it allows the public/residences to have input in potential projects specifically at the local level. According to APA, public engagement is "the key to building an inclusive community," because it gives everyone access to participate in the planning process. Working with the people who live in Autauga, Elmore, and Montgomery counties gives the community an active role in planning, creates a partnership between the public and planners.

Due to the COVID-19 pandemic zero meetings were held in order to comply with social distancing laws in places at the time. The public was invited and encouraged to participate in the planning process by partaking in surveys and reviewing the draft plans. Digital copy of the plan was uploaded on the Lee Russell Council of Governments and EMA county websites, city and county websites as well as links to the plan were posted on socials media pages. These initiatives were done prior to the plan approval and adoption of the plan. A copy of the final plan approved by FEMA will be placed on the LRCOG website as well as hard copies at the local EMA offices, city and county offices (as determined), school boards, and water authorities will also receive a hard copy. The Lee-Russell Council of Governments consulted with other regional planning offices in the state in order to receive feedback on Phase II of the Hazard Mitigation Plan. Due to the nature of a regional plan, it was impossible to reach out to neighboring jurisdictions because the regional plan covers all the jurisdictions in the closest eleven counties. Therefore, the planning staff decides to contact the planning directors following regional planning offices in order to meet FEMA's requirements on having the plan reviewed by a non-Division D entity: East Alabama Regional Planning, Regional Planning Commission of Greater Birmingham, North-central Alabama Regional Council of Governments, Southeast Alabama Regional Planning & Development Commission, The Alabama-Tombigbee Regional Commission, and West Alabama Regional Council. The feedback we received from the regional planning was positive and did not have any adjustments made to the content in the plan.

Extensive public outreach was conducted with surveys to garner input on hazard assessment in the region in order could obtain helpful information about the residences' knowledge, needs, and concerns. The survey consisted of multiple choice and short answer questions that focused on understanding the residences' knowledge, needs, and concerns regarding hazard events and hazards preparation. For this project, we chose to use a non-probability sampling method because we do not know the probability of everyone has been chosen or not chosen to participate in the survey. This type of survey method is focused on qualitative research rather than quantitative research, which will allow us to understand people's feelings towards hazards.

The target population for our survey was those individuals who live or work in Autauga, Elmore and Montgomery counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys. Interactive surveys were sent to or posted on the following locations: The Lee-Russell Council of Governments website; Each EMA office's Facebook, Twitter, Instagram, and Websites; County and City websites and social media pages; emailed to key community groups in each county. For a detailed list of all the places and groups who received the survey please refer to Section 7.3 in the Appendix. Due to the outbreak of

COVID-19 the staff was unable to attend any community events to receive citizen input, nor could staff work with the RSVP program to go into senior centers.

The following results from the public outreach survey were broken down by county.

A total of 241 responses to the survey were recorded, and all survey was complete. Of the 241 responses, 146 responses were from Montgomery County residents. Of those participants, 16%, 24 persons, responded that they felt not prepared for a natural hazard, while 51%, 75 persons said they did feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than an option on this question. 58%, 85 persons, expressed having access to safe rooms would help them feel more prepared, 58%, 85 persons, felt that access to a readiness kit would make them feel more prepared, and 27%, 40 persons said community classes on natural hazards would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Lee County. The top four sources that participants found the most effective way to get information were as followed: 87% chose cell phones (128 persons), 68 % outdoor sirens (100 persons), 32% chose radio (48 persons), and 35% said TV coverage (52 persons). 21%, 31 persons, did not know if they lived in a floodplain.

Of the 241 responses, 18 responses were from Autauga County residents. Of those participants, 33%, 6 persons, responded that they felt very prepared for a natural hazard, while 61%, 11 persons said they did not feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than one option on this question. 77%, 14 persons, expressed having access to a readiness kit would help them feel more prepared, 55%, 10 persons, felt that access to community shelters would make them feel more prepared, and 55%, 10 persons said access to safe rooms would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Autauga County. The top four sources that participants found the most effective way to get information were as followed: 94%, 17 persons, expressed having cell phone alerts would help them feel more prepared, 77%, 14 persons, felt that access to TV coverage would make them feel more prepared, and 66%, 12 persons said access to a radio coverage would help them feel more prepared. 16%, 3 persons, did not know if they lived in a floodplain.

A total of 241 responses to the survey were recorded, and all survey was complete. Of the 241 responses, 77 responses were from Elmore County residents. Of those participants, 10%, 8 persons, responded that they felt not prepared for a natural hazard, while 58%, 45 persons said they did feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than an option on this question. 64%, 50persons, expressed having access to readiness kits would help them feel more prepared, 53%, 41 persons, felt that access to safe kits would make them feel more prepared, and 24%, 19 persons said access to community shelters would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Lee County. The top four sources that participants found the most effective way to get information were as followed: 85% chose cell phones (66

persons), 77 % TV coverage (60 persons), 64% chose radio (50 persons), and 55% said outdoor sirens (43 persons). 10%, 8 persons, did not know if they lived in a floodplain.

The feedback received from the surveys mainly focused on what the people of Autauga, Elmore and Montgomery County felt about concerns regarding the level of threat and access to safe places during natural hazard events. The feedback received from these comments and the survey results were used to help write narrative sections of the plan as well as used to support the mitigation action strategies.

The Lee-Russell Council of Governments and the local EMA directors involved multiple stakeholders in the formation of this plan as identified in Table 1.2. These stakeholders were informed of the process, plan update, and information. Comments were solicited from the stakeholders identified.

1.4 Integration with Existing Plans

Existing plans were consulted upon drafting the Phase II Regional Hazard Mitigation Plan to gauge understanding of the region's capacity for hazard mitigation. Plans reviewed include:

Alabama State Hazard Mitigation Plan (2018 Update):
The State Hazard Mitigation Plan was consulted to assist with the consistency of information within the regional plan, including items within the Risk Assessment and local capabilities.

Autauga County, Elmore County, and Montgomery County Hazard Plans:
Autauga County, Elmore County, and Montgomery County both have previously developed and approved local hazard mitigation plans. These plans were reviewed for consistency of information within the regional plan.

Local Comprehensive/Master Plans:
Local Comprehensive/Master Plans that that have been prepared and adopted in the jurisdictions in Autauga County, Elmore County, and Montgomery County were reviewed for consistency with information in the regional hazard mitigation plan.

- Town of Eclectic 2016 Comprehensive Plan
- Town of Eclectic Zoning Regulations
- Elmore County Subdivision and Land Development Regulations
- City of Millbrook Zoning Ordinance
- City of Millbrook Subdivision Regulation
- City of Montgomery 2040 Comprehensive Plan
- City of Montgomery SmartCode 2007
- City of Montgomery 2018 Strategic Development Plan
- City of Montgomery 2018 Joint Land Use Plan
- City of Montgomery Subdivision Regulations
- City of Montgomery Zoning Ordinances
- Town of Pike Road Comprehensive Plan
- Town of Pike Road 2014 Constriction and Design Standards Manual

- Town of Pike Road 2017 Zoning Ordinances
- Town of Pike Road SmartCode Version 9.2
- Town of Pike Road Conventional Zoning Ordinances
- Town of Pike Road Subdivision Regulations
- City of Prattville Zoning Ordinance
- City of Prattville 2010 Comprehensive Plan
- City of Prattville Zoning Regulations
- City of Tallassee 2040 Comprehensive Plan
- City of Tallassee of Zoning Ordinances
- City of Wetumpka Zoning Ordinances
- City of Wetumpka Subdivision Regulations

CARPDC Comprehensive Economic Development Strategy 2010 Update:
The CARPDC CED's was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for the Central Alabama region.

Emergency Operations Plans:
Autauga, Elmore, and Montgomery counties all have an Emergency Operation Plan (EOP) that is utilized in an emergency. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. These plans complement the hazard mitigation plan but do not necessarily cover the same material.

Alabama Drought Management Plan (2018)
The Alabama Drought Management Plan was studied to provide background information about drought impacts on the planning area.

Section 2- Regional Profile

Section Contents

2.1 Background
2.2 Demographics
2.3 Business and Industry
2.4 Infrastructure
2.5 Land Use and Development Trends
2.6 NFIP Compliance

2.1 Background

The planning area is defined by Alabama Emergency Management Agency (AEMA) as Division D, which is one of seven emergency management divisions within the state. AEMA Division D is located in eastern Alabama (Figure 2.1). AEMA Division D is comprised of the following twelve counties: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell, Tallapoosa and the jurisdictions in those counties. This version of the multi-jurisdictional hazard mitigation plan covers three of the twelve AEMA Division D counties and the jurisdictions in Autauga, Elmore and Montgomery Counties. The additional ten counties and the jurisdictions in the AEMA Division D are currently covered by their own hazard mitigation plan but will be fully included in subsequent update(s). Information for Autauga, Elmore, and Montgomery Counties are the only counties included. Please refer to Figure 1 to see where in Alabama Division D is located and the phases.

Autauga, Elmore, and Montgomery counties are located in Central Alabama along the Alabama River. Autauga County occupies 604 mi^2 of the 50,744 mi^2 of Alabama, Elmore occupies 657 mi^2, while Montgomery County occupies 507 mi^2. Table 2.1 presents the land area of each county and that of its municipalities.

Autauga, Elmore, and Montgomery counties are in central of Alabama. The counties to the north of Autauga, Elmore, and Montgomery counties are Chilton, Coosa, and Tallapoosa; Dallas and Lowndes counties are to the west; Macon and Bullock counties are the east; Crenshaw and Pike are located to the south. Figure 2 shows an overview of details for Autauga, Elmore, and Montgomery.

Autauga and Elmore counties are located north side of the Alabama River with Montgomery County along the southern side. The Alabama, Coosa, and Tallapoosa rivers cut through the region, which provide two river basins for the region, Alabama-Coosa River Basin and the Coosa-Tallapoosa River Basin. Lake Martin and Jordan Lake have a large presence in Elmore County because of the recreation amenity it offers the area.

Montgomery County is a part of the Black Belt region, largely characterized as fertile prairie land. Autauga and Elmore counties are a part of the Coastal Plan, largely characterized by hilly topography with gentle to steep slopes. According to Charles C. Mitchell, Donn Rodekohr, and Shane Harris from the Alabama Cooperative Extension System, the Alabama “The soils found in Autauga and Elmore counties comprise largely of sandy and loamy upland soils, alluvial terraces and poorly drained floodplains of the Alabama, Coosa, and Tallapoosa rivers.” The soil found in the Black Belt Region are alkaline and acid, clayey soils, which can create drainage, foundation, wastewater disposal issues.

Figure 1: AEMA Division D Plan Phases

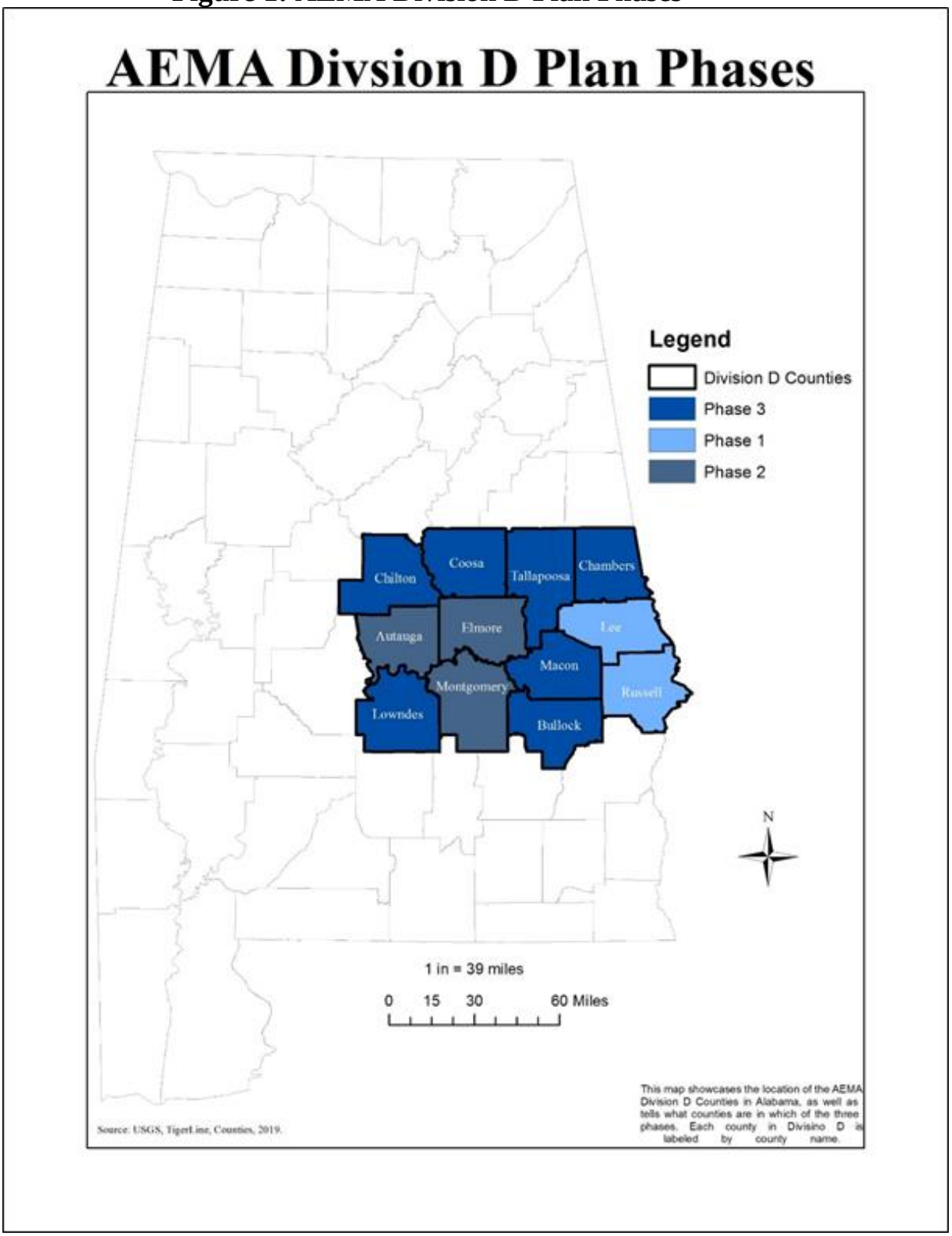


Figure 2: Overview of Central Alabama Region

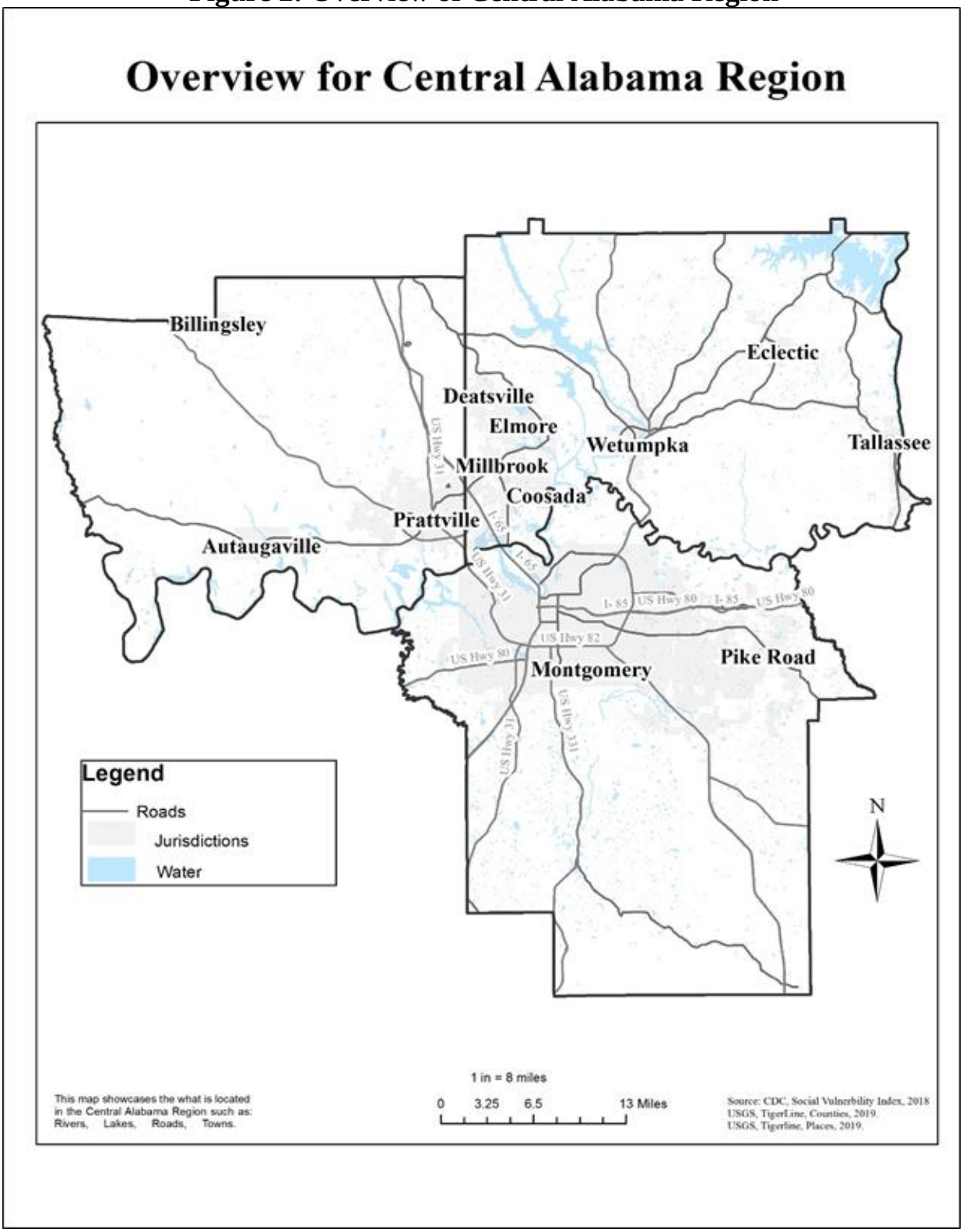


Table 2.1 Total Area by County

Jurisdiction	Total Area
Autauga County (entire)	**604 mi²**
Town of Autaugaville	8 mi²
Town of Bllingsley	1 mi²
City of Prattville	30 mi²
Unincorporated County	551 mi²
Elmore County (entire)	**657 mi²**
Town of Coosada	7 mi²
Town of Deatsville	5 mi²
Town of Eclectic	4 mi²
Ton of Elmore	6 mi²
Town of Millbrook	14 mi²
City of Prattville	5 mi²
City of Tallassee	7 mi²
City of Wetumpka	11 mi²
Unincorporated County	598 mi²
Montgomery County (entire)	**507 mi²**
Montgomery	162 mi²
Pike Road	33 mi²
Unincorporated County	312 mi²

Source: *USGS, Tiger Line, Places, Total Area, 2019*

2.2 Demographics

According to the 2010 Census, the combined population of the Central Alabama Region was 363,848. The estimate population for the Central Alabama Region was 363,353 according to the 2018 ACS. The following table provides the 2010 population according to the US Census Bureau as well as the 2018 American Community Survey estimates for each jurisdiction. As evidenced in Table 2.2, the Central Alabama Region experienced a decrease in population from 2010 to 2018, but this was attributed to the decrease in Montgomery County's population, specifically, the City of Montgomery.

Table 2.2: Jurisdiction Population

Jurisdiction	2010 Census Population	2018 ACS Estimate	Percent of Change
Autauga County	**54,660**	**55,200**	0.978%
Town of Autaugaville	870	821	-5.632%
Town of Bllingsley	144	121	-15.972%
City of Prattville	33,960	35,657	4.997%
Elmore County	**79,465**	**81,212**	**2.198%**
Town of Coosada	1,224	1,116	-8.824%
Town of Deatsville	1,154	1,350	16.984%
Town of Eclectic	1,001	1,042	4.096%
Ton of Elmore	1,262	1,607	27.338%
Town of Millbrook	14,640	15,160	3.552%
City of Prattville	33,960	35,657	4.997%
City of Tallassee	4,819	5,015	4.067%

City of Wetumpka	6,528	8,117	24.341%
Montgomery County	**229,723**	**226,941**	**-1.211%**
City of Montgomery	205,764	200,156	-2.725%
Town of Pike Road	5,406	8,884	64.336%

Source: United States Census Bureau (2010 Census and 2018 Population Estimates)

Based on the 2017 ACS Estimates, the median age for residents within this region ranges from 35 years of age in Montgomery to 43.9 years of age in Autaugaville. Persons who lived in Autauga and Elmore Counties were majority white, while majority of persons who lived in Montgomery County were majority African American according to the ACS 2013 to 2017 5 year estimates. The racial characteristics from the ACS 2013 to 2017 5 year estimate by county are presented below in Table 2.3.

Table 2.3: Racial and Ethnic Demographics by County

Jurisdiction	White	African American		American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other race	Two or more races:
Autauga County	42,437	10,565		159	568	32	409	1,030
Town of Autaugaville	231	561		0	0	0	29	0
Town of Bllingsley	69	50		2	0	0	0	0
City of Prattville	27,011	6,738		79	606	32	348	843
Elmore County	60,824	17,402		209	392	0	774	1,611
Town of Coosada	522	542		16	0	0	0	36
Town of Deatsville	1,069	227		0	5	0	0	49
Town of Eclectic	822	138		0	0	0	0	82
Ton of Elmore	968	364		0	0	0	236	39
Town of Millbrook	10,462	4,078		38	62	0	209	311
City of Prattville	27011	6738		79	606	32	348	843
City of Tallassee	3,659	1,233		0	0	0	54	67
City of Wetumpka	5327	2,470		0	28	0	123	169
Montgomery County	82,862	130,866		414	6,104	56	2,522	4,117
City of Montgomery	66,586	121,381		341	5,655	27	2,443	3,723
Town of Pike Road	5,751	2,711		0	253	0	3	166

Source: United States Census Bureau (ACS 2014- 2018 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, there are 139,945 total housing units in the Central Alabama region. Montgomery County has the most occupied housing units in the region, but it also has the oldest housing stock. Older housing can make people more vulnerable to hazard if the house is dilapidated. Housing information estimates, including more vulnerable housing such as mobile homes and aging housing, are presented by county in Table 2.4 below:

Table 2.4: Housing Conditions by County

Jurisdiction	Occupied Housing Units	Mobile Homes	Housing 30+ Years
Autauga County	23,315	4,279	34.20%
Town of Autaugaville	477	185	47.80%
Town of Bllingsley	76	21	61.90%
City of Prattville	14,854	1,015	0.37%
Elmore County	32,683	5,123	34.40%
Town of Coosada	441	110	18.90%
Town of Deatsville	454	71	65.10%
Town of Eclectic	454	70	64.60%
Ton of Elmore	547	293	0.28%
Town of Millbrook	6,149	251	28.10%
City of Prattville	14,854	1,015	36.30%
City of Tallassee	2,224	130	66.50%
City of Wetumpka	3,668	215	57.60%
Montgomery County	102,137	4,362	50.10%
City of Montgomery	92,215	2,631	56.00%
Town of Pike Road	3,545	39	12.40%

Source: U.S. Census Bureau (2014-2018 ACS 5-Year Estimates, Table DP04)

All persons living in manufactured homes, as well as older housing, are vulnerable to natural disasters due to the building materials and standards are not the same as homes built on a slab. The towns such as Autaugaville, Billingsley, and Coosada have the largest amount of manufactured homes, which is dangerous because these people should not stay in their homes in the event of natural disasters like a tornado, or severe thunderstorm with high winds. For more details on housing characters please refer to the Table 2.5.

Based on the U.S. Census Bureau's 2014-2018 ACS 5-Year Population Estimate, Montgomery County, the City of Montgomery, and the City of Prattville have the largest amount of households in these three counties. The U.S. Census Bureau defines a "household" to include all people who occupy one unit of residence, such as an apartment, single room, mobile home, or a house. Table 2.5 represents the median household income for the Autauga, Elmore, and Montgomery counties:

Table 2.5: Household Median Income by County

County	Income

Autauga	$55,317
Elmore	$54,981
Montgomery	$46,545

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Montgomery County had the largest percent of person who lived below the poverty line (20.8%) compared to Autauga and Elmore county. The U.S. Census Bureau determines poverty based on the poverty threshold. If the total income is greater than the poverty threshold, then the family or person is not considered in below the poverty line. The U.S. Census Bureau uses the following two equations to determine poverty status: *Income / Threshold =X or Income – Threshold =X*. Montgomery County has the most persons living under the poverty, 20.8%, in the Central Alabama Region. Table 2.6 displays the total number of an individual below the poverty line and the percent below the poverty line.

Table 2.6: Individuals below the Poverty Line by County

	Individuals Below Poverty Line	**% Below Poverty Line**
Autauga County	7,483	13.7
Town of Autaugaville	161	19.60%
Town of Bllingsley	39	32.20%
City of Prattville	5,281	15%
Elmore County	10,299	13.5
Town of Coosada	308	27.60%
Town of Deatsville	43	3.20%
Town of Eclectic	93	8.90%
Town of Elmore	418	28%
Town of Millbrook	1664	11%
City of Prattville	5,281	15%
City of Tallassee	1,167	23.70%
City of Wetumpka	662	9.30%
Montgomery County	45,863	20.8
City of Montgomery	40,590	21.90%
Town of Pike Road	349	3.90%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate there are 36,757 persons in Autauga County, 55,278 persons in Elmore County, and 149,318 in Montgomery that are 25 years or older. Of these person whom are 25 years or older living in Elmore County, 47% of these persons do not have more than a high school education. This trend is similar for Autauga and Montgomery counties. Unfortunately, this data is only available at the county level. The lack of education stresses the need for education about natural hazard

vulnerability. Table 2.7 shows the total number and rate for highest education attained (high school graduate or less) of person 25 and older.

Table 2.7: Highest Education Attained (High school Graduate or Less) by County

County	Individuals (25+) with High School Graduate or Less	% Individuals (25+) with High School Graduate or Less
Autauga County	16,884	45.93%
Elmore County	26,360	47.68%
Montgomery County	59,587	39.91%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Based on the U.S. Census Bureau's 2010 Census there were 2,533 (Autauga County), 3,696 (Elmore County), and 12,653 (Montgomery County) persons 75 years or older. The 2013-2017 ACS 5-Year Population Estimate reported 2,056 (Autauga County), 4,855 (Elmore County), and 13,981 (Montgomery County) person 75 years or older, which can be seen in Table 2.8.

Table 2.8: People 75 years or older in 2010 and 2018

County	2010	2018
Autauga County	2,533	2,056
Elmore County	3,696	4,855
Montgomery County	12,653	13,981

Source: U.S. Census Bureau (2010 Census and 2018 ACS Population Estimates)

Based on the U.S. Census Bureau's 2010 Census there were 18,882 persons 75 years or older lived in the Central Alabama Region, with the highest concentration living in Montgomery County. The 2013-2017 ACS 5-Year Population Estimate reported 20,892 persons 75 years or older lived in the Central Alabama Region. From 2010 to 2018 in Montgomery County there was a 10.49% increase in the population of 75 years or older, a 31.35% increase in Elmore County, and 18.83% decrease in Autauga County. The large increase in the persons 75 years or older can be attributed to the large Baby Boomer population reaching 75 years old, which can be seen in Table 2.9.

Table 2.9: People 18 years and Under & 75 years or Older in 2018

Jurisdiction	19 and Under	75+ Year
Autauga County	**13,369**	**3,339**
Town of Autaugaville	110	111
Town of Bllingsley	365	16
City of Prattville	53,723	11,700
Elmore County	**18,562**	**4,749**
Town of Coosada	263	88
Town of Deatsville	424	44
Town of Eclectic	365	53
Town of Elmore	457	116

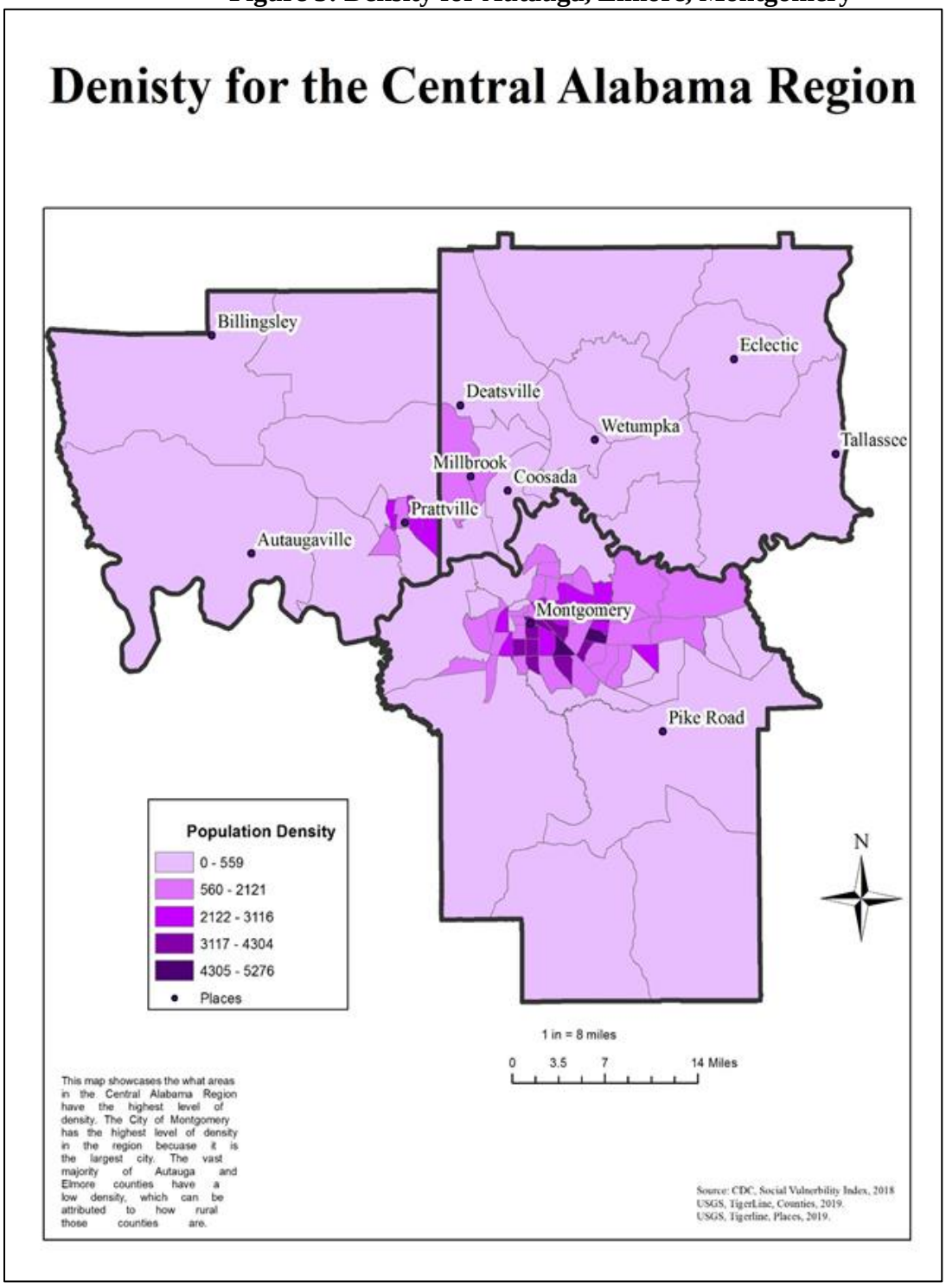
Town of Millbrook	4,093	594
Jurisdiction	**19 and Under**	**75+ Year**
City of Prattville	53,723	11,700
City of Tallaassee	2,595	347
City of Wetumpka	9,576	2,165
Montgomery County	**52,623**	**13,822**
City of Montgomery	1,230	302
Town of Pike Road	1,886	571

Source: U.S. Census Bureau (2018 ACS Population Estimates)

The population under 18 years old is also vulnerable during natural disasters because these persons may not know how to react during an event. It is important to learn this education in school.

Figure 3 shows where the pockets of density are located in Autauga, Elmore, and Montgomery counties. The City of Montgomery in Montgomery County has the most density in the area. The City of Prattville and Town of Millbrook also have a small amount of density, but the remainder of the counties are rural.

Figure 3: Density for Autauga, Elmore, Montgomery



2.3 Business and Industry

The Central Alabama Region supports a wide variety of industrial and commercial stakeholders such as: automotive, aviation, medical, governmental, and other manufacturing and high-tech industry. The region is home to Maxwell U.S. Air Force base, International Paper Mill, Hyundai Motor Manufacturing, and the Alabama state capital. Table 2.10 shows the largest employers in Autauga, Elmore, and Montgomery counties.

Table 2.10: Major Employers (Over 400 employees)

Employer	County	Product	Employees
Autauga County Board of Education	Autauga County	Education	1,100
International Paper	Autauga County	Linerboard	584
Elmore County Board of Education	Elmore County	Education	1,300
Maxwell Gunter Air Force Base	Montgomery County	Federal Government	12280
State of Alabama	Montgomery County	State Government	11639
Montgomery Public Schools	Montgomery County	Public School System	4524
Baptist Health	Montgomery County	Hospitals/Clinics	4300
Hyundai Motor Manufacturing Alabama	Montgomery County	Automobile Manufacturing	3100
ALFA Insurance Companies	Montgomery County	Insurance Services	2568
City of Montgomery	Montgomery County	Local Government	2500
MOBIS Alabama	Montgomery County	Automobile Parts Manufacturing	1400
Jackson Hospital & Clinic	Montgomery County	Hospitals/Clinics	1300
Koch Foods	Montgomery County	Poultry Processing	1250
Wind Creek Casino & Hotel Wetumpka	Montgomery County	Casino/Hotel	1200
Rheem Water Heaters	Montgomery County	Water Heater Manufacturing	1147
GKN Aerospace	Montgomery County	Aircraft Parts Manufacturing	1000
Baptist Medical Center South	Montgomery County	Hospital	980
Regions Bank	Montgomery County	Banks	977
U.S. Postal Service	Montgomery County	Shipping Services	900
Creek Casino Montgomery	Montgomery County	Casino	850
Glovis Alabama	Montgomery County	Warehousing/Logistics	832
Alabama State University	Montgomery County	University	792
Montgomery County Commission	Montgomery County	Local Government	700
Alabama Power Company	Montgomery County	Utility	660
Alorica	Montgomery County	Call Center	660

Source: Economic Development Partnership of Alabama, Local Economic Development Contact

The individual industries are susceptible to the same natural hazards as the remainder of the region, i.e., high wind events, tornadoes, flooding, etc. The economic impact of losing any industry is directly related to the size/type of business and the duration/severity of the loss.

2.4 Infrastructure

2.4.1 Transportation

The Central Alabama region is bisected by Interstate 85, which connects Atlanta, Georgia, to Montgomery, Alabama, and Interstate 65, which connects Mobile, Alabama, to North Alabama. I-85 and I-65 are the main transportation corridor between the Port of Mobile, Midwestern states, and the East coast. The region is in the middle of Alabama, and conveniently located near Birmingham and Atlanta. Montgomery regional airport is the only comical airport in the region, but it also serves as a military airport. Rail lines serving the region include Autauga Northern Railroad, Meridian & Bigbee Railroad, Norfolk Southern and CSX Transportation.

2.4.2 Utilities

Electrical service in the Autauga, Elmore, and Montgomery counties are provided by one of the following: Alabama Power, Central Alabama Electrical Corporative, Dixie Electric Cooperative. Natural Gas service is provided by the Spire.

Water and sewer service is provided by a mixture of municipal and county utility authorities. Most populated areas have public water service; however, most unincorporated areas rely on septic systems for sewer disposal.

2.5 Land Use and Development Trends

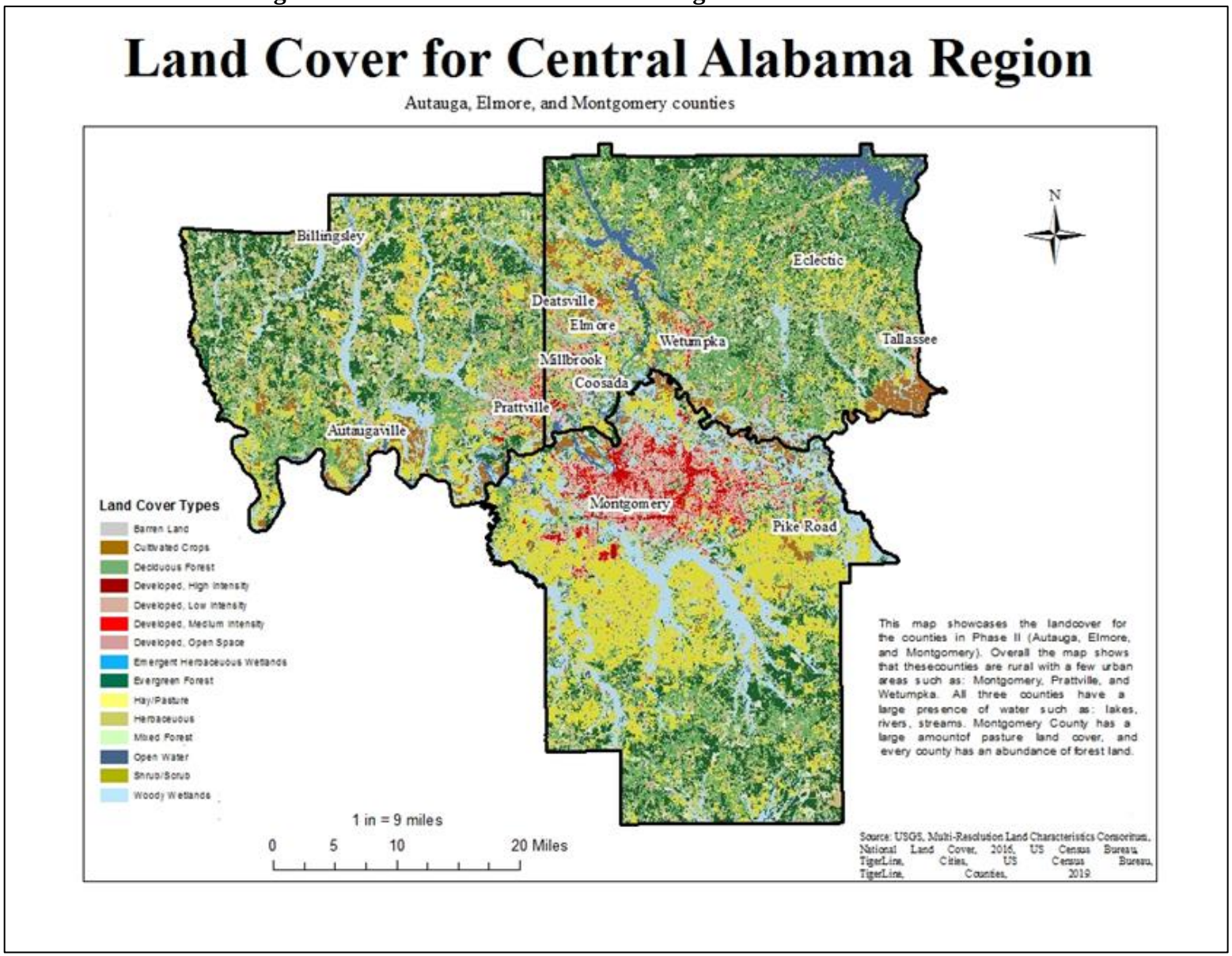
Autauga, Elmore, and Montgomery counties are semi/-rural predominantly composed of evergreen forest, deciduous forest, pasture, and urban areas. Montgomery County has a largest urban footprint of the region due to the City of Montgomery's size. According to the 2018 ACS Population Estimates Montgomery County had a population of 200,156, which the City of Montgomery had a population decrease but the region as a whole grew. Autauga and Elmore counties are extremely rural areas of the state, but there are small urban areas in these counties such as: Prattville, Wetumpka, and Millbrook. Figure 4 shows the types of land cover presence in Autauga, Elmore and Montgomery County.

The town of Elmore, Town of Deatsville (27.34%), City of Wetumpka (24.34%), and Town of Pike Road (64.33%) grew the most from 2010 to 2018. These areas continued to expand their urban footprint. As the population in these areas continues to grow the so does the vulnerability of natural hazards. An increase in population increases the vulnerability a population has towards natural hazards as well as the opportunity to damage or destroy the newly built urban environment associated with growth.

Every jurisdiction (Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery,) particularly the fast-growing areas, should work towards building in compatible areas that are not susceptible hazards such as flooding and other location-specific hazards in their

long-range development plans in order to make communities more resilient to hazards. The town of Autaugaville, Town of Billingsley, Town of Coosada, City of Montgomery, and Montgomery County vulnerability has not changed because the population in these areas have decreased since 2010.

Figure 4: Land Cover for Lee-Russell Region



2.6 NFIP Compliance

The table below summarizes NFIP participation and policy statistics for each jurisdiction in the planning area as of December 31, 2019. More site-specific information is provided in the Risk Assessment section. Jurisdictions that are non-participating in the NFIP Program have participated in the hazard mitigation planning process. Table 2.11 shows the National Flood Insurance Program Status for each jurisdiction in Autauga, Elmore, and Montgomery.

Table 2.11 National Flood Insurance Program (NFIP) Status

Jurisdiction	County	Participation Status	Initial FBHM Identified	Initial FIRM Identified	Current Effective Map Date
Autauga County	Autauga	Yes	03/24/1978	12/18/1985	09/03/2014
Town of Autauga	Autauga	Yes	06/07/1974	12/18/1985	09/03/2014
Town of Billingsley	Autauga	No			
Elmore County	Elmore	Yes	12/15/1978	02/19/1986	09/03/2014
Town of Coosada	Elmore	Yes	08/19/1986	08/19/1986	09/03/2014
Town of Deatsville	Elmore	No			
Town of Elmore	Elmore	Yes	NA	09/03/2008	09/03/2014
City of Millbrook	Elmore/ Autauga	Yes	09/15/1978	98/15/1984	09/03/2014
City of Prattville	Elmore/ Autauga	Yes	05/03/1974	08/15/1978	09/03/2014
City of Tallassee	Elmore	Yes	09/15/1974	09/15/1983	07/18/2011
City of Wetumpka	Elmore	Yes	06/28/1974	01/03/1986	09/03/2014
Montgomery County	Montgomery	Yes	01/17/1975	01/06/1982	01/07/2015
City of Montgomery	Montgomery	Yes	06/28/1974	01/20/1982	01/07/2015
Town of Pike Road	Montgomery	Yes	01/24/1975	01/061982	01/07/2015

Source: FEMA, the National Flood Insurance Program Community Status Book, 2019

Section 3- Hazard Risk Assessment

3.1 Risk Assessment
3.2 Natural Hazards Identification and Description
3.3 Dams
3.4 Droughts
3.5 Earthquakes
3.6 Extreme Heat
3.7 Hail
3.8 High Winds/ Thunderstorms
3.9 Landslides
3.10 Lightning
3.11 Sinkholes
3.12 Tropical Depression/ Tropical Storm/ Hurricane
3.13 Tornado
3.14 Wildfire
3.15 Winter Storm

3.1 Risk Assessment

Autauga, Elmore, and Montgomery counties are affected by a wide range of natural and human-caused hazards that negatively impact life and property. Current FEMA regulations are under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is allowed, but not required for plan approval. The Regional Hazard Mitigation Plan concentrates on natural hazards but does include a summarized assessment of potential human-caused hazards.

The AEMA Division D Core Team identified the hazard based on the vulnerability of the AEMA Division D to natural hazards. Autuaga County EMA, Elmore County EMA, Montgomery County EMA, Lee Russell Council of Governments, local governments, and stakeholders developed a risk assessment for Autauga, Elmore and Montgomery counties, which details the risk Autauga, Elmore and Montgomery counties have towards each hazard. The following components are included for each hazard:

- Hazard Description
- Probability of Future Hazards
- Previous Occurrences
- Impact of Hazards by Jurisdiction
- Probability of Future Occurrence by Jurisdiction
- Vulnerability Overview
- Vulnerability Synthesis and Overall Risk

3.2 Natural Hazard Identification

AEMA Division D is affected by multiple hazards that are addressed below. These hazards were identified and evaluated through a process that included studying historical events, previous local mitigation plans, the susceptibility of the location to hazards, and input from local stakeholders. Each hazard addressed in the risk assessment will include a general description of the hazards and its extent of effects on the region. Phase II of the Regional Hazard Mitigation Plan will include only Autauga, Elmore and Montgomery counties. The remaining counties, Chilton, Coosa, Tallapoosa, Chambers, Lee, Macon, Lowndes, Russell, and Bullock will be added in a phased process.

Due to the geographical location of Autauga, Elmore and Montgomery counties each county is vulnerable to many hazards that could potentially disrupt life and damage property year-round. The following hazard types do not have any applicability to the region, and will not be mentioned any further: Avalanche, coastal erosion, tsunami, and volcano. Table 3.1 below displays the hazards that can impact Autauga, Elmore and Montgomery, information sources, and how the hazard associates to the region.

Table 3.1: Potential Hazards and Data Sources

Hazard	Risk	Source	Correlation with Region
Dam Failure	Yes	USACE National Inventory of Dams	Population downstream from dams; flooding concerns; no State regulation of dam safety
Hazard	Risk	Source	Correlation with Region
Drought	Yes	United States Drought Monitor	Historic Incidents with damage
Earthquakes	Yes	USGS Earthquake Hazard Program	Proximity to Southeast US seismic zones
Extreme Temperatures	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Flooding	Yes	FEMA; NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents/identified flood hazard areas
Hail	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
High Winds/Thunderstorms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Landslides	Yes	Geological Survey of Alabama USGS Landslides Hazard Program Alabama State HMP	Historic Incidents
Lightning	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Sinkholes and Land Subsidence	Yes	Geological Survey of Alabama	Historic Incidents
Tropical Storms/Tropical Depressions/Hurricanes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Tornadoes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Wildfire	Yes	Alabama Forestry Commission Wildfire Assessment Maps	Historic Incidents
Winter Storms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents

Effects from tornadoes, high winds and flooding are regarded as the most significant natural hazards affecting the county areas.

In Autauga, Elmore, and Montgomery counties has been included in Federal Disaster 26 since 1975, which can be seen in Table 3.2. The declared disasters have been primarily related to two major types of impacts: flooding (through both tropical and non-tropical events) and severe storms to include hurricanes and tornadoes. There has also been a declaration for a drought incident and a winter storm incident.

Table 3.2: Autauga, Elmore, Montgomery counties region, federally declared Disasters

Declaration Date	Disaster Number	Type of Incident	Counties Declared
March 14, 1975	458	Severe Storms, Flooding	Montgomery
April 23, 1975	464	Severe Storms, Flooding	Elmore
July 20, 1977	3045	Drought	Autauga, Elmore, Montgomery
April 24, 1978	3064	Tornado	Montgomery
March 17, 1979	3074	Flooding	Autauga
April 18, 1979	578	Severe Storms, Wind, Flooding	Autauga, Elmore, Montgomery
May 11, 1984	3088	Severe Storms, Tornado	Montgomery
March 15, 1990	861	Severe Storms, Flooding, Tornado	Autauga, Elmore, Montgomery
March 13, 1993	3096	Severe Snowfall, Winter Storm	Autauga, Elmore, Montgomery
October 4, 1995	1070	Hurricane	Autauga, Elmore, Montgomery
March 5, 1996	1108	Severe Storms, Tornado, Flooding	Montgomery
November 24, 2001	1399	Severe Storms, Tornado	Autauga
September 13, 2004	1549	Hurricane	Autauga, Elmore, Montgomery
July 10, 2005	1593	Hurricane	Autauga, Elmore, Montgomery
September 10, 2005	3237	Hurricane	Autauga, Elmore, Montgomery

March 3, 2007	1687	Severe Storms, Tornado	Montgomery
August 30, 2008	3292	Hurricane	Autauga, Elmore, Montgomery
April 28, 2009	1835	Severe Storms, Flooding, Tornado, Straight-line Winds	Elmore
June 3, 2009	1842	Severe Storms, Tornado, Flooding, Straight-line Winds	Autauga, Elmore, Montgomery
April 27, 2011	3319	Severe Storms, Tornado, Straight-line Winds	Autauga, Elmore, Montgomery
April 28, 2011	1971	Severe Storms, Tornado, Straight-line Winds, Flooding	Autauga, Elmore, Montgomery
January 21, 2016	4251	Severe Storms, Tornado, Straight-line Winds, Flooding	Autauga, Elmore
September 11, 2017	3389	Hurricane	Autauga, Elmore, Montgomery
October 6, 2017	3394	Hurricane	Autauga, Elmore, Montgomery
November 16, 2017	4349	Hurricane	Autauga
October 12, 2018	3407	Hurricane	Montgomery

Source: Federal Emergency Management Agency (March 2020)

Under a federally declared disaster, the State of Alabama and affected local jurisdictions are eligible to apply for federal reimbursement for debris removal, emergency services, and critical facility repair/replacement. Funding is also made available for hazard mitigation grants that allow for the implementation of mitigation projects that are listed in this plan.

Each hazard profile includes a summary of the following:

- **Background:** Provides general definitions and brief descriptions of the hazard, its characteristics, and potential effects.

- **Extent:** Provides information on the potential strength or magnitudes of the hazard.

- **Previous Occurrences:** Provides information on the history of previous hazard events in the planning area, including their impacts.

- **Impact:** Provides information on the geographic areas within the Autauaga, Elmore and Montgomery counties that are susceptible to hazard occurrences. Locations affected are described regionally unless a specific jurisdiction has different risks, which is further explained.

- **Probability of Future Events:** Describes the likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low or Very Low as described below:

  High: Probable major damage in a 1-10 Year Period
  Medium: Probable major damage in a 10-50 Year Period
  Low: Probable major damage in a 100 Year Period
  Very Low: No probable major damage in a 100 Year Period.

Figure 5: FEMA Disaster Declaration as of June 1st, 2011

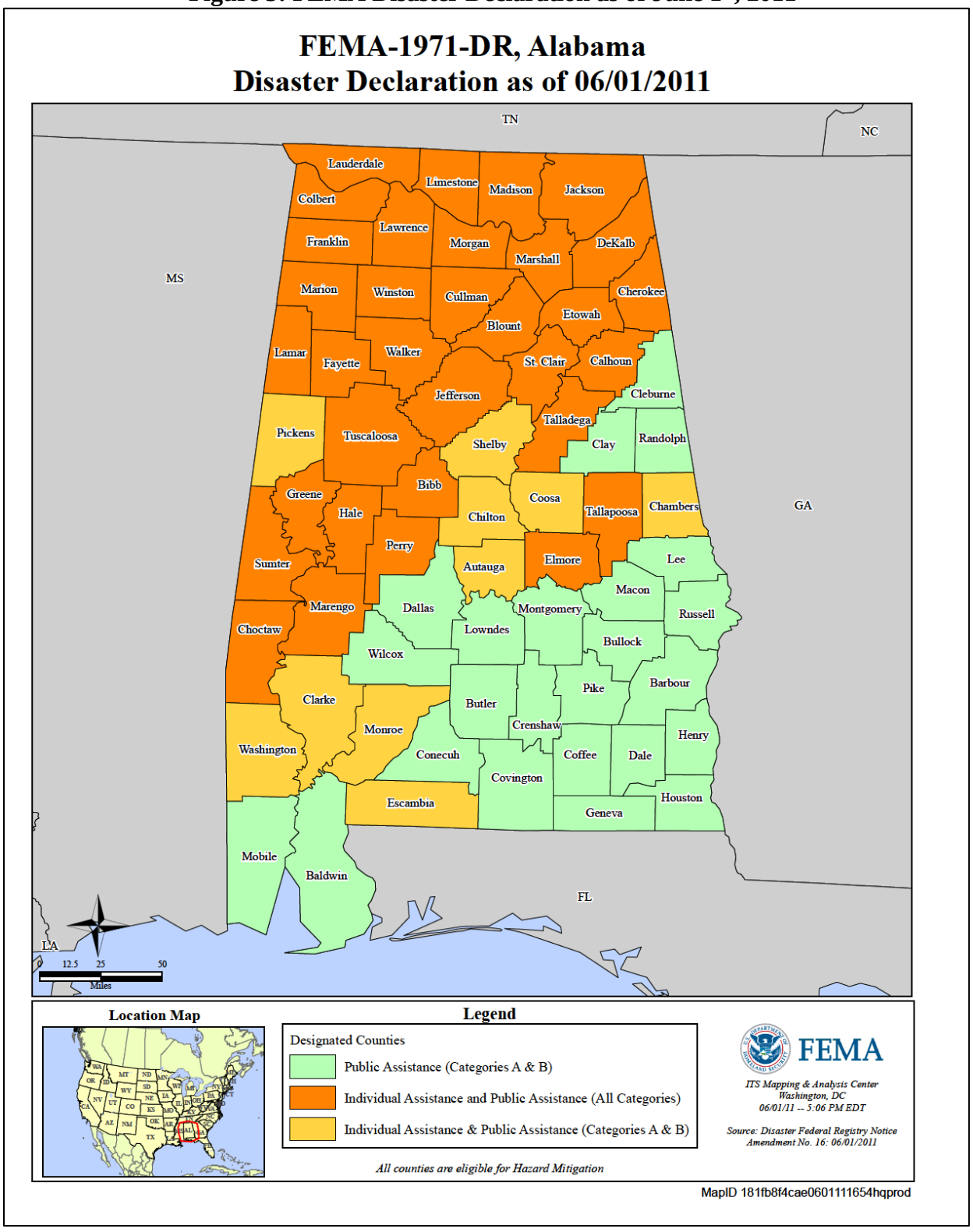


Figure 6: FEMA Disaster Declaration as of January 1st, 2016 for Alabama

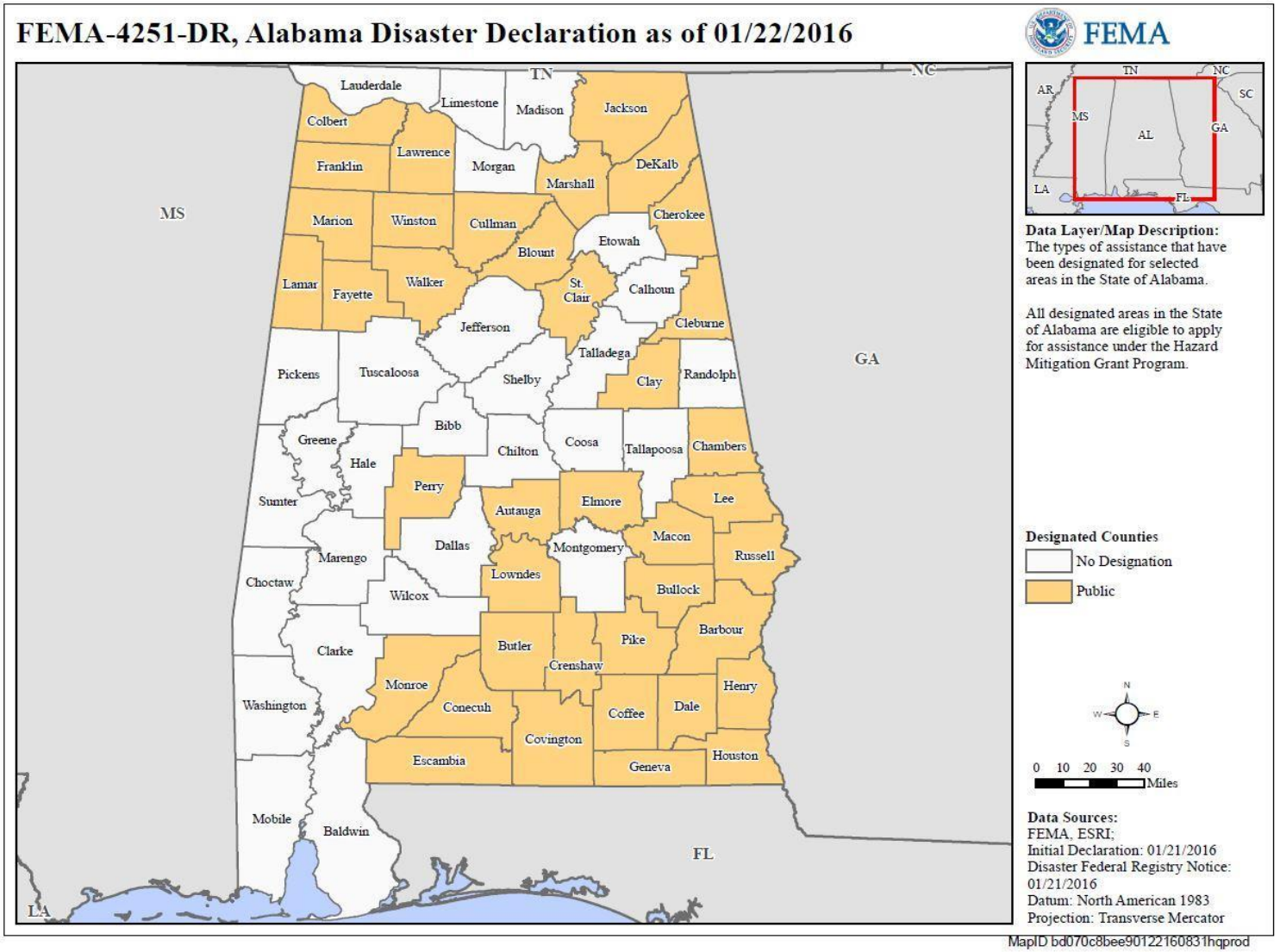
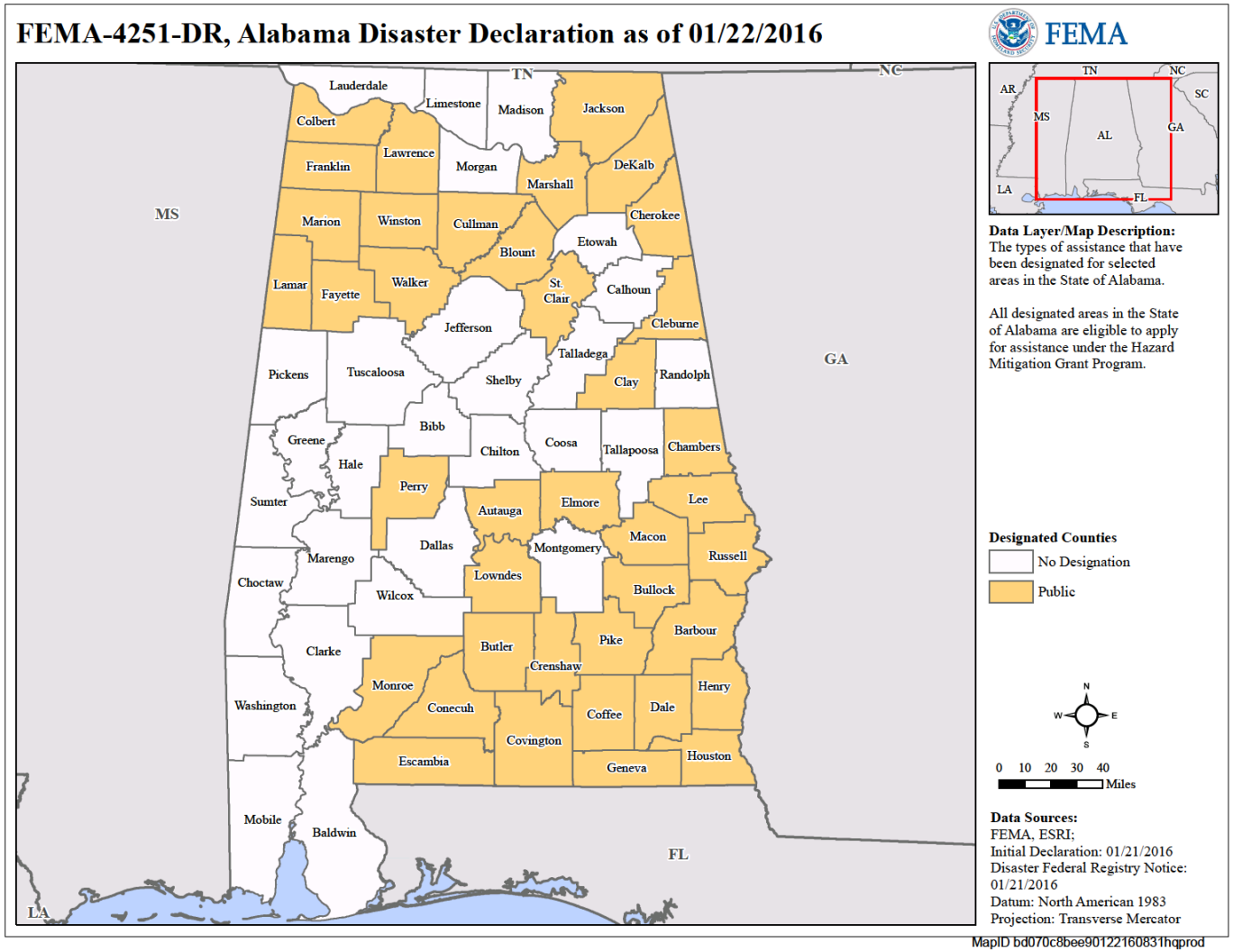


Figure 7: FEMA Disaster Declaration as of March 3rd, 2019 for Alabama



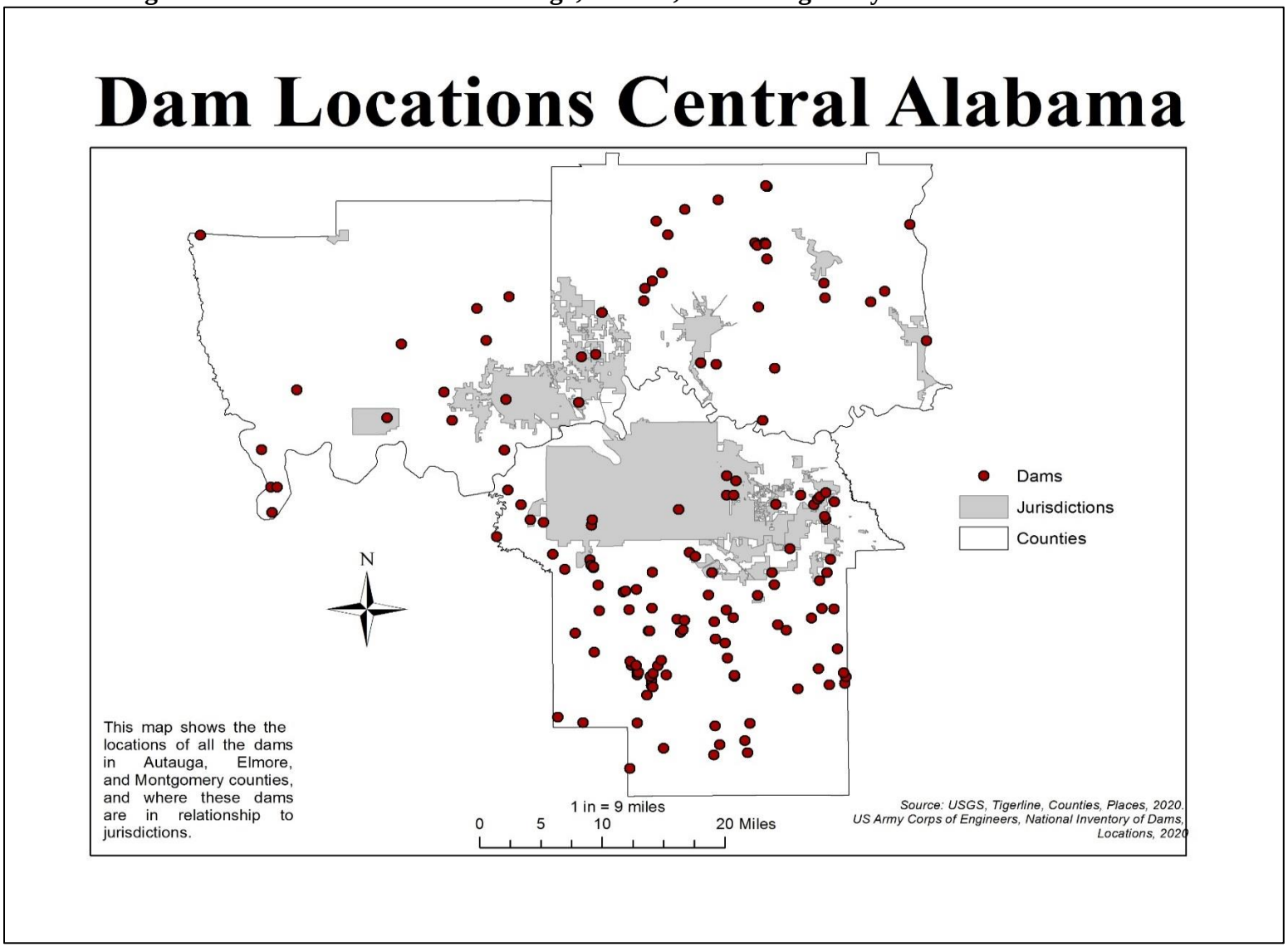
3.3 Dams

3.3.1 Description

Dams are a vital part of communities today because these assets provide drinking water, recreation, flood control, power generation, or water for agriculture and livestock. When a dam or levee failures arise, the areas located downstream are subject to flooding due to the large volumes of water released suddenly. These events happen with little warning are may cause extensive property damages and casualties. Dam safety is a hazard that the State of Alabama works on continuously for the last two decades as the infrastructure ages, especially small privately-owned dams and/or poorly maintained. Alabama currently does not have a state law to regulate existing private dams or new construction of private dams that do not require federal licenses or inspections. There are approximately 1,700 privately owned dams in Alabama that are on bodies of water over 50 acre-feet or dams higher than 25 feet. Efforts to pass legislation regarding the regulation of these 1,700 dams have not been successful.

According to the National Inventory of Dams, there are 140 dams in the planning region. Tables 3.3 to 3.5 provide a list of all dams in these counties. All of these dams are owned by a public utility, local government, or state government. All these dams are owned by a public utility, local government, or state government. Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: the City of Prattville, Town of Autaugaville, unincorporated Autauga County, Town of Elmore, City of Wetumpka, City of Millbrook, and unincorporated Elmore County, City of Montgomery, and unincorporated Montgomery County. Autauga, Elmore, and Montgomery counties do not have a reported history of dam failures. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk. Please refer to Figure 7 to see the locations of all dams in Autauga, Elmore, Montgomery Counties, or refer to Table 7.4.8 in section 7 of the Appendix for the exact location of dams in these counties.

Figure 7: Locations of Dams in Autauga, Elmore, and Montgomery Counties



3.3.2 Extent by Jurisdiction

"Hazard potential" is the classification used to indicate probability for damages, human losses, or property damage, which could arise to the region if a dam failure occurred. The Federal Guidelines for Dam Safety present three classifications of dams, please refer to Table 3.6, which is below to see the classifications. Tables 3.3 to 3.5 show the hazard level for all dams found in Elmore, Autauga, and Montgomery counties, please refer to the Appendix to see the more details on Dams in section 7.4.

Table 3.6: Dam Hazard Classifications

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None Expected	Low; Generally Limited o Owner
Significant	None Expected	Yes
High	Probable; One or More Expected	Yes

Source: Federal; Guidelines for Dam Safety (published April 2004)

Dams located in Autauga, Elmore, and Montgomery counties are valuable assets for the communities in the region because these dams provide communities with benefits including water for drinking and agricultural purposes, recreation, flood control, and power generation. Despite the importance of the dams, if a dam failure was to occur large problems can arise downstream. The water that is stored behind the dam's wall has a large amount of energy stored, which can cause casualties and property damage should a dam fail and release its capacity uncontrolled. In Autauga County, two dams' hazard potential is classified as high, Pickering Lake Dam, and Crystal Lake. In Elmore County, eight dams 'hazard potential is classified as high, Martin Dam, Jordan Dam, Walter Bouldin Saddle Dike, Pigeon Roost Creek, Walter Bouldin, Spiegner, Yates, and Thurlow dam. In Montgomery County, four dams' hazard potential is classified as high, Newell Lake, Duggar, Dabass Lake, and EC Lane Lake. High-risk dams are those with the capacity to cause both property and casualties in the downstream areas should the dam fail. There are several high-risk dams located in each of the counties for Phase II of the Hazard Mitigation plan. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All of these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams are the most susceptible, which is the most common type of dam found in Autauga, Elmore, and Montgomery counties. Concrete structures with spillways and controls would be less susceptible. The larger dams like Jordan Dam on the Coosa River are operated by Alabama Power and are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

The majority of the dams in Autauga, Elmore, and Montgomery counties area are considered to be earth dams, as reported by the National Inventory of Dams, which is constructed of earth material such as gravel, soil, rock, and silt. The largest dams are classified as gravity dams, and are all located in Elmore county. These dams are built out of concrete in order to hold back water. The dam list from the National Inventory of Dams is outdated, due to the lack of regulatory authority in Alabama. Private dams may be missing from this list if local authorities are unaware of the features. Localized studies conducted by the Office of Water Resources (OWR) demonstrate that data collected from the National Inventory of Dams might be inaccurate due to locational errors and the misrepresentation of the potential hazards of dams. Future updates to the Division D

Hazard Mitigation Plan will incorporate information regarding the classification of potential dam hazards.

Table 3.3: Autauga County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Dam Type	Purpose	Hazard Potential	Year Completed
PICKERING LAKE DAM	Autauga	Public	0 ft.	0 acre feet	Earth	Recreation	High	NA
CIRCLE A RANCH	Autauga	Public	35 ft.	158 acre feet	Earth	Recreation	Significant	1966
CAMP TUKABATCHEE LAKE	Autauga	Public	22 ft.	61 acre feet	Earth	Recreation	Low	1951
O Dell Lake	Autauga	Public	0 ft.	0 acre feet	Earth	Recreation	Significant	NA
R M PENDERGRASS	Autauga	Public	17 ft.	50 acre feet	Earth	Recreation	Significant	1936
UNDERWOOD LAKE	Autauga	Public	29 ft.	146 acre feet	Earth	Recreation	Significant	1956
JIM ADAMS LAKE DAM	Autauga	Public	15 ft.	240 acre feet	Earth	Recreation	Low	1976
CRYSTAL LAKE	Autauga	Public	18 ft.	50 acre feet	Earth	Recreation	High	1941
IDLEWILD LAKE	Autauga	Public	22 ft.	123 acre feet	Earth	Recreation	Significant	1954
PRATTVILLE LAKE	Autauga	Public	27 ft.	86 acre feet	Earth	Recreation	Significant	1920
PRATTVILLE INDUSTRIAL BOARD WASTE DAM	Autauga	Public	20 ft.	496 acre feet	Earth	Other	low	1976
W T Palmer	Autauga	Public	17 ft.	64 acre feet	Earth	Fish and Wildlife Pond	Significant	1965
UPCHURCH LAKE	Autauga	Public	18 ft.	51 acre feet	Earth	Recreation	Low	1967
M A RICKARD	Autauga	Public	17 ft.	56 acre feet	Earth	Recreation	low	1958

Source: *FEMA, National Inventory of Dams, Autauga County, Alabama, 2019*

Table 3.4: Elmore County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Dam Type	Purpose	Hazard Potential	Year Completed
BLACKWELL LAKE DAM NUMBER TWO	Elmore	Public	20 ft.	50 acre feet	Earth	Recreation	Low	1963
BLACKWELL LAKE DAM NUMBER ONE	Elmore	Public	21 ft.	56 acre feet	Earth	Recreation	Low	1963
WHETSTONE	Elmore	Public	27 ft.	80 acre feet	Earth	Recreation	Low	1957
B G POWELL LAKE DAM	Elmore	Public	19 ft.	61 acre feet	Earth	Recreation	Low	1961
G C WHITE	Elmore	Public	24 ft.	89 acre feet	Earth	Fish and Wildlife Pond	Low	1977
CHARLES BEARD	Elmore	Public	15 ft.	18 acre feet	Earth	Fish and Wildlife Pond	Significant	1970
MARTIN	Elmore	Public	168 ft.	1,622,000 acre feet	Gravity	Flood Control	High	1926
Jordan	Elmore	Public	125 ft.	235,000 acre feet	Gravity	Hydroelectric	High	1928
WALTER BOULDIN SADDLE DIKE	Elmore	Public	10 ft.	48,000 acre feet	NA	Hydroelectric	High	1967
PIGOEN ROOST CREEK	Elmore	Public	45 ft.	48,000 acre feet	Earth	Hydroelectric	High	1967
WALTER BOULDIN	Elmore	Public	174 ft.	48,000 acre feet	Gravity	Hydroelectric	High	1967
SPIEGNER	Elmore	Public	23 ft.	2,070 acre feet	Earth	Recreation	High	1953
MERRITT JORDAN	Elmore	Public	14 ft.	130 acre feet	earth	Fish and Wildlife Pond	NA	1957
W A WILLIAMSON	Elmore	Public	32 ft.	144 acre feet	Earth	Recreation	NA	1955

PARAVIGNI DAM	Elmore	Public	10 ft.	50 acre feet	Earth	Recreation	Low	1961
CROMMELIN LAKE DAM	Elmore	Public	18 ft.	64 acre feet	Earth	Other	NA	1940
FITZPATRICK	Elmore	Public	37 ft.	326 acre feet	Earth	Recreation	Low	1934
H M CHRISTIAN	Elmore	Public	21 ft.	69 acre feet	Earth	Fish and Wildlife Pond	Significant	1973
POUNDSTONE	Elmore	Public	12 ft.	77 acre feet	Earth	Recreation	low	1954
KNIGHT LAKE DAM	Elmore	Public	19 ft.	58 acre feet	Earth	Recreation	Low	1960
MAIER LAKE DAM	Elmore	Public	31 ft.	67 acre feet	Earth	Recreation	Low	1972
DANNZ DAVIS LAKE DAM	Elmore	Public	21 ft.	50 acre feet	Earth	Recreation	Low	1970
NOLEN DAVIS LAKE DAM NUMBER TWO	Elmore	Public	26 ft.	92 acre feet	Earth	Other	Low	1968
DAVIS	Elmore	Public	25 ft.	83 acre feet	Earth	Recreation	Low	1970
STEWART	Elmore	Public	25 ft.	79 acre feet	Earth	Recreation	low	1958
NOLEN DAVIS LAKE DAM NUMBER ONW	Elmore	Public	26 ft.	92 acre feet	Earth	Other	Low	1968
WINGARD LAKE DAM	Elmore	Public	25 ft.	56 acre feet	Earth	Recreation	low	1960
R H LAMB LAKE DAM	Elmore	Public	0 ft.	0 acre feet	Earth	Recreation	Significant	NA
O M WILSON	Elmore	Public	14 ft.	128 acre feet	Earth	Fish and Wildlife Pond	Significant	1967
ANNIE T GREGORY LAKE DAM	Elmore	Public	26 ft.	77 acre feet	Earth	Recreation	Low	1955
YATES	Elmore	Public	87 ft.	54,000 acre feet	Gravity	Hydroelectric	High	1928
THURLOW	Elmore	Public	62 ft.	18,250 acre feet	Gravity	Hydroelectric	High	1930

Source: FEMA, National Inventory of Dams, Elmore County, Alabama, 2019

Table 3.5: Montgomery County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Dam Type	Purpose	Hazard Potential	Year Completed
D W RUTLAND	Montgomery	Public	22 ft.	121 acre feet	Earth	Recreation	Significant	NA
C H WARNER	Montgomery	Public	12 ft.	66 acre feet	Earth	Recreation	Significant	1950
BAGGETT	Montgomery	Public	9 ft.	63 acre feet	Earth	Recreation	Low	1947
ELGIN	Montgomery	Public	17 ft.	114 acre feet	Earth	Recreation	Significant	1948
SUGGS	Montgomery	Public	7 ft.	210 acre feet	Earth	Recreation	Low	1946
WALLLOCK	Montgomery	Public	28 ft.	126 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1968
DAVIS NO 1	Montgomery	Public	12 ft.	252 acre feet	Earth	Recreation	Low	1948
MADDOX	Montgomery	Public	17 ft.	68 acre feet	Earth	Recreation	Low	1970
SILVERMAN & DYKES	Montgomery	Public	18 ft.	92 acre feet	Earth	Fish and Wildlife Pond	Low	1989
DR BILL CAUTHEN	Montgomery	Public	18 ft.	112 acre feet	Earth	Fish and Wildlife Pond	Low	1975
NEWELL LAKE	Montgomery	Public	9 ft.	67 acre feet	Earth	Grade Stabilization	High	NA
FARM BUREAU	Montgomery	Public	15 ft.	58 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant	1946
FISHER	Montgomery	Public	12 ft.	53 acre feet	Earth	Recreation	Significant	1969
FRANK DAVIS	Montgomery	Public	12 ft.	54 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1948

DAVIS NO 4	Montgomery	Public	21 ft.	116 acre feet	Earth	Recreation	Low	1952
DAVIS NO 5	Montgomery	Public	18 ft.	108 acre feet	Earth	Recreation	Low	1952
DUGGAR	Montgomery	Public	13 ft.	273 acre feet	Earth	Fire Protection, Stock, or Small Fish	High	1961
LASSIER	Montgomery	Public	15 ft.	105 acre feet	Earth	Recreation	low	1954
SIMS NO 1	Montgomery	Public	15 ft.	105 acre feet	Earth	Recreation	Significant	1957
SIMS NO 2	Montgomery	Public	22 ft.	99 acre feet	Earth	Recreation	Significant	1960
PIRTLE	Montgomery	Public	15 ft.	173 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1945
FAULKNER	Montgomery	Public	17 ft.	85 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant	1935
EDWARD MYERS	Montgomery	Public	8 ft.	50 acre feet	Earth	Recreation	Significant	1948
C H WARNER POND	Montgomery	Public	11 ft.	25 acre feet	Earth	Fish and Wildlife Pond	Significant	1981
HILL & HILL	Montgomery	Public	15 ft.	132 acre feet	Earth	Fish and Wildlife Pond	Low	1950
FLOWERS	Montgomery	Public	15 ft.	45 acre feet	Earth	Recreation	Significant	1953
WEIL	Montgomery	Public	19 ft.	109 acre feet	Earth	Fish and Wildlife Pond	Low	1957
NUTSON NO 3	Montgomery	Public	22 ft.	121 acre feet	Earth	Recreation	low	1947
NUTSON NO 1	Montgomery	Public	21 ft.	126 acre feet	Earth	Recreation	Low	1945

HILL	Montgomery	Public	19 ft.	95 acre feet	Earth	Recreation	low	1950
CAUTHEN NO 1	Montgomery	Public	20 ft.	80 acre feet	Earth	Recreation	Significant	1950
UNDERWOOD NO 1	Montgomery	Public	20 ft.	210 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1950
UNDERWOOD NO 2	Montgomery	Public	22 ft.	198 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1953
HUBIE CAUTHEN NO 1	Montgomery	Public	20 ft.	120 acre feet	Earth	Fish and Wildlife Pond	Low	1967
HUBIE CUTHEN NO 2	Montgomery	Public	18 ft.	99 acre feet	Earth	Recreation	low	1969
HUBIE CAUTHEN	Montgomery	Public	17 ft.	69 acre feet	Earth	Fish and Wildlife Pond	low	1969
DAVIS NO 3	Montgomery	Public	26 ft.	325 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1950
DAVIS NO 2	Montgomery	Public	21 ft.	326 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1950
VONGOL NO 1	Montgomery	Public	15 ft.	75 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1960
VONGOL NO 2	Montgomery	Public	18 ft.	108 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1952
LECROY	Montgomery	Public	10 ft.	50 acre feet	Earth	Recreation	Significant	1960
MCBRIDE	Montgomery	Public	10 ft.	75 acre feet	Earth	Fire Protection,	low	1950

						Stock, or Small Fish		
HERMAN GIBSON	Montgomery	Public	15 ft.	135 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1953
HERMAN GIBSON NO 2	Montgomery	Public	17 ft.	77 acre feet	Earth	Recreation	Significant	1954
SPEARS RHODES DAM	Montgomery	Public	0 ft.	0 acre feet	Earth	Recreation	Significant NA	
WYLIE HILL NO 2	Montgomery	Public	13 ft.	98 acre feet	Earth	Recreation	Low	1958
WYLIE HILL NO 1	Montgomery	Public	12 ft.	120 acre feet	Earth	Recreation	Low	1953
PAT MCINTYRE	Montgomery	Public	11 ft.	108 acre feet	Earth	Fish and Wildlife Pond	Low	1978
ARRINGTON NO 1	Montgomery	Public	22 ft.	121 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1949
ARRINGTON NO 2	Montgomery	Public	20 ft.	120 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1968
W C GIBSON	Montgomery	Public	12 ft.	60 acre feet	Earth	Recreation	Low	1954
EVAN DAM	Montgomery	Public	14 ft.	79 acre feet	Earth	Fish and Wildlife Pond	low	1977
C E SELLERS	Montgomery	Public	29 ft.	319 acre feet	Earth	Recreation	Low	1967
STRICKLAND	Montgomery	Public	15 ft.	95 acre feet	Earth	Fish and Wildlife Pond	low	1968
DOUG CHAPMAN	Montgomery	Public	15 ft.	105 acre feet	Earth	Fish and Wildlife Pond	Significant	1979
C E NEAL	Montgomery	Public	25 ft.	150 acre feet	Earth	Fire Protection,	Low	1954

						Stock, or Small Fish		
MORRIS DEES	Montgomery	Public	23 ft.	150 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1952
FANNIN	Montgomery	Public	14 ft.	140 acre feet	Earth	Recreation	low	1958
JAMES SKYES	Montgomery	Public	14 ft.	28 acre feet	Earth	Fish and Wildlife Pond	Significant	1981
JACK WOOL	Montgomery	Public	15 ft.	96 acre feet	Earth	Recreation	Significant	1955
GUZ PUGH	Montgomery	Public	14 ft.	81 acre feet	Earth	Recreation	Significant	1950
C E SELLERS NO 2	Montgomery	Public	26 ft.	78 acre feet	Earth	Recreation	Low	1968
C E SELLERS NO 3	Montgomery	Public	21 ft.	105 acre feet	Earth	Recreation	low	1968
C E SELLERS NO 4	Montgomery	Public	22 ft.	165 acre feet	earth	Recreation	low	1963
T S TURNIPSEED DAM	Montgomery	Public	12 ft.	156 acre feet	Earth	Fire Protection, Stock, or Small Fish	Significant	1969
WYLIE HILL NO 1	Montgomery	Public	13 ft.	98 acre feet	Earth	Recreation	low	1958
WYLIE HILL NO 2	Montgomery	Public	12 ft	120 acre feet	Earth	Recreation	Low	1958
MORRIS DEES NO 2	Montgomery	Public	13 ft.	78 acre feet	Earth	Recreation	Low	1953
KIRKEY	Montgomery	Public	14 ft.	141 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1939
ALLISON	Montgomery	Public	9 ft.	83 acre feet	Earth	Recreation	Low	1955
W. E. WATERS	Montgomery	Public	12.5 ft.	175 acre feet	Earth	Fish and Wildlife Pond	low	1988

W C GRAY	Montgomery	Public	13 ft.	130 acre feet	Earth	Fire Protection, Stock, or Small Fish	low		1954
BROOKS NO 2	Montgomery	Public	15 ft.	53 acre feet	Earth	Recreation	low		1955
W R TUNIPSEED	Montgomery	Public	13 ft.	90 acre feet	Earth	Recreation	Significant		1953
DR JOHN KIMBROUGH	Montgomery	Public	16 ft.	212 acre feet	Earth	Fish and Wildlife Pond	low		1979
GEORGE H OWENS	Montgomery	Public	16 ft.	88 acre feet	Earth	Fish and Wildlife Pond	low		1971
W J SORRELL	Montgomery	Public	10 ft.	55 acre feet	Earth	Recreation	Significant		1949
LEE MERRIWEATHER	Montgomery	Public	12 ft.	62 acre feet	Earth	Recreation	Low		1948
SHIRLEY	Montgomery	Public	11 ft.	66 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1950
DABSS LAKE	Montgomery	Public	13 ft.	68 acre feet	Earth	Flood Control	High	NA	
EC LANE LAKE	Montgomery	Public	4 ft.	51 acre feet	NA	Flood Control	high	NA	
SCOTT DAM	Montgomery	Public	0 ft.	0 acre feet	earth	Recreation	Significant	NA	
A W DALE	Montgomery	Public	8 ft.	80 acre feet	Earth	Recreation	Low		1952
FREEMAN	Montgomery	Public	12 ft.	144 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1954
BELSER	Montgomery	Public	14 ft.	140 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low		1940
GERALD WALLACE NO 2	Montgomery	Public	18 ft.	90 acre feet	Earth	Fire Protection,	low		1959

						Stock, or Small Fish		
GERALD WALLACE NO 1	Montgomery	Public	19 ft.	190 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1959
FRANK RUTLAND NO 1	Montgomery	Public	12 ft.	96 acre feet	Earth	Recreation	Significant	1935
FRANK RUTLAND NO 2	Montgomery	Public	12 ft.	180 acre feet	Earth	Recreation	Low	1955
MCCLURKIN NO 2	Montgomery	Public	11 ft.	126 acre feet	Earth	Fire Protection, Stock, or Small Fish	low	1955
MCCLURKIN NO 3	Montgomery	Public	15 ft.	90 acre feet	Earth	Fire Protection, Stock, or Small Fish	Low	1953
FRANK RUTLAND POND	Montgomery	Public	19 ft.	501 acre feet	Earth	Fish and Wildlife Pond	low	1986
FRANK RUTLAND POND NO 1	Montgomery	Public	12 ft.	96 acre feet	Earth	Recreation	Significant	1935
FRANK RUTLAND POND NO 2	Montgomery	Public	12 ft.	180 acre feet	Earth	Recreation	low	1955

Source: FEMA, National Inventory of Dams, Montgomery County, Alabama, 2019

3.3.3 Previous Occurrences and Impact

Zero reports of a dam failure have been reported in the planning area, but this might not include failures for small private dams.

Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: the City of Prattville, Town of Autaugaville, unincorporated Autauga County, Town of Elmore, City of Wetumpka, City of Millbrook, and unincorporated Elmore County, City of Montgomery, and unincorporated Montgomery County. There have not been any reports or a history of dam failures in Autauga, Elmore, or Montgomery counties. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk.

A dam failure near/in built-up areas in the Cities of Prattville, Millbrook, Wetumpka and Montgomery is concerning due to the potential loss of life, injury, and damage to property downstream that could result. All persons living in a manufactured home near a high-risk dam are vulnerable in their homes if the dams fail in the jurisdictions that follow: the City of Prattville, Town of Autaugaville, unincorporated Autauga County, Town of Elmore, City of Wetumpka, City of Millbrook, and unincorporated Elmore County, City of Montgomery, and unincorporated Montgomery County. If Jordan Dam, Martin Dam, Yates Dam, or Thurlow Dam failed, everyone downstream would be at risk due to a large amount of water the dam holds. This is particularly concerning for all persons in retirement communities, all persons in assisted living facilities, disabled, staff and patients at medical facilities, staff and students at schools, elderly living near the Tallapoosa or Coosa rivers in places like Tallassee or Wetumpka, eastern portions unincorporated of Autauga and Elmore counties. These specific groups would have difficulty evacuating quickly in an emergency event such as a dam failure.

In a jurisdiction such as the City of Prattville, Town of Autaugaville, unincorporated Autauga County, Town of Elmore, City of Wetumpka, City of Millbrook, and unincorporated Elmore County, City of Montgomery, and unincorporated Montgomery County the following types of assets would be vulnerable if a nearby high-risk dam was to fail: manufactured homes, structures, bridges, power lines, livestock /animals, crops, trees/timber, roads, buildings (made of wood, vinyl, or metal).

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any of the following jurisdiction the City of Prattville, Town of Autaugaville, unincorporated Autauga County, Town of Elmore, City of Wetumpka, City of Millbrook, and unincorporated Elmore County, City of Montgomery, and unincorporated Montgomery County. This information will be provided in the next Hazard Mitigation Plan in five years.

3.3.4 Probability of Future Occurrences

Since zero dam failures have been recorded, it is not possible to calculate risk losses from dam failure based on the historical record. Dated and incomplete information pertaining to dam classification in Alabama makes it difficult to predict what dams are susceptible in the planning region. It is unlike that that a dam failure will occur in the region and will be considered to have a low probability. Table 3.7 shows the probability of future occurrences.

Table 3.7: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Dam Failure	Autauga County	0	13	0.00
Dam Failure	Autaugaville	0	13	0.00
Dam Failure	Unincorporated Autauga County	0	13	0.00
Dam Failure	Prattville	0	13	0.00
Dam Failure	Billingsley	0	13	0.00
Dam Failure	Elmore County	0	13	0.00
Dam Failure	Elmore	0	13	0.00
Dam Failure	Coosada	0	13	0.00
Dam Failure	Deatsville	0	13	0.00
Dam Failure	Eclectic	0	13	0.00
Dam Failure	Prattville	0	13	0.00
Dam Failure	Tallassee	0	13	0.00
Dam Failure	Unincorporated Elmore County	0	13	0.00
Dam Failure	Wetumpka	0	13	0.00
Dam Failure	Montgomery	0	13	0.00
Dam Failure	Montgomery County	0	13	0.00
Dam Failure	Unincorporated Montgomery County	0	13	0.00
Dam Failure	Pike Road	0	13	0.00

Source: NOAA, National Weather Service Strom Events Database, 2020,

3.4 Drought

3.4.1 Description

Drought occurs when there is below-average precipitation over an extended period of time, gradually affecting hydrological, agricultural, and social concerns. Occurrences of drought are typically classified as follows:

Table 3.8: Drought Classifications

Drought Type	Description/Definition
Meteorological Drought	Defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales
Hydrologic Drought	Related to the effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Defined principally in terms of soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic Drought	Associates the supply and demand of economic goods or services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of a weather-related supply shortfall. This type of drought may also be called a water management drought.

Source: FEMA's Multi-Hazard Identification and Risk Assessment, published January 1997. Also cited in the State of Alabama Hazard Mitigation Plan, 2018.

The long-term dangers of drought can have a serious economic impact on a community. Agricultural production can be damaged or destroyed by the loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these resources. Water supply that is drawn from groundwater sources could also be negatively impacted by prolonged drought. Drought can also be a contributing factor to wildfires in the forested areas of the region.

3.4.2 Extent by Jurisdiction

For the extent of drought, the United States Drought Monitor classifies drought in five levels of severity, based on multiple indicators including soil moisture, streamflow levels, precipitation levels, and local observations. These classifications are listed in the Table 3.9 :

Table 3.9: United States Drought Monitor Classification

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops, or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested.
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or

		restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies.

Source: US Drought Monitor Classifications

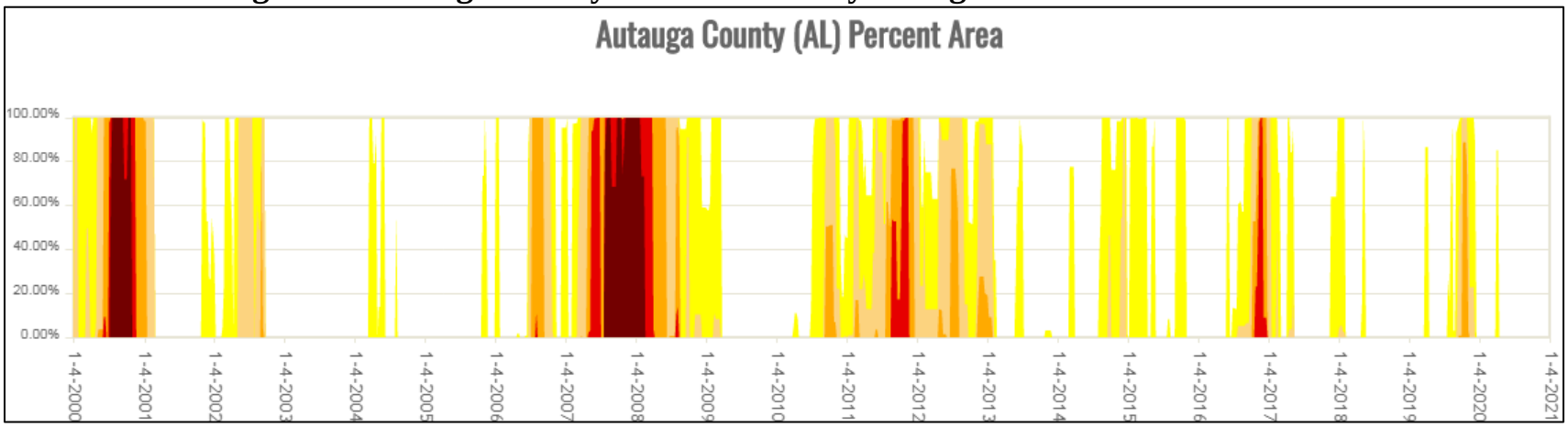
Table 3.10 describes the extent of drought in Autauga, Elmore, and Montgomery counties. Extent is used to define how severe or how intense drought can be, which provides a foundation for implementing mitigation strategies to reduce damages from a drought. The extent of the potential for damages across Autauga, Elmore, and Montgomery counties are equal.

Table 3.10: United States Drought Monitor Classification

Hazard	Extent (All Jurisdictions)
Drought	A D4: Exceptional Drought corresponds to an area experiencing exceptional and widespread crop and pasture losses, fire risk, and water shortages that result in water emergencies.

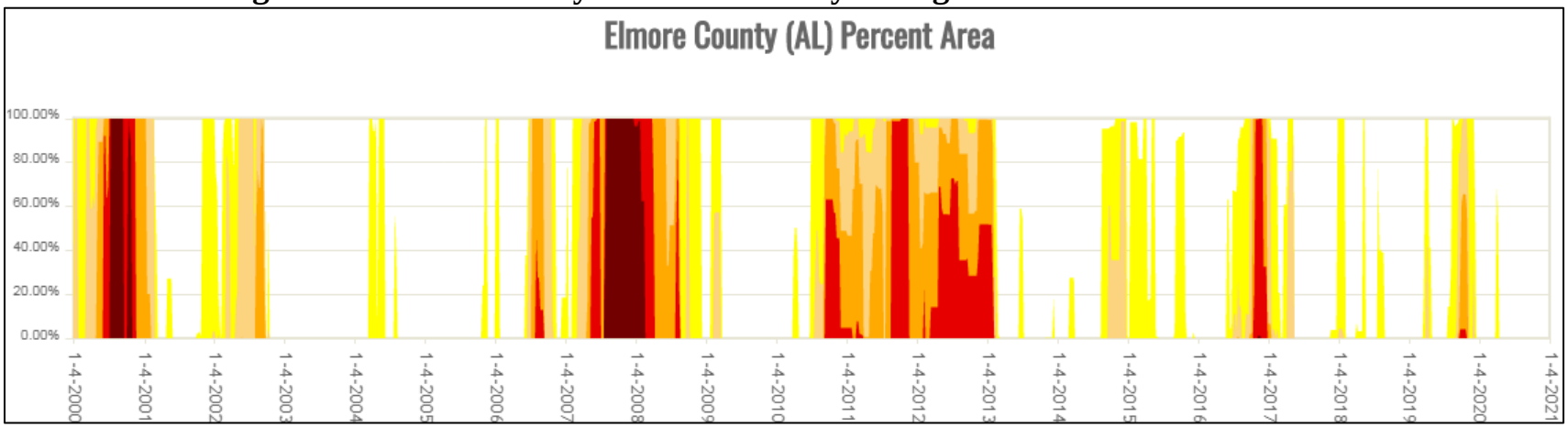
Figures 8 to 10 below show the percent of the area in Autauga, Elmore, and Montgomery counties that have suffered from droughts, as well as how bad the drought was in the county. Figures 11 and 12 demonstrates how severe droughts can be in Elmore, Autauga and Montgomery when there is a wide drought.

Figure 8: Autauga County Area Affected by Droughts



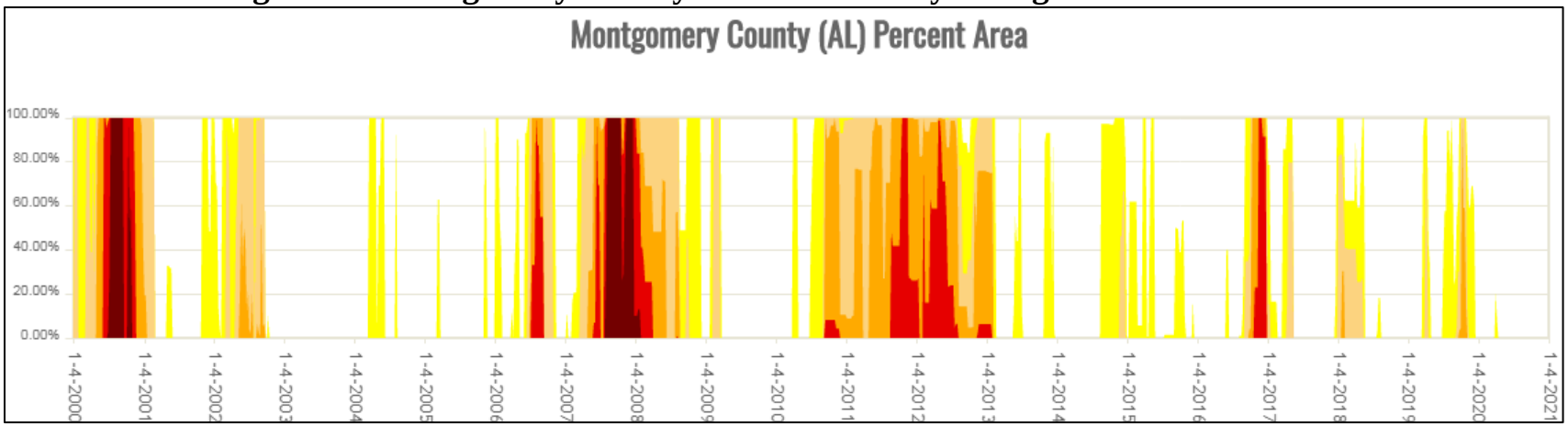
Source: the United States Drought Monitor, 2020

1.4.1 Figure 9: Elmore County Area Affected by Droughts



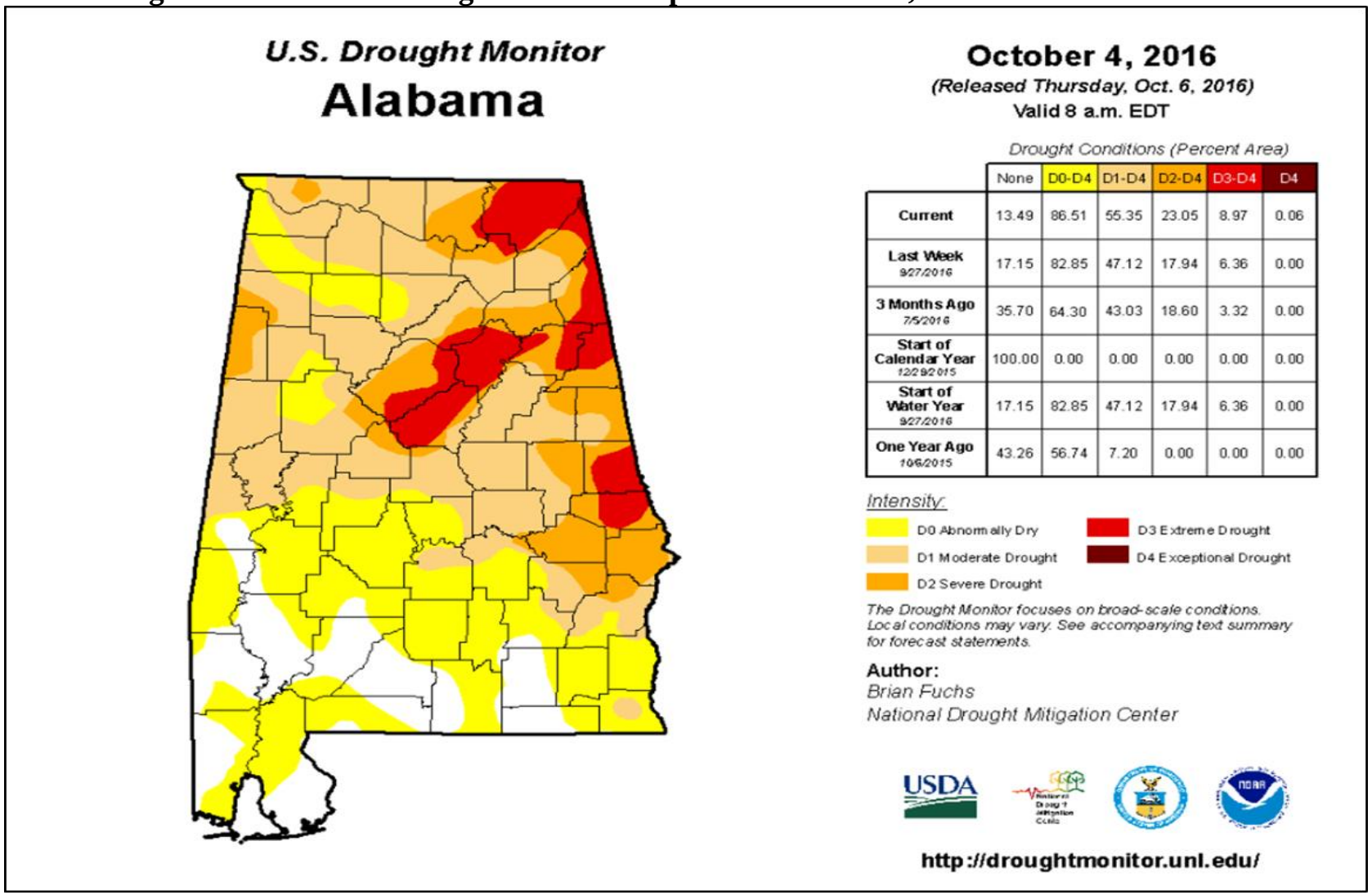
Source: the United States Drought Monitor, 2020

1.4.2 Figure 10: Montgomery County Area Affected by Droughts



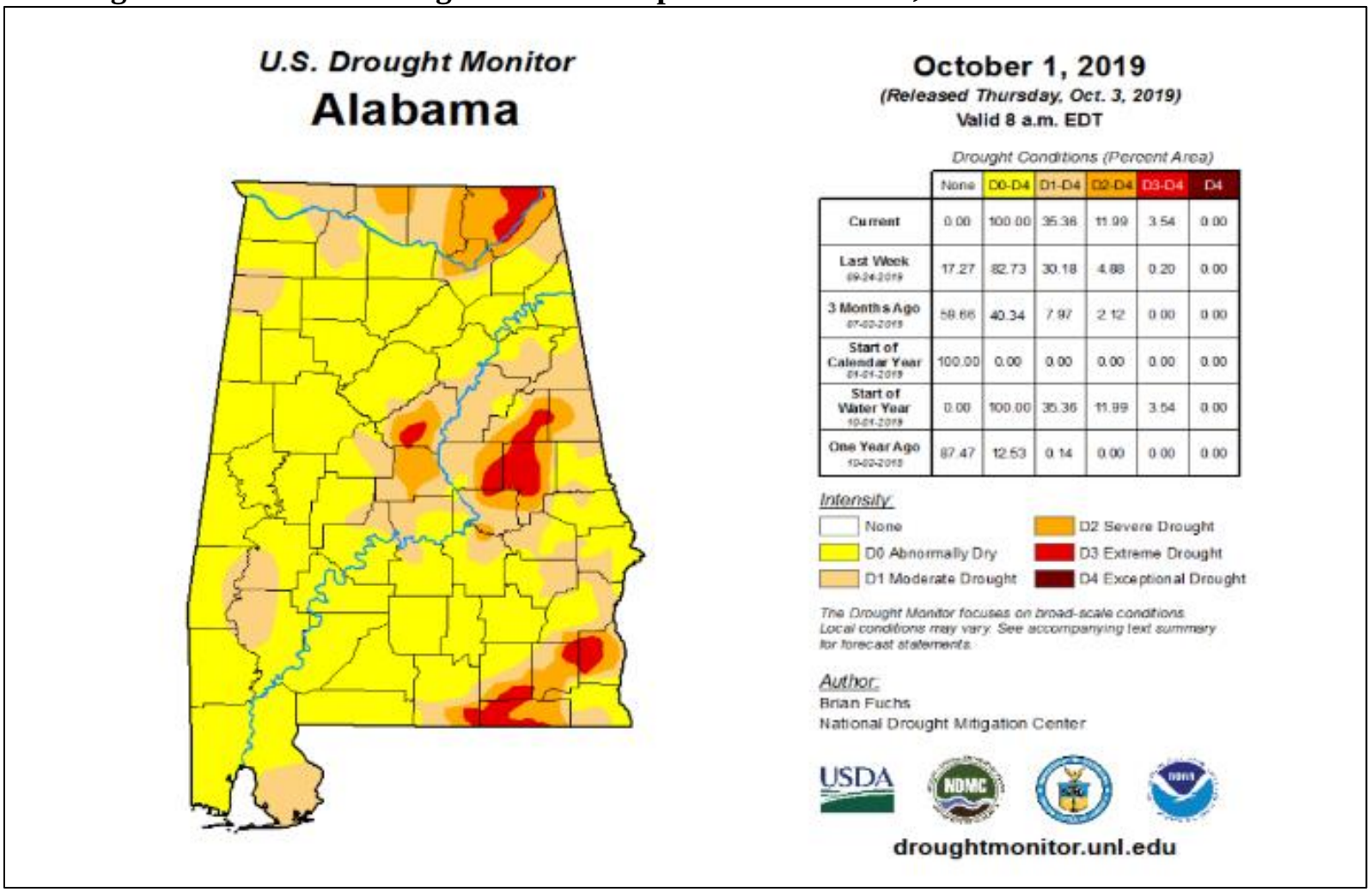
Source: the United States Drought Monitor, 2020

Figure 11: Alabama Drought Monitor Map as of October 4th, 2016



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2016

Figure 12: Alabama Drought Monitor Map as of October 1st, 2019



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

3.4.3 Previous Occurrences and Impact

Since 2006 Autauga County experienced 36 droughts, Elmore County experienced 62, and Montgomery County experienced 55 droughts. In 1977, a federal disaster declaration was made due to droughts that occurred in Autauga, Elmore, and Montgomery counties.

In 2007 to 2008, Autauga, Elmore, and Montgomery counties experienced a D2 to a D3 level of severe to extreme drought, which turned into a D4, Exceptional Drought event occurred in 2007 into 2008. Along with the rest of Alabama, experienced a severe drought that lasted from May to June of 2008. In August of 2007, NOAA reported, "Agricultural, hydrologic, and sociological impacts continued to be widely felt. Around 80 percent of the corn and soybean crop, 70 percent of the cotton crop, and 40 percent of the peanut crop, was considered to be in poor or very poor condition by month's end. In addition, about 60 percent of the livestock, and 75 percent of pasture lands, were also considered to be poor or very poor, and hay yields for the summer were less than half of normal." By December NOAA reported "roughly three-quarters of Central Alabama remained in Exceptional Drought (D4), with the remainder in Moderate (D1) to Extreme (D3) Drought. This severe drought had a large negative impact on the Coosa River, and Tallapoosa River as well as caused a water shortage in municipalities and water restrictions. Hurricane Fay, in October of 2008, brought widespread rainfall to the region, which helped improve the drought conditions.

Starting in September of 2010, the Autauga, Elmore, and Montgomery counties experienced and sustained extreme exceptional drought conditions that lasted until February 2013. Elmore and Montgomery counties experienced a worst drought, D3, than Autauga County during this time. Water restrictions were necessary across the jurisdictions. The United States Department of Agriculture declared all of Autauga, Elmore, and Montgomery counties a natural drought disaster area in both 2012 and 2013 for crop disaster losses.

The USDA issued a Secretarial Drought Designation for Autauga, Elmore and Montgomery counties in 2012, 2013, 2014, 2016, 2017 and 2019, which made emergency loans available to producers suffering losses. In 2016, the Autauga, Elmore, Montgomery experienced a D1 to a D3 level of severe to extreme drought. According to NOAA, "sites across east-central Alabama were 10-15 inches below normal for 2016."

According to NOAA, a drought is "is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people." Droughts become dangerous when it impacts economic prosperity, agricultural productivity, and human health and welfare. "Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region," according to NOAA. Autauga, Elmore and Montgomery counties are susceptible to long periods without any perception which results in drought conditions. When an extreme drought arises water shortages will impact the local jurisdictions, which can lead to water rationing for communities. Unfortunately, droughts are not easily predicted, and the impacts felt from a prolonged drought are not readily quantifiable. The moderate drought condition experienced in Autauga, Elmore and Montgomery counties have promoted concern about the areas vulnerable to prolonged and extreme droughts. Counties have promoted concern about the areas vulnerable to prolonged and extreme droughts.

3.4.4 Probability of Future Occurrences

The probability that drought conditions will occur annually in Autauga, Elmore and Montgomery counties are between 10%-100% (medium). The potential impacts on the region will range between minor impacts critical due to possible stress on agricultural and forestry interests in some areas of the region. Table 3.11 shows the probability of a drought occurring.

Table 3.11 Drought Probability

Hazard	Jurisdiction	Months of Droughts	2006 to 2019	Frequency Event per Year
Droughts	Autauga County	36	13	2.77
Droughts	Autaugaville	NA*	13	0.00
Droughts	Unincorporated Autauga County	NA*	13	0.00
Droughts	Billingsley	NA*	13	0.00
Droughts	Elmore County	62	13	4.77
Droughts	Coosada	NA*	13	0.00
Droughts	Deatsville	NA*	13	0.00
Droughts	Eclectic	NA*	13	0.00
Droughts	Elmore	NA*	13	0.00
Droughts	Prattville	NA*	13	0.00
Droughts	Millbrook	NA*	13	0.00
Droughts	Tallassee	NA*	13	0.00
Droughts	Unincorporated Elmore County	NA*	13	0.00
Droughts	Wetumpka	NA*	13	0.00
Droughts	Montgomery County	55	13	4.23
Droughts	Montgomery	NA*	13	0.00
Droughts	Unincorporated Montgomery County	NA*	13	0.00
Droughts	Pike Road	NA*	13	0.00

Source: NOAA, National Weather Service Strom Events Database, 2020,
Data is only offered at the county level

3.5 Earthquakes

3.5.1 Description

According to NOAA, an earthquake is "anything that causes seismic waves to radiate throughout the Earth is an earthquake. There are two main types of earthquakes, tectonic and caused by humans." Earthquakes occur along the fault line or when tectonic plates move. Autauga, Elmore, Montgomery counties are susceptible to earthquakes due to proximity to two major seismic zones. The Southern Appalachian Seismic Zone, the New Madrid Seismic Zone, or the South Carolina Seismic Zone. The Southern Appalachian Seismic Zone extends into northern and central Alabama, and the South Carolina Seismic Zone is in South Carolina. These seismic zones typically create infrequent earthquakes of small intensity and moderate earthquakes every few hundred years. The New Madrid Seismic Zone lies within the central Mississippi Valley but has produced some of the strongest earthquakes in North America that were felt in Alabama. The New Madrid Seismic Zone lies north and west of the region Earthquakes in 1811-1812 had limited damage due to the low-density settlements, but it created Reel Foot Lake in Tennessee and Kentucky. Large earthquakes (magnitude 7 or higher) can be created from these seismic zones, but according to the USGS, the probability of a moderate or large earthquake in Autauga, Elmore, Montgomery counties is low. The impact of an earthquake could produce minor damage in the these counties such as cracked windows, but there are zero of the seismic zones located in Autauga, Elmore, Montgomery counties However, fault lines do run through Autauga, Elmore and Montgomery counties, Figure 15 show the locations of these fault lines.

3.5.2 Extent by Jurisdiction

The USGS defines the Mercalli Intensity Scale as a method to "value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. The lower numbers of the intensity scale generally deal with the manner in which the earthquake is felt by people. The higher numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above."

Table 3.12: Earthquake Extent All Jurisdictions

Hazard	Extent (All Jurisdictions)
Earthquakes	The epicenter of an earthquake has not originated in Autauga, Elmore, and Montgomery counties. A large earthquake of 7.0 or higher on the Richter Scale from the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, or the South Carolina Seismic Zone could be felt by a few people in Autauga, Elmore, And Montgomery counties. The impact would be felt by a few people but.resulting in no damages or injuries.

Potentially causing serious damage to buildings, structure, and infrastructure as well as injury and loss of life. Figure 13 describes each magnitude and the potential damage each magnitude can create.

Figure 13: Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Modified Mercalli Intensity Scale, 2020.

3.5.3 Previous Occurrences and Impact

While there are no reported instances of earthquakes centered in the Autauga, Elmore and Montgomery county region, which is depicted in Figure 14. Table 3.13 reflects previous earthquakes in Alabama/Southeast which the Geological Survey of Alabama feels may have been felt in this region. If a strong earthquake occurred in the southeast the impact on Autauga, Elmore, and Montgomery would look similar to earthquakes from the past.

Table 3.13 Previous Earthquake Events that could be felt in this region

Epicenter	Date	Magnitude at Epicenter	Mercalli Intensity in the Region	Shaking	Damage	Inj/Dth
Memphis, TN	02/07/1812	>7.0	IV	Light	None	None
Charleston, SC	08/13/1886	7.3	IV	Light	None	None
Irondale, AL	10/18/1916	5.1	III	Weak	None	None
Fort Payne, AL	04/29/2003	4.9	III/IV	Weak/Light	None	None

Source: USGS, Earthquake Hazards Program, Muscogee/Harris County, Georgia

While there are no reported instances of earthquakes centered in the Autauga, Elmore, and Montgomery, Figure 16 displays rare instances of tremors/quakes that happened hundreds of miles away that may have been felt in the area. Table 3.14 reflects previous earthquakes in Alabama/Southcentral which the Geological Survey of Alabama feels may have been felt in this region.

Two earthquakes were reported on February 4th, 1886, and on February 13th, 1886 in Sumter and Marengo. While residents felt the tremors from the earthquakes no damages were reported. In August of 1886 a destructive earthquake near Charleston, South Carolina, was felt and caused

minimal damage in Alabama’s northeast. In 1916 a strong earthquake shook east of Birmingham causing damage near Easonville. The damages reported were as followed: chimneys knocked down, windows were broken, and frame buildings "badly shaken."

Figure 14: Earthquake Epicenter as of March 2019

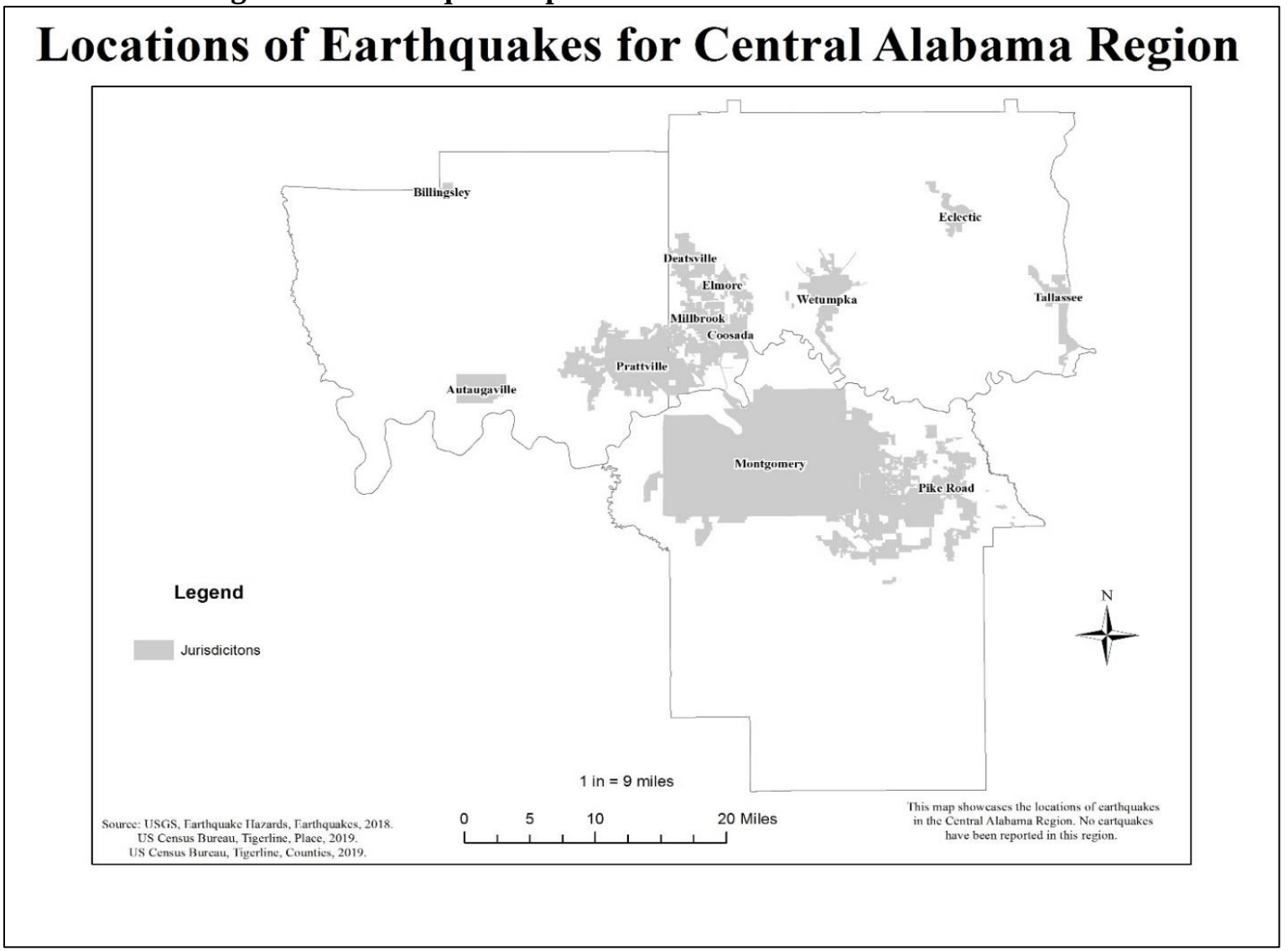
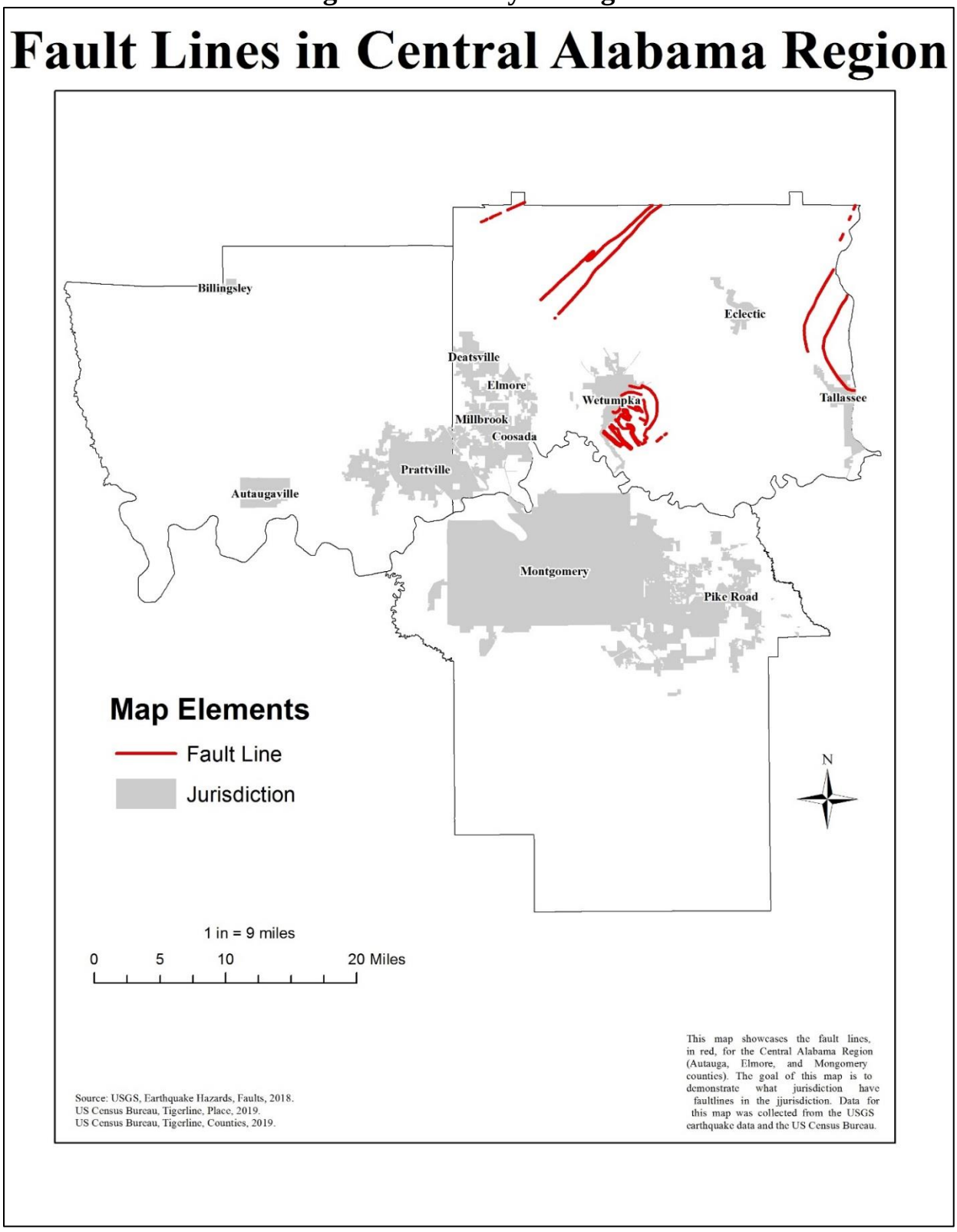


Figure 15: County Geologic Fault Line

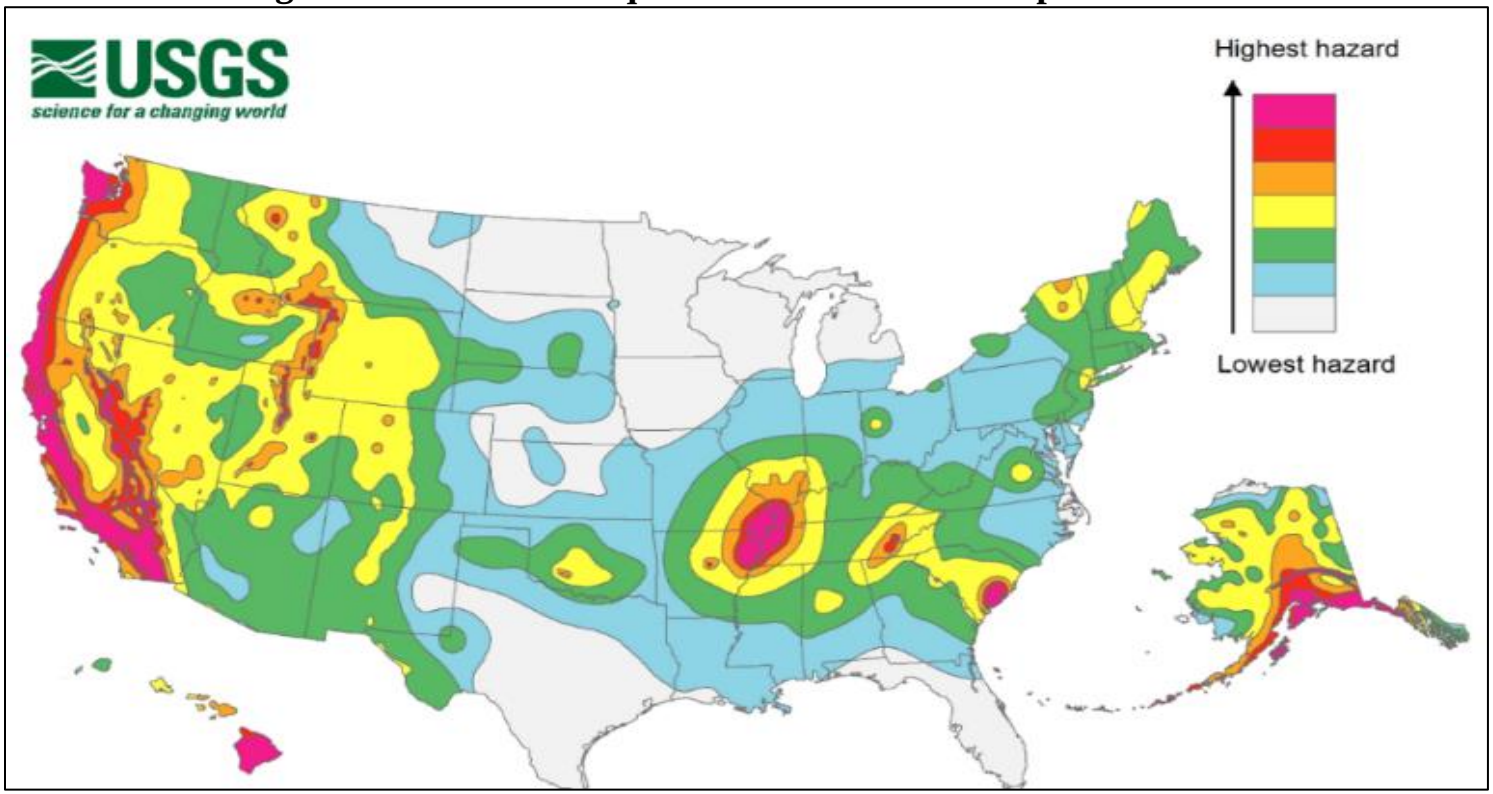


3.5.4 Probability of Future Occurrences

The probability of an earthquake occurring in this region was determined to be very low with less than a 1% annual probability with a very minor impact if one was to occur. Therefore, the probability of an impactful earthquake in the region is very low and will not be profiled any further, which can been seen in Table 3.14..

The United States Geological Survey (USGS) publishes simplified earthquake seismic hazard maps that quickly give earthquake hazard probabilities, which can be seen in Figure 16.

Figure 16: USGS Earthquake Seismic Hazard Map



Source: USGS Earthquake Hazard Probability, 2019

Table 3.14: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Earthquake	Autauga County	0	13	0.00
Earthquake	Autaugaville	0	13	0.00
Earthquake	Unincorporated Autauga County	0	13	0.00
Earthquake	Billingsley	0	13	0.00
Earthquake	Prattville	0	13	0.00
Earthquake	Elmore County	0	13	0.00
Earthquake	Coosada	0	13	0.00
Earthquake	Deatsville	0	13	0.00
Earthquake	Eclectic	0	13	0.00
Earthquake	Elmore County	0	13	0.00
Earthquake	Elmore	0	13	0.00
Earthquake	Prattville	0	13	0.00
Earthquake	Millbrook	0	13	0.00
Earthquake	Tallassee	0	13	0.00
Earthquake	Unincorporated Elmore County	0	13	0.00
Earthquake	Wetumpka	0	13	0.00
Earthquake	Montgomery	0	13	0.00
Earthquake	Montgomery County	0	13	0.00
Earthquake	Unincorporated Montgomery County	0	13	0.00
Earthquake	Pike Road	0	13	0.00

3.6 Extreme Temperatures

3.6.1 Description

Extreme temperature is a hazard that encompasses instances of both extreme heat and extreme cold. Both extremes are profiled in this section.

Extreme Heat

Extreme heat is abnormally high temperatures that disproportionately affect the elderly, very young, and those with health concerns if exposed to the conditions, especially those without effective climate control systems. The State of Alabama Hazard Mitigation Plan, 2018, discusses extreme heat as temperatures above 100 F. Heat stress can be indexed by combining the effects of temperature and humidity, as shown in Table 3.15. The heat index estimates the relationship between dry bulb temperatures (at different humidity) and the skin's resistance to heat and moisture transfer. The higher the temperature or humidity, the higher the apparent temperature. The major human risks associated with extreme heat are:

Heat/Sun Stroke: Considered a medical emergency, heat/sunstroke is often fatal. It occurs when the body's responses to heat stress are insufficient to prevent a substantial rise in the body's core temperature. While no standard diagnosis exists, a medical condition is usually diagnosed when the body's temperature exceeds 105 F due to environmental temperatures. Rapid cooling is necessary to prevent death, with an average fatality rate of 15 percent even with treatment.

Heat Exhaustion: While much less serious than heatstroke, heat exhaustion can cause victims to complain of dizziness, weakness, or fatigue. Body temperatures may be normal or slightly too moderately elevated. The prognosis is usually good with fluid treatment.

Heat Syncope: This refers to a sudden loss of consciousness and is typically associated with people exercising who are not acclimated to warm temperatures. It causes little or no harm to the individual.

Heat Cramps: May occur in people unaccustomed to exercising in the heat and generally ceases to be a problem after acclimatization.

Table 3.15: Heat Index and Disorders

Danger Category	Heat Disorders	Apparent Temperatures (F)
I Caution	Fatigue possible with prolonged exposure and physical activity	89-90
II Extreme Caution	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity	90-105
III Danger	Sunstroke, heat cramps, or heat exhaustion likely, heatstroke possible with prolonged exposure and physical activity.	105-130
IV Extreme Danger	Heatstroke or sunstroke imminent	>130

Source: FEMA, 1997, NWS, 1997, State of Alabama HMP, 2018

In addition to affecting people, severe heat places significant stress on plants and livestock. The effects of severe heat on agricultural products may include reduced yields and loss of crops, State of Alabama HMP, 2018.

Extreme Cold

From the State of Alabama Hazard Mitigation Plan, 2018, extreme cold temperatures also impact Alabama weather, although not as likely. Prolonged exposure to the cold can cause frostbite or

hypothermia and become life-threatening. Frostbite occurs when the extremities become excessively cold, and hypothermia is a serious health condition where a person's body temperature falls below 90 F. Both conditions are influenced by wind conditions. Various wind chill indices have been developed to predict cold temperature's effect on humans. For instance, a temperature of 5 F will have a wind chill of -19F if the wind is blowing 30 mph. Cold weather can also impact crops and livestock. Cold air has the potential to freeze produce, which can damage or kill it.

Older adults are more prone to being impacted by extreme heat and extreme cold events. This is because they do not adjust well as other demographics to drastic changes in temperature, they are more likely to have a medical condition that changes normal body responses to heat and cold, and they are more likely to take prescription medications that impact the body's ability to react to changes in temperatures. Access to climate control, such as air conditioning and heating systems, provides protection from the impacts of extreme heat and cold events and is one way to mitigate against the potential impacts of an extreme temperature event.

3.6.2 Extent by Jurisdiction

Table 3.16: Extreme Temperatures Extent

Hazard	Extent (All Jurisdictions)
Extreme Temperatures	Extreme highs above 100 deg. F increases the risk of injury from exposure and drought risk. Low-temperature extremes around 0 deg. F for several days at a time causing water shortages and injury.

All of Autauga, Elmore, and Montgomery counties are susceptible to annual extreme heat due to its central location in Alabama. Although not as common, the planning area has seen instances of extreme cold.

3.6.3 Previous Occurrences and Impacts

Typically, daytime high temperatures can reach the upper 90's to low 100's during the summer months. The combination of humid air, the heat index can climb to 105 to 110 degrees across Autauga, Elmore, and Montgomery counties. In August of 2007 temperatures reached between 100 to 109 degrees from August 4th to August 15rd, which resulted in 3 deaths, and 80 people required medical treatment, according to NOAA. NOAA did not record any crop damages for this event. In 2010 an extreme heat event caused $150,000 in damages to crops after Montgomery set a record 56 consecutive days above 90 degrees on the 28th of August.

Autuaga, Elmore, and Montgomery counties had zero instances of extreme cold since 2006, nor were any injuries or deaths reported due to extreme cold.

3.6.4 Probability of Future Occurrences

The probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of an extreme heat/cold event is rated as low to critical largely based on duration. The events in the region have been short-lived, according to the NOAA datasets. Table 3.17 shows the future probability of the occurrence of extreme temperature.

3.17: Future Probability of Extreme Temperatures

Hazard	Jurisdiction	Number Previous Events	2006 - 2019	Frequency Event per Year
Extreme Temperature	Autauga County	4	13	0.31
Extreme Temperature	Autaugaville	NA*	13	0.00
Extreme Temperature	Unincorporated Autauga County	NA*	13	0.00
Extreme Temperature	Billingsley	NA*	13	0.00
Extreme Temperature	Prattville	NA*	13	0.00
Extreme Temperature	Elmore County	7	13	0.53
Extreme Temperature	Coosada	NA*	13	0.00
Extreme Temperature	Deatsville	NA*	13	0.00
Extreme Temperature	Eclectic	NA*	13	0.00
Extreme Temperature	Elmore	NA*	13	0.00
Extreme Temperature	Prattville	NA*	13	0.00
Extreme Temperature	Millbrook	NA*	13	0.00
Extreme Temperature	Tallassee	NA*	13	0.00
Extreme Temperature	Unincorporated Elmore County	NA*	13	0.00
Extreme Temperature	Wetumpka	NA*	13	0.00
Extreme Temperature	Montgomery County	11	13	0.85
Extreme Temperature	Montgomery	NA*	13	0.00
Extreme Temperature	Unincorporated Montgomery County	NA*	13	0.00
Extreme Temperature	Pike Road	NA*	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

*** (Extreme Temperatures are not recorded in every jurisdiction)*

3.7 Flooding

3.7.1 Description

Flooding is considered one of the most frequent and costly natural hazards that occurs in the United States. Most communities in the United States have experienced some kind of flooding, including those in the Autauga, Elmore and Montgomery counties. Flooding normally occurs due to excessive precipitation, but many factors can have an impact on flooding such as drainage basin characteristics, antecedent soil moisture conditions, weather patterns, and land cover. There are two primary types of flooding that affect this planning area: riverine flooding and flash flooding.

Riverine flooding occurs when substantial levels of precipitation ensue over a long period of time, causing rivers and streams to flow outside of their natural channels and negatively affecting surrounding areas. Flash flooding is normally instigated by intense amounts of precipitation over a short time period in a localized area. Autauga, Elmore and Montgomery counties all experience types of flood events. Flash floods are generally more prevalent in the urbanized areas with abundant impervious surfaces and other areas of obstructions to water runoff. The Coosa River, which runs through Autauga, Elmore and Montgomery counties, is a primary factor in riverine flooding in the region.

The City of Prattville, the Town of Autaugaville, The Town of Billingsley, Town of Coosada, Town of Deatsville, Town of Eclectic, Town of Elmore, Town of Millbrook, City of Tallaasee City of Wetumpka, City of Montgomery, Town of Pike Road, Autauga, Elmore and Montgomery County have mapped Flood Hazard Areas, with the exception of those jurisdictions that are not located in the flood hazard area. Figures 17 to Figure 31 show the areas of susceptibility to riverine flooding events, and flash flooding. When a large amount of rainfall occurs during a short period or over days, flash flooding therefor can occur anywhere under the right circumstances. Figures show the location of currently mapped special flood hazard areas for the Autauga, Elmore and Montgomery Planning Area, based on the most recent FEMA National Flood Hazard Layer Available. This map includes areas designated Zone A (one-percent annual chance flood) and Zone AE (one percent annual chance flood with elevation). The data made available by FEMA is not without error, therefore, and some flooding may occur outside of these mapped areas. The following maps show where the floodplain goes in each jurisdiction.

Figure 17: Floodplain Autauga County

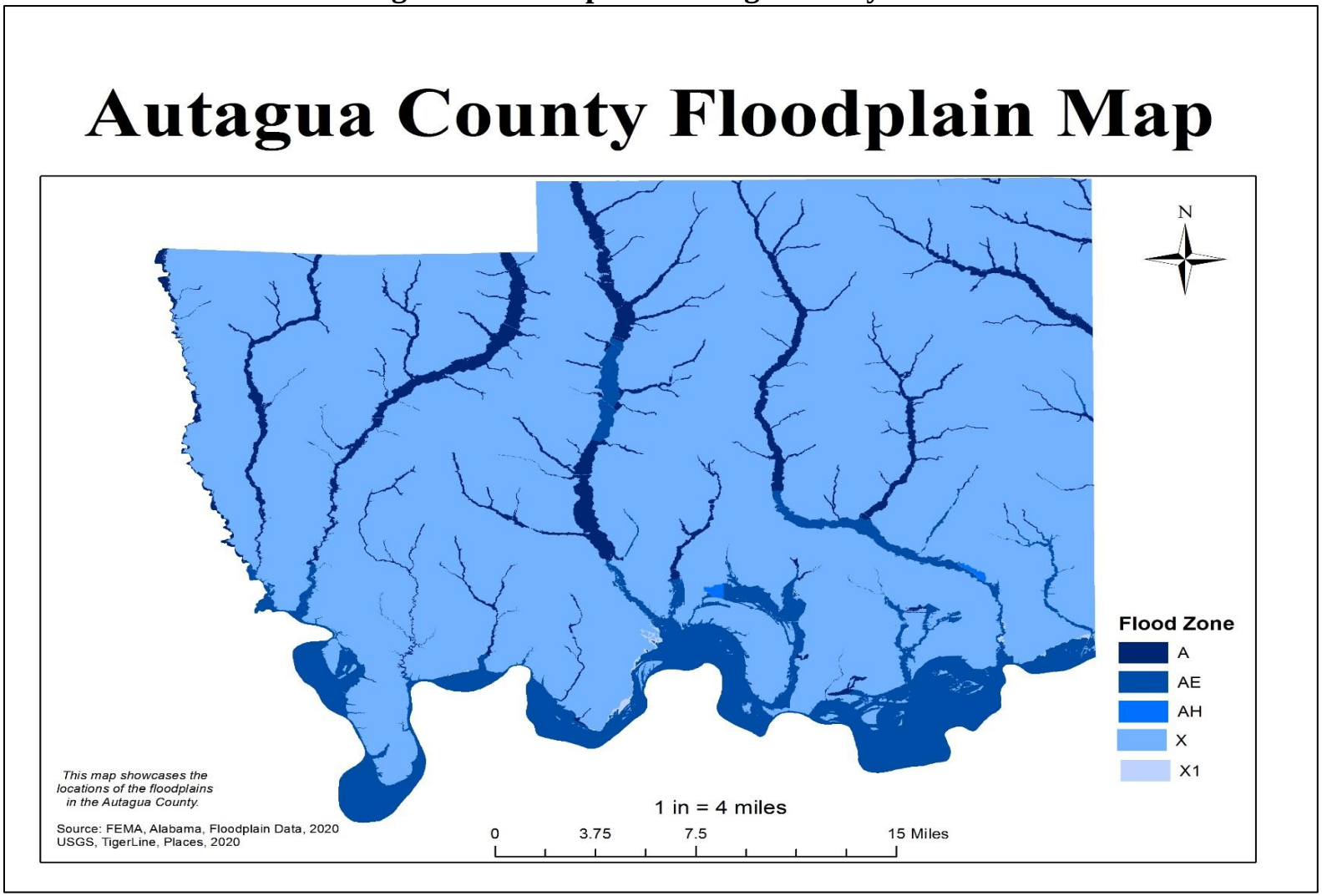


Figure 18: Floodplain Autaugaville

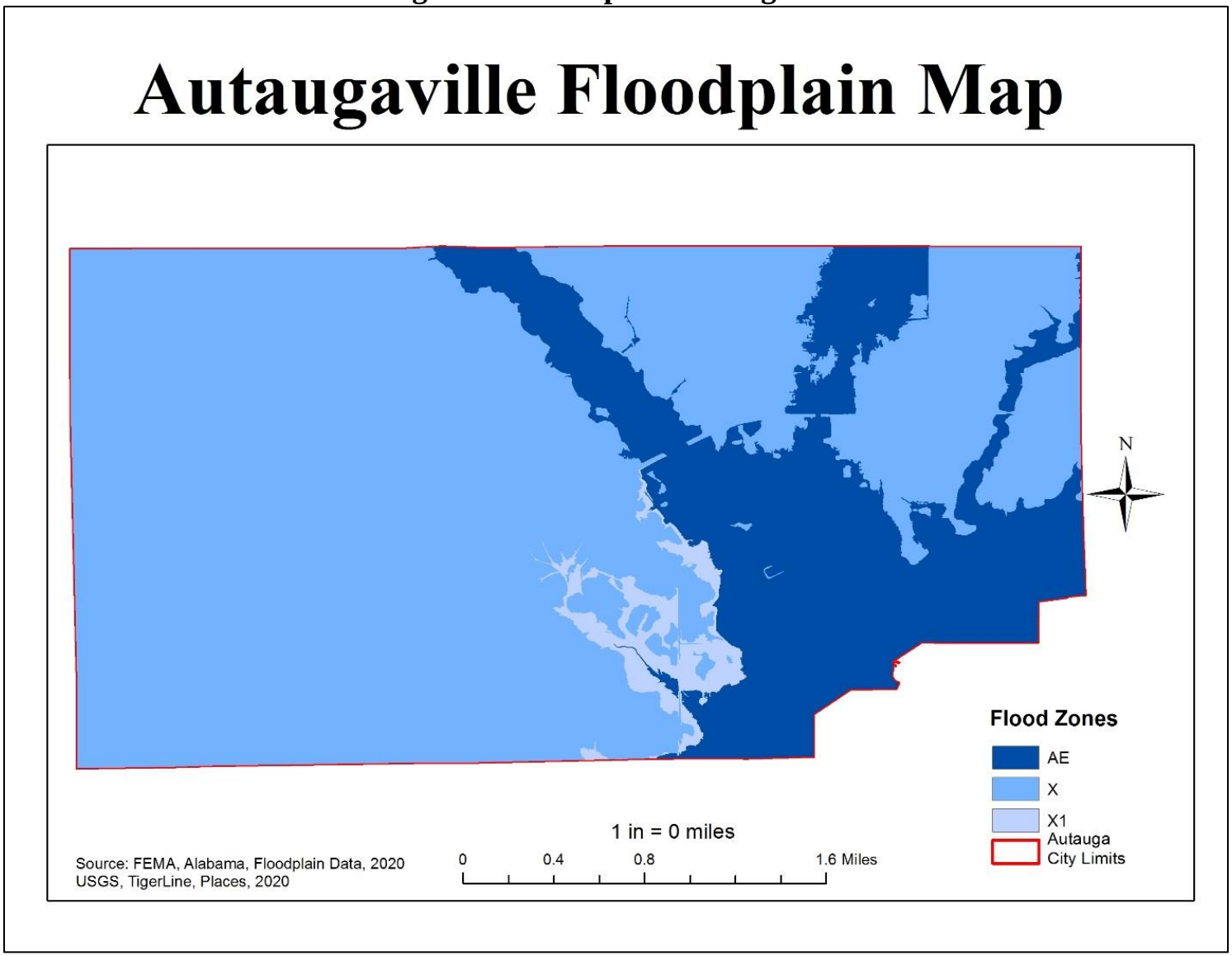


Figure 19: Floodplain Billingsley

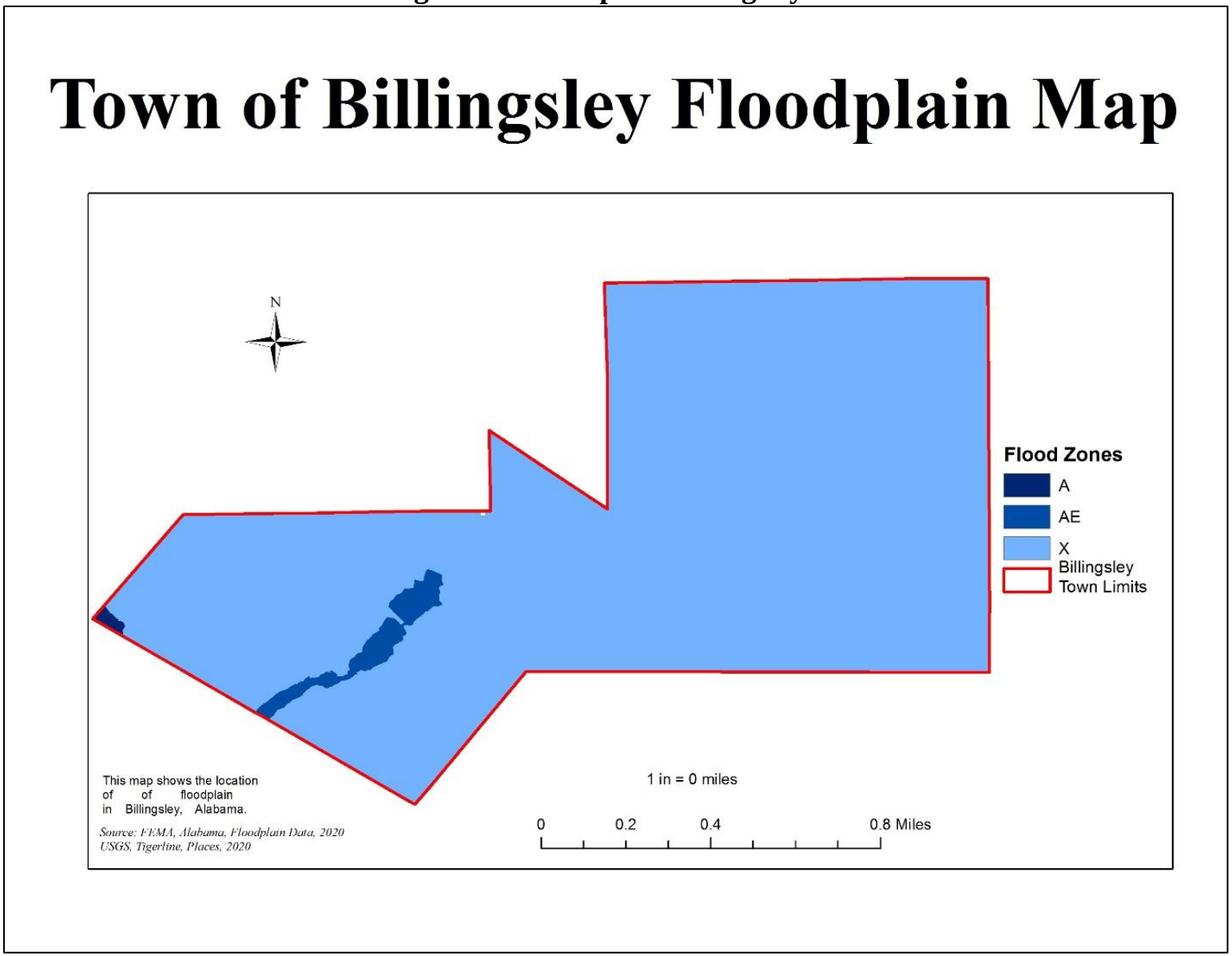


Figure 20: Floodplain Prattville

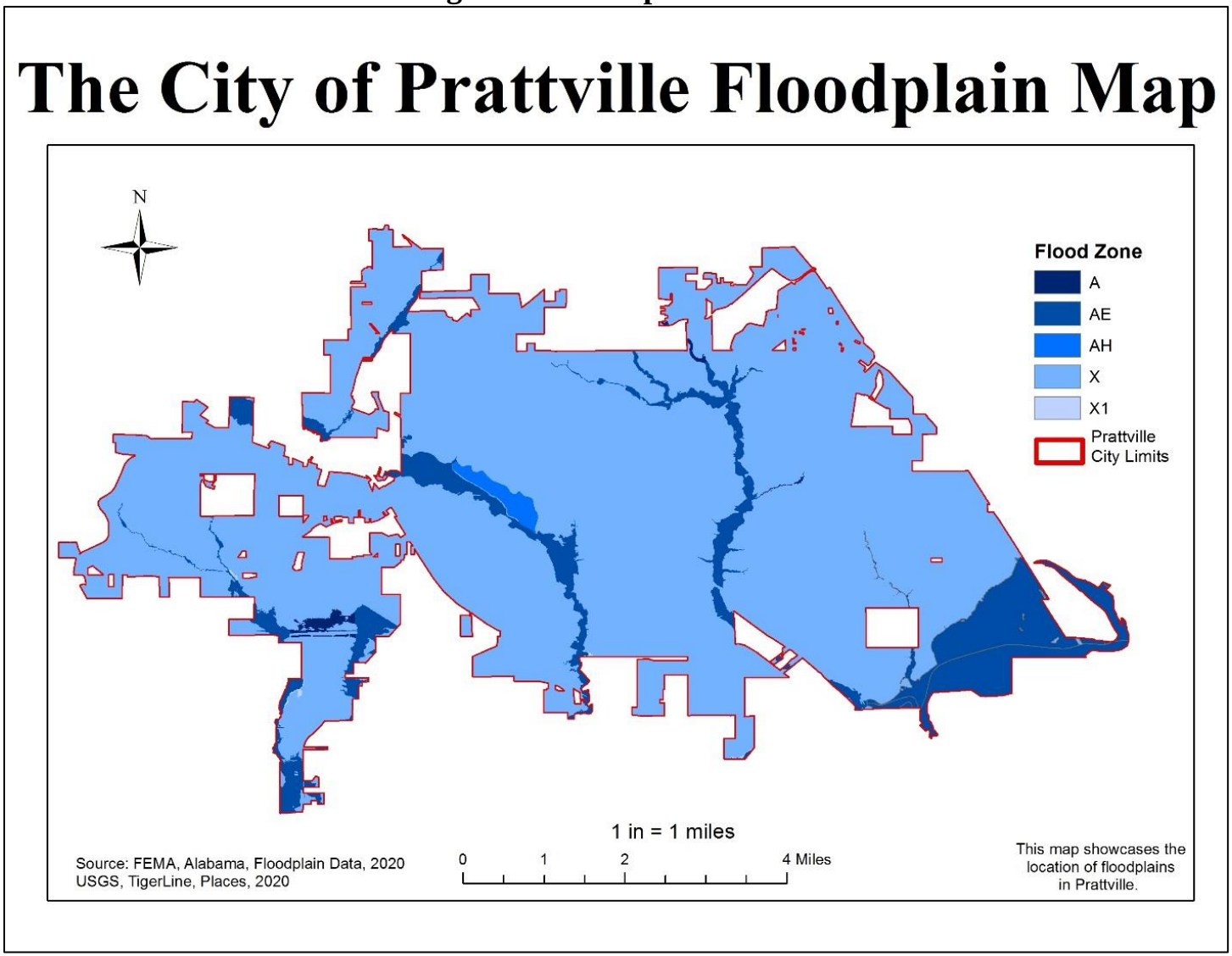


Figure 21: Floodplain Millbrook

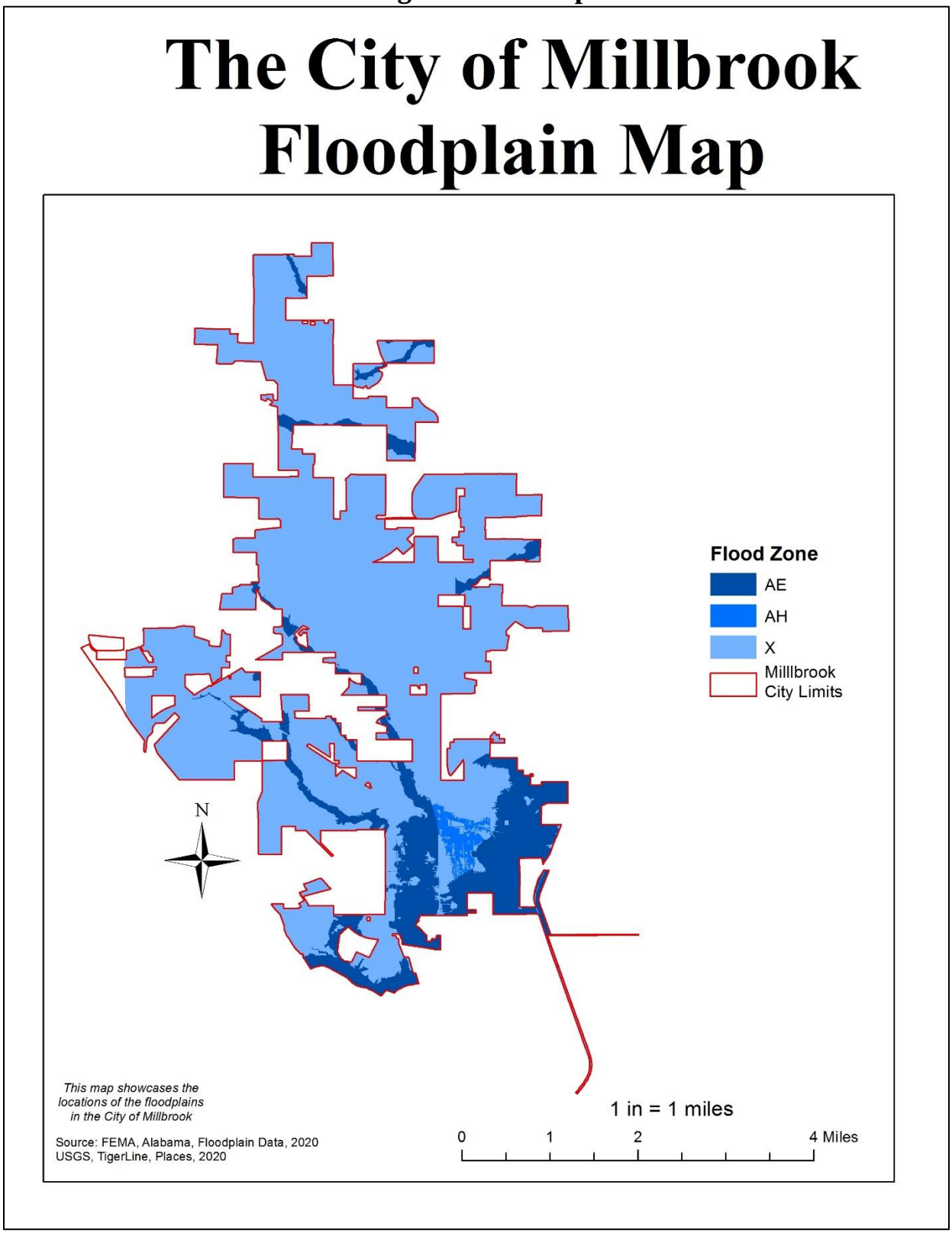


Figure 22: Floodplain Elmore County

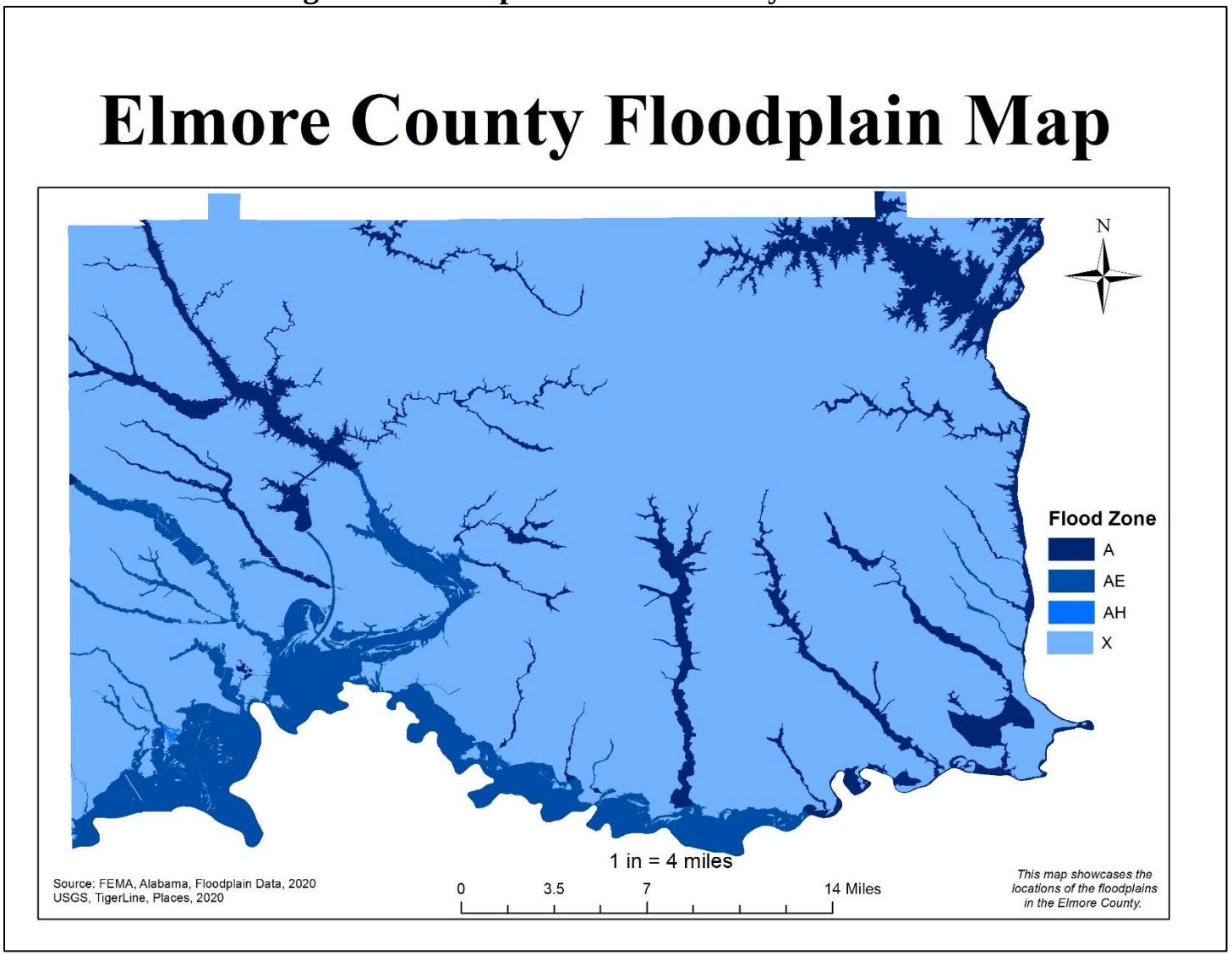


Figure 22: Floodplain Coosada

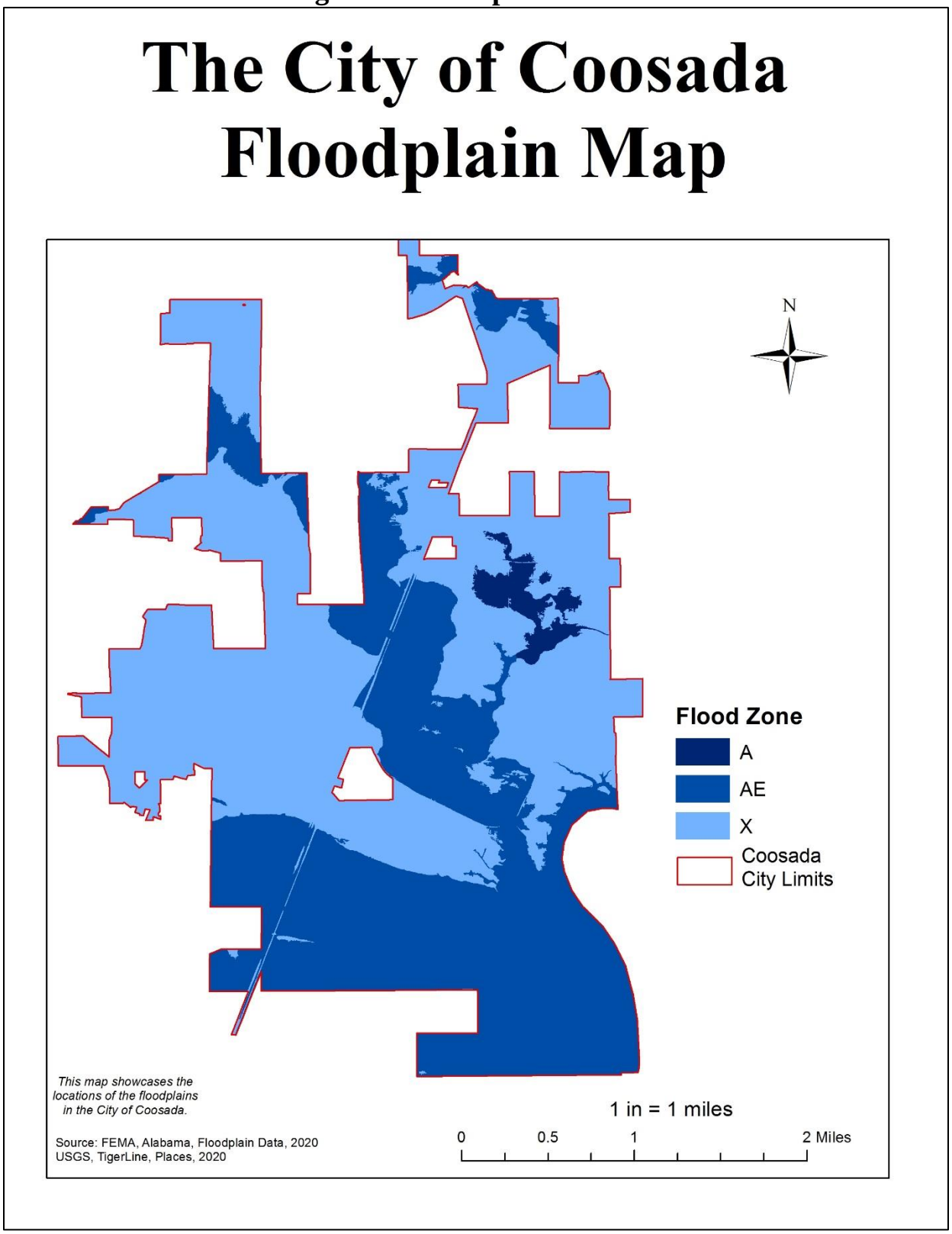


Figure 23: Floodplain Deatsville

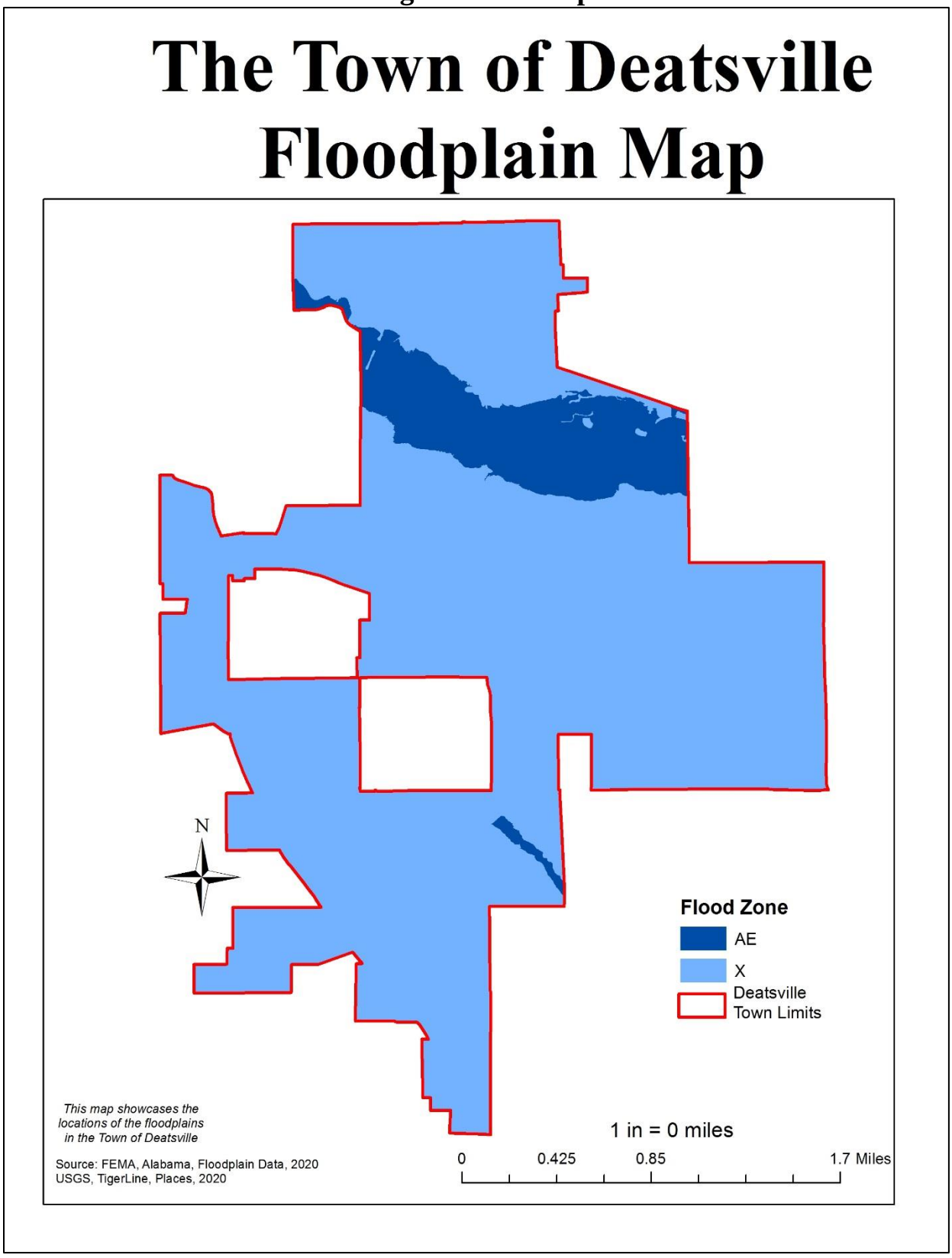


Figure 24: Floodplain Eclectic

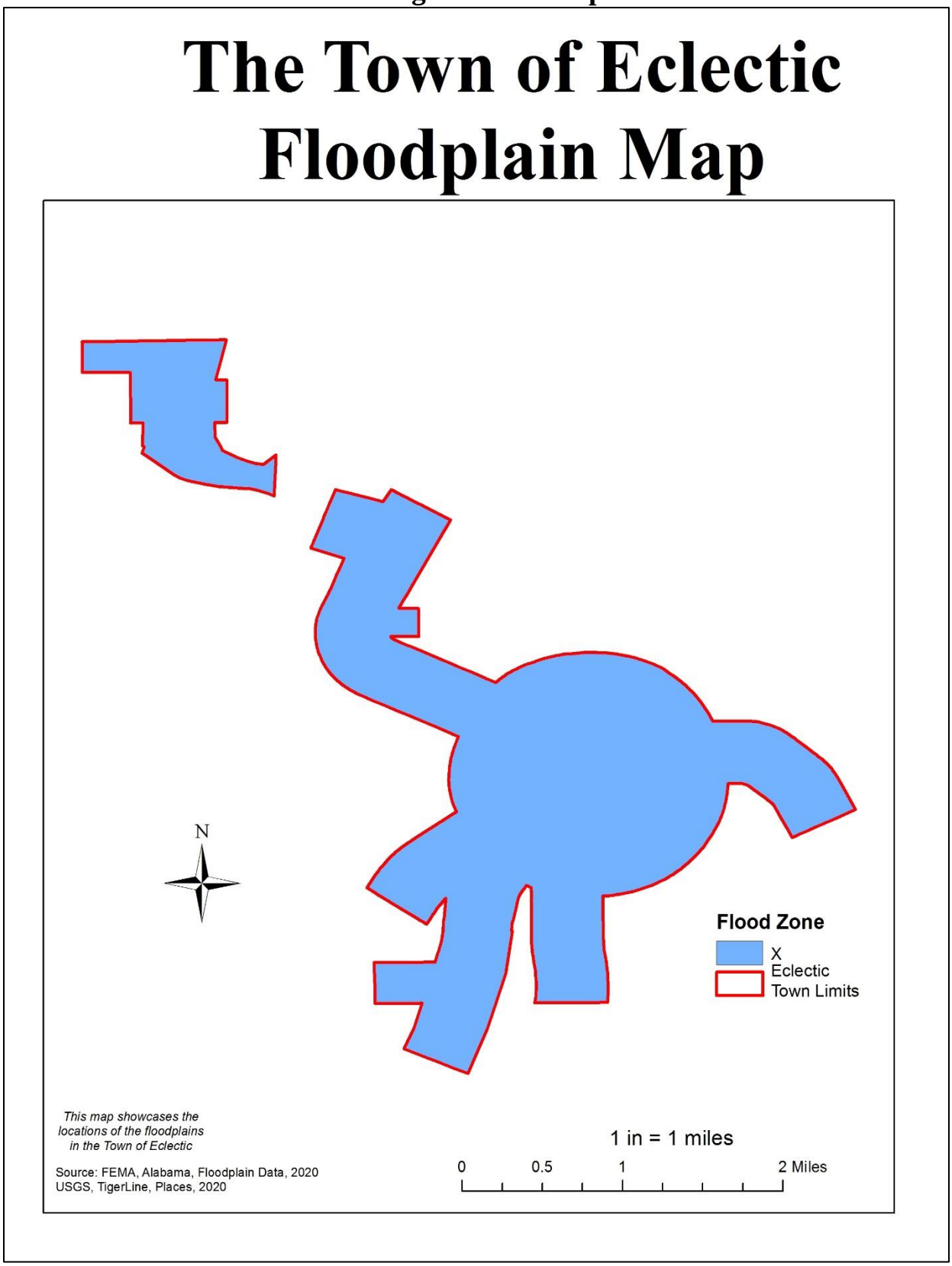


Figure 25: Floodplain Elmore

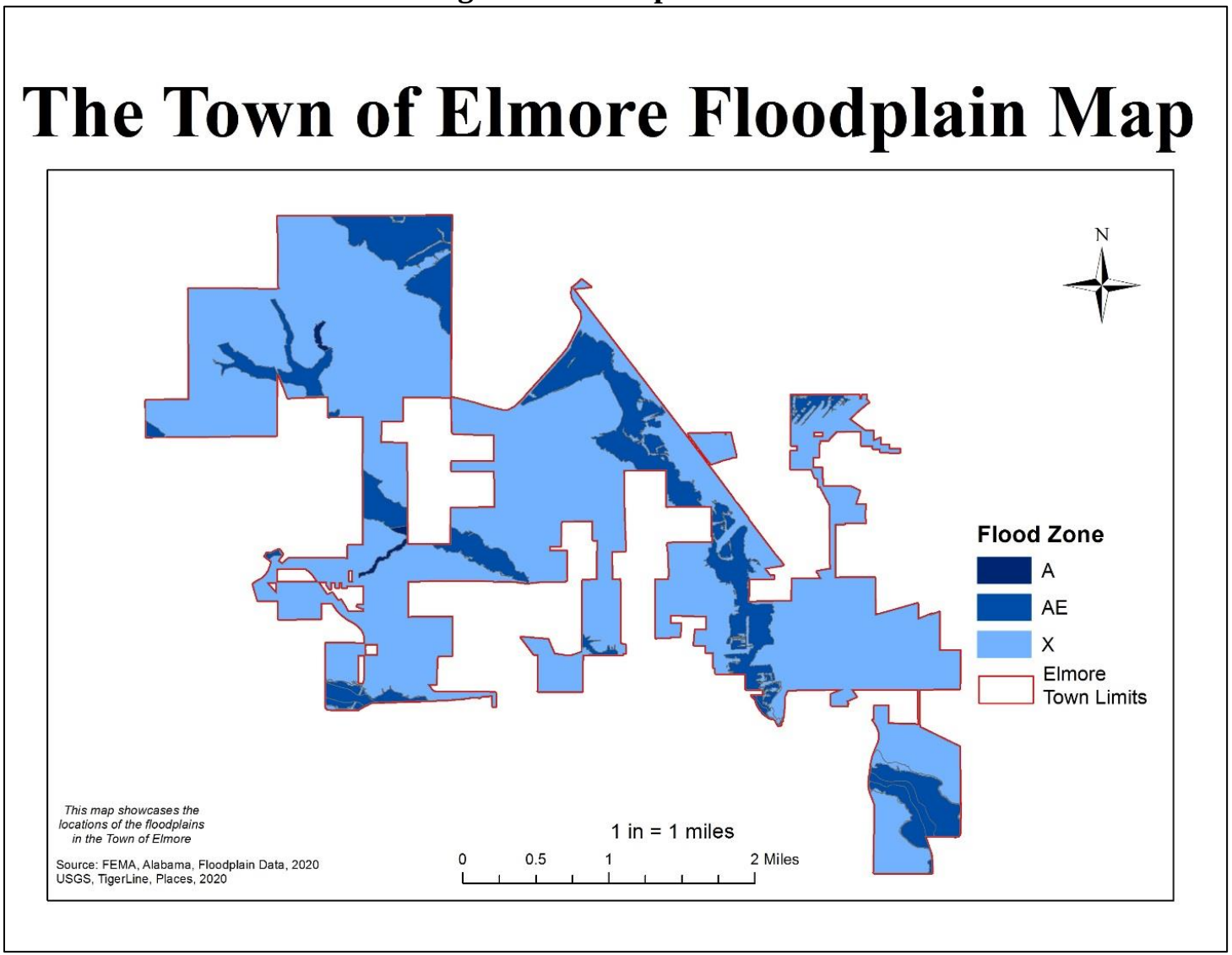


Figure 26: Floodplain Tallassee

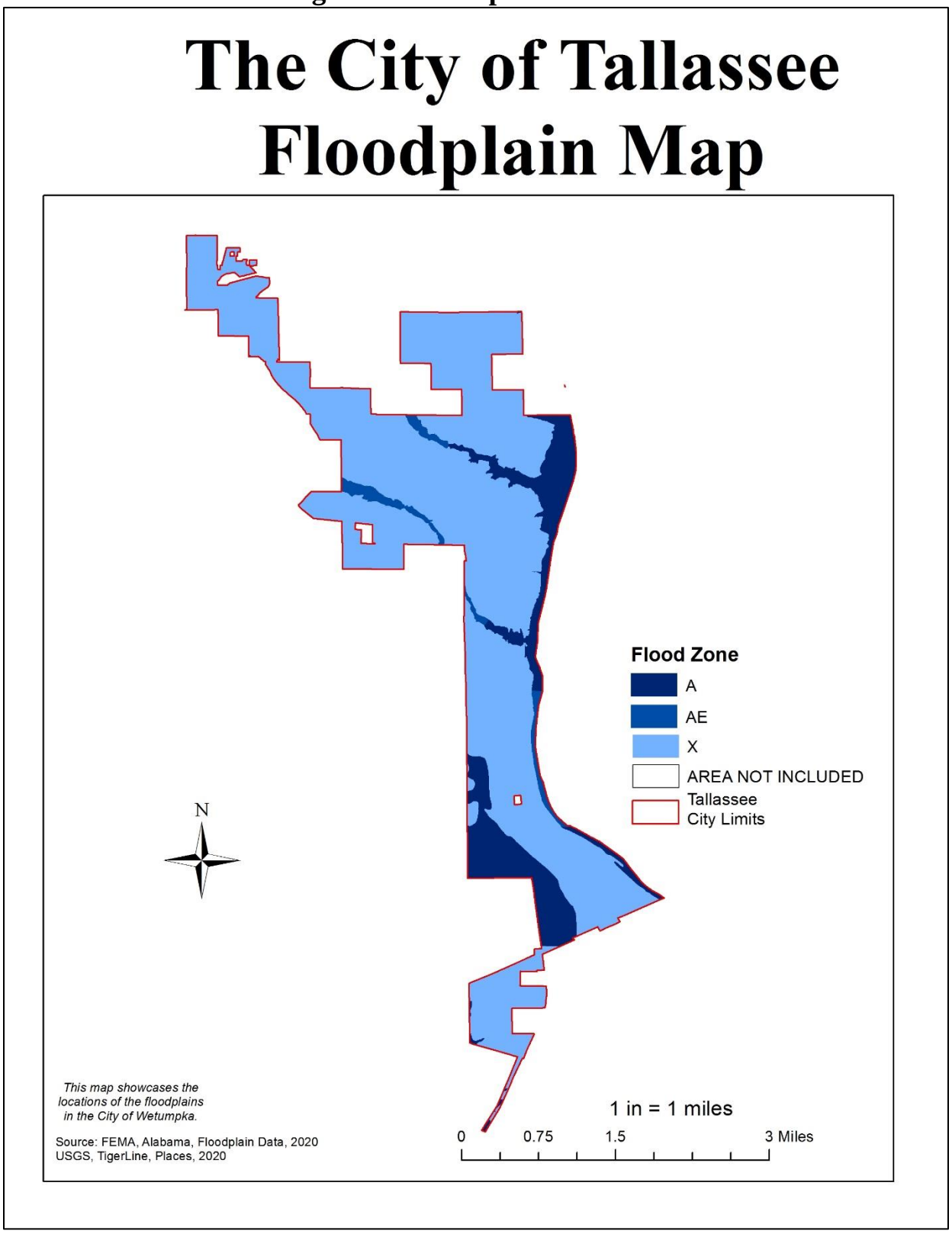


Figure 27: Wetumpka

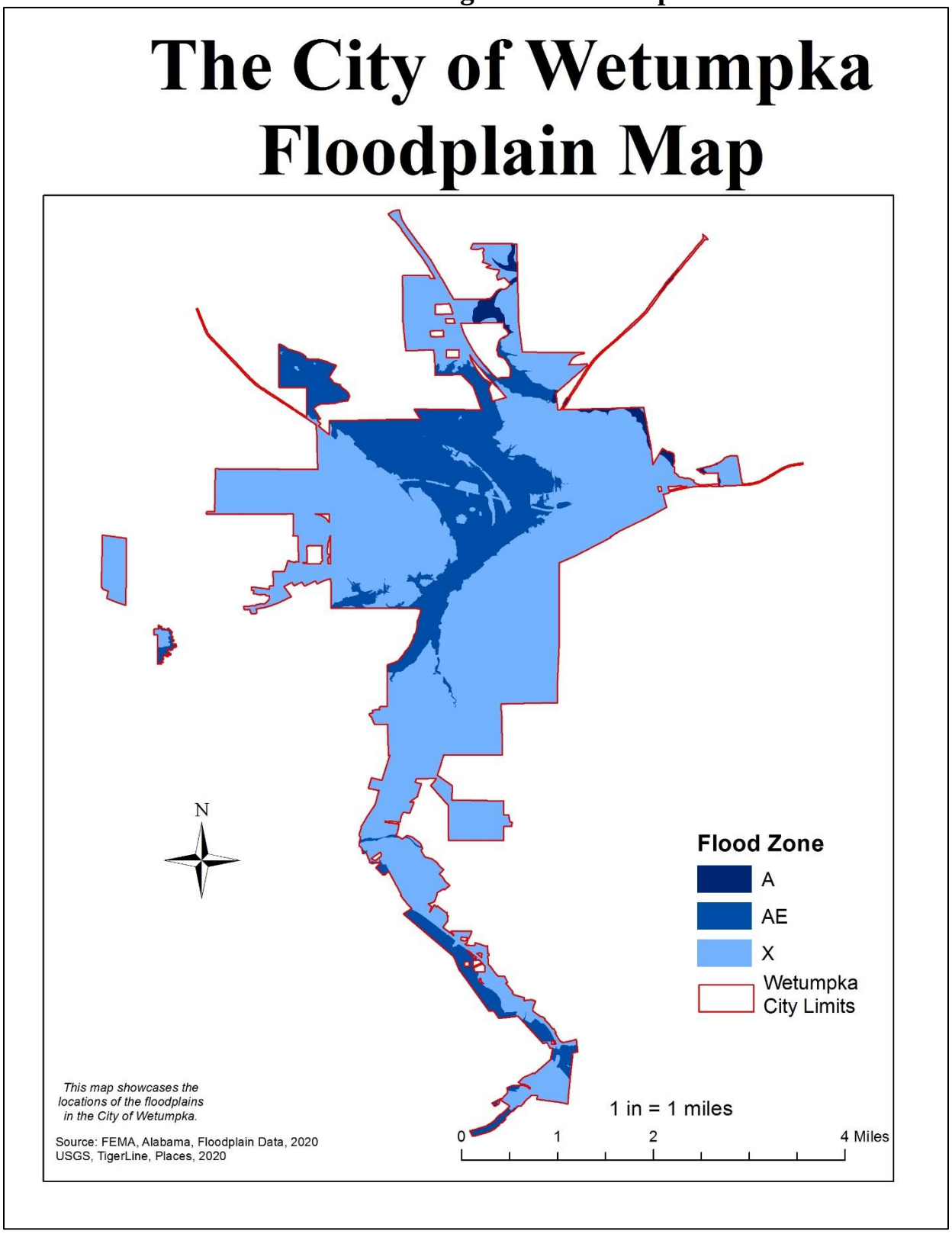


Figure 28: Montgomery County

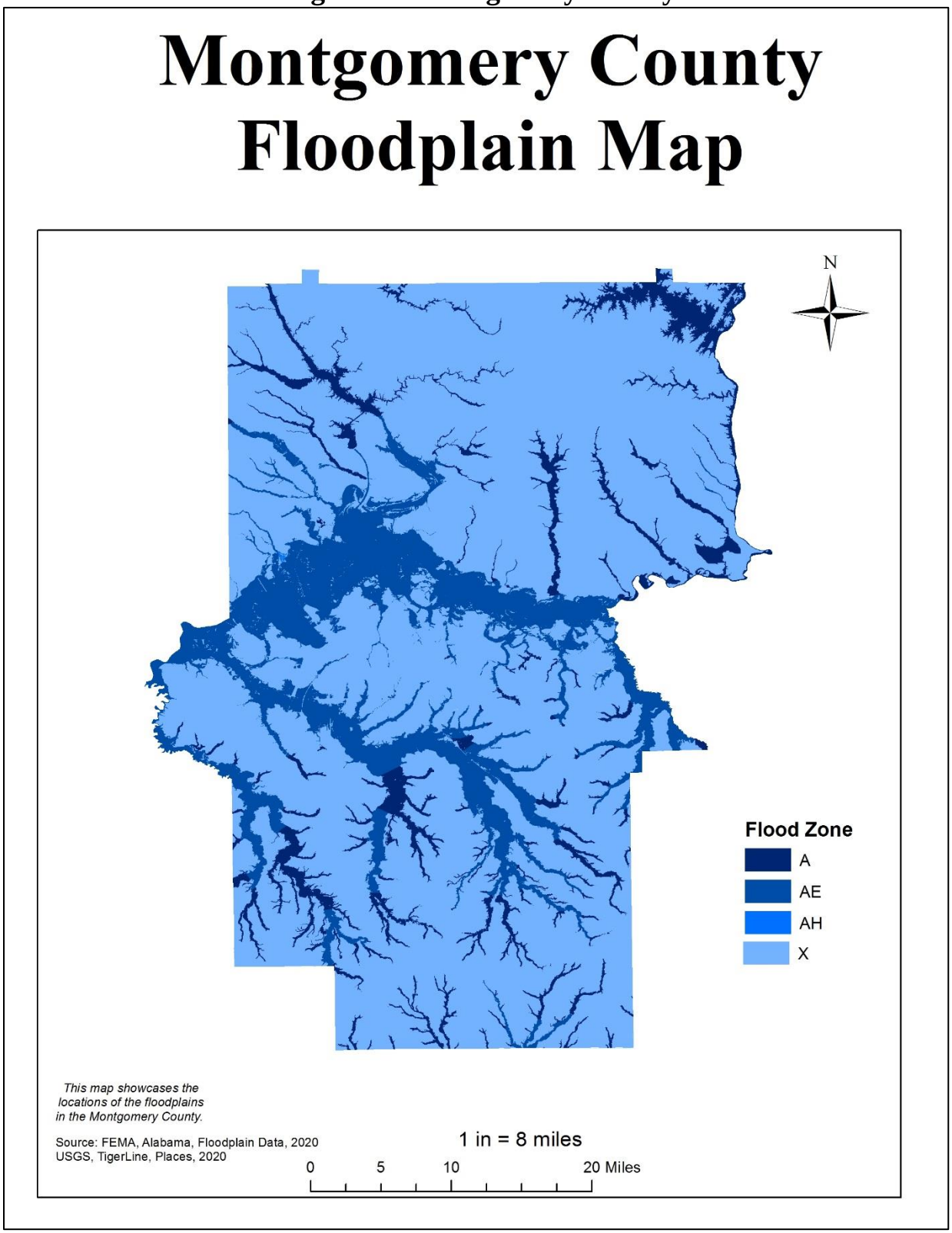


Figure 29: Montgomery

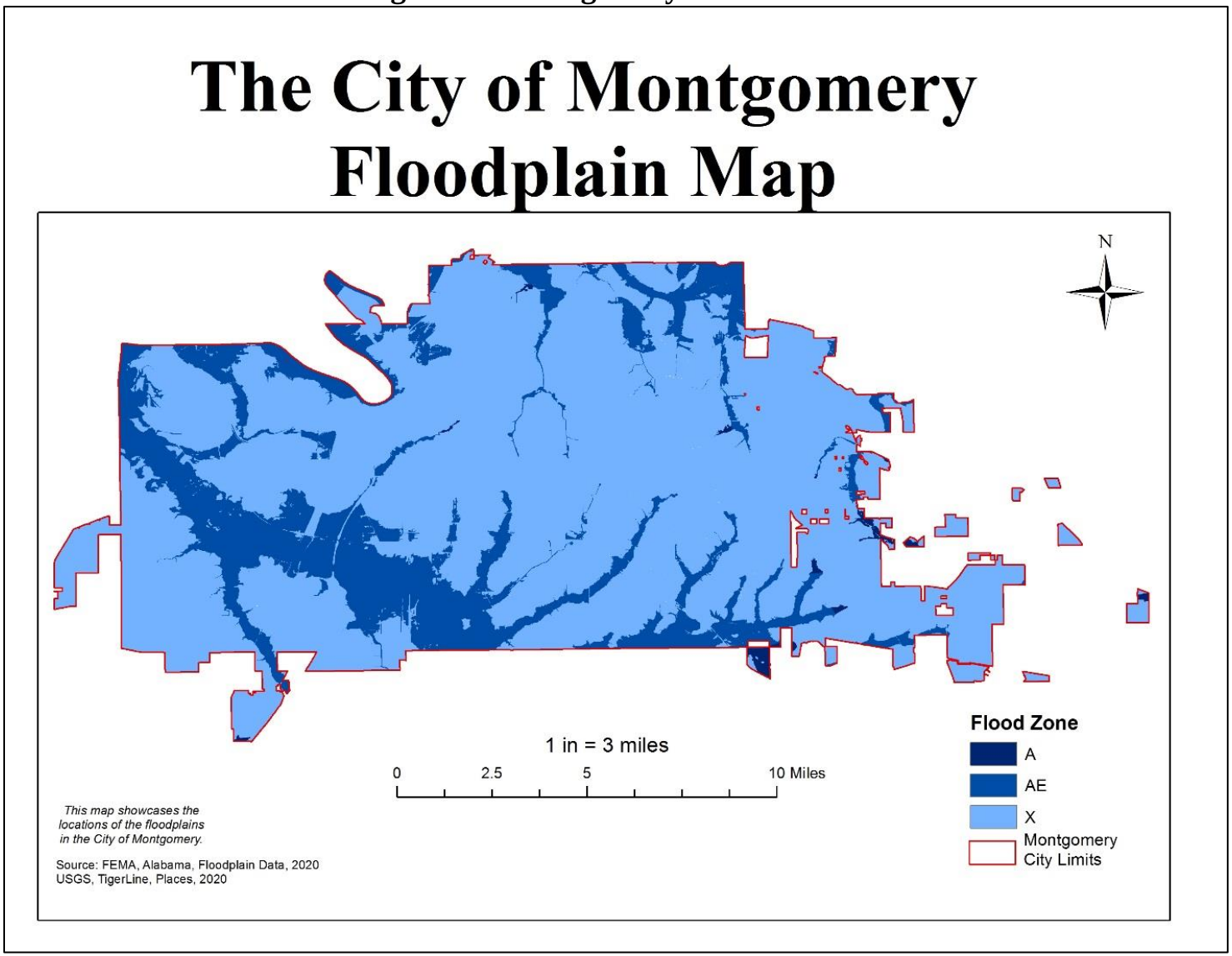
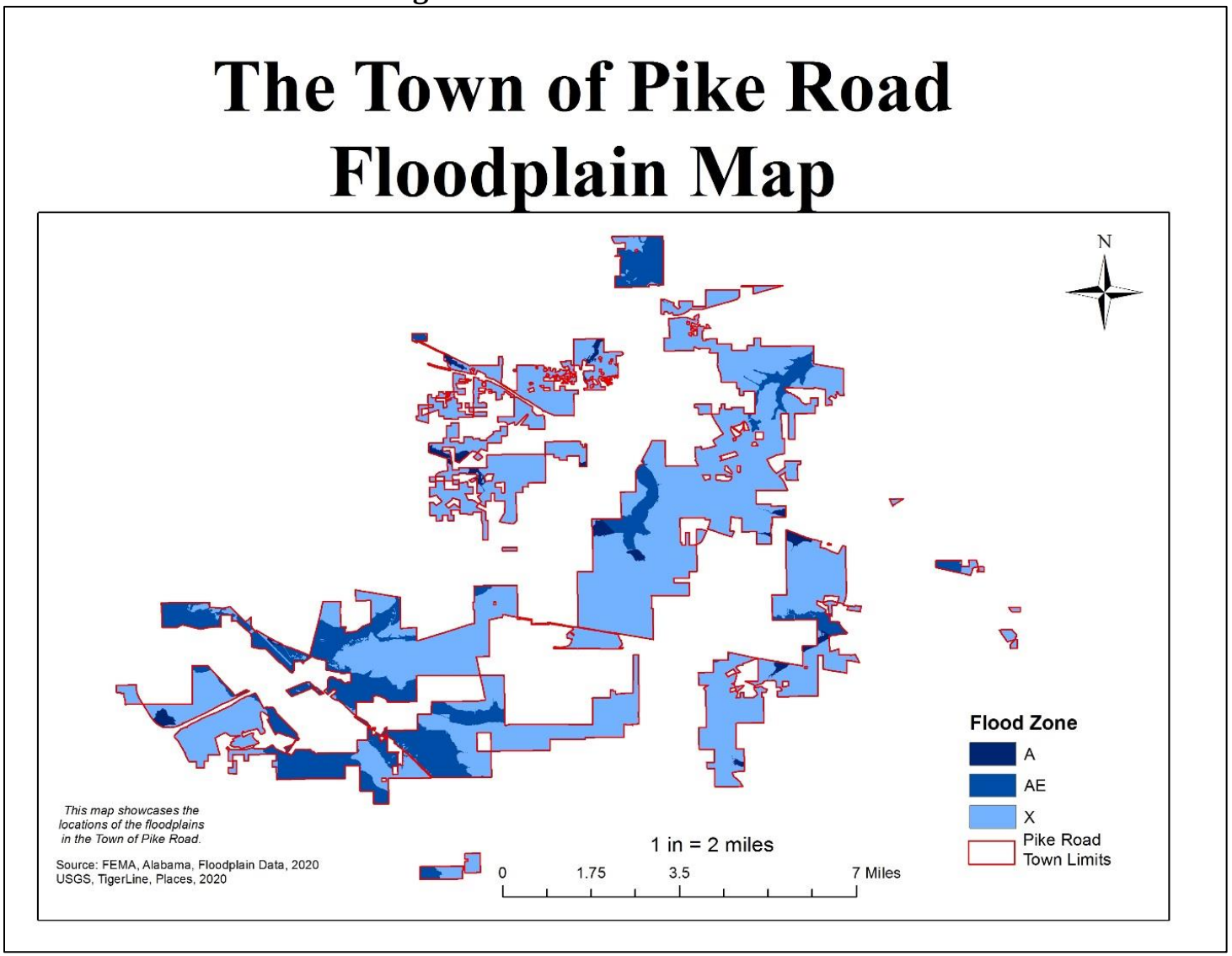


Figure 30: Pike Road



3.7.2 Extent by Jurisdiction

The severity of a riverine flood event is typically dependent on several factors, including drainage basin topography, recent precipitation and weather occurrences, and land surface. Periodic riverine flooding on adjacent lands is a natural occurrence. The most common method used to express flood frequency is a percent chance of occurrence in a giver year, or annual probability with a FEMA identified floodplain. A 100-year flood event has a one percent (1%) chance of occurring in any year within that floodplain. However, these type floods can occur multiple times during a 100-year period.

The extent of a flash flooding event varies depending on the local geography, rainfall intensity, and duration. Typically, flash flooding does not have as widespread of an impact on communities as a riverine floorings event. Due to the lack of advance warning before a flashflood event many streets and properties can become damage during these events.

Table 3.18 Flooding Extent by Jurisdiction

Jurisdiction	Flooding
Autauga County	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Autaugaville	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Billingsley	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
City of Prattville	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Elmore County	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Coosada	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure
Town of Deatsville	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Eclectic	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Elmore	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Milbrook	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
City of Prattville	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
City of Tallaasee	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure
City of Wetumpka	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure
Montgomery County	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Montgomery	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure

Town of Pike Road	Flooding to depths from 1 to several feet affecting agricultural lands, persons, structures, and infrastructure

3.7.3 Previous Occurrences and Impact

The Autauga, Elmore and Montgomery Planning Area has experienced several major flooding events. There have been three federal disaster declarations due to extensive flooding in Elmore County while flash flooding is very common in Autauga and Montgomery County. Typically, the flash floods recede very quickly without significant disruption to the public but there have been instances of flash flooding that were registered with the National Climatic Data Center (at the time) and caused property and crop damage.

Autauga County has specific areas that frequently suffer from flooding due to rainfall. The following listed are:

- Strickland Landing Road
- Dutch Island Circle
- Riverview Road
- Riverview Lane
- Riverview Court
- Simmons Road
- Red Eagle Road
- County Road 1 South
- County Road 42 East and West
- County Road 123
- County Road 32 East
- County Road 67
- County Road 105
- County Road 98
- County Road 65
- County Road 64
- County Road 84
- County Road 27
- Norris Road
- County Road 131
- Berry Lane
- County Road 6
- Hunter Loop Road
- County Road 59
- Alternate County Road 59
- Sabrina Lane
- Bel Ru Landing Road (Not County Maintained)
- County Road 60
- County Road 52
- County Road 29
- County Road 70
- County Road 131

- County Road 68
- County Road 19
- County Road 47
- Hosea Lane
- T R Drive
- County Road 24
- County Road 50
- County Road 86
- County Road 4

Elmore County has suffered severe flooding over the years. In 2009, the county was included in a Presidential Declaration due to flooding in Elmore's typical flood prone areas. In the City of Millbrook, neighborhoods in the Englenook Subdivision along Mill Creek are constantly affected. Along the Alabama River from Jackson Lake out to the country line at Hwy 143 and I-65. The neighborhoods off of Lina Ann Drive faces flooding that flows to Pineleaf Drive/Dogwood Circle. Turtle Drive is also a recurring drainage area. Mill Ridge, on multiple occurrences, faces drainage issues.

In the Town of Coosada, Meadow Lane Drive, Gibson Town Road, Pecan Grove Road, Coosada Parkway, Coosada Road and Lower Gibson Town Road reported flooding issues. In the Town of Elmore, Lucky Town, the Historic Downtown, Politic Road and Duncan Road reported flooding. In the Town of Deatsville, Cypress Road has suffered severe flooding occurrences. The community of Holtville's front section of its restraunts and drug stores flood when significant rainfall occurs.

In the City of Wetumpka, the downtown around Gold Star Park. Holtville Road around Nolan Drive and the White Waters. The businesses along the Coosa River on the end of Hill Street, Company Street near the bait shop failed due to the Coosa River being high Sections of Ft. Toulouse Road, Redland Road around the bridge (2017) near Hwy 231.

In Montgomery County and the City of Montgomery, the following have been deemed susceptible to flooding: Dozier Road, Old Selma, Cedar Point, the water plant on Madison Park, Louis Preister, and Anderson Road. Dozier Road has had layers of asphalt wash away, as well as the shoulder. This occurs when heavy rainfall hits near the Tallapoosa River. Overflow from the river washes on the road. This is an event that occurs multiple instances a year.

3.7.4 Probability of Future Occurrences

Since 2006, NOAA has recorded 18 flooding events in Autauga, Elmore, and Montgomery counties. It is estimated that these flood events caused at least $1,726,721 in damages in the Autauga, Elmore, and Montgomery counties, but this number could be much higher since some flood events did not report monetary values of damages despite recorded damages. The event frequency for flooding is 1.38 events per year, which is based on the eighteen events that occurred in thirteen years. The annual risk of losses for floods based on the historical record was $132,824 of damages per year. The probability of a flooding event is medium.

Table 3.19 Probability of Future Occurrences of Flooding

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flooding	Autauga County	14	13	1.08
Flooding	Autaugaville	1	13	0.08
Flooding	Unincorporated Autauga County	9	13	0.69
Flooding	Billingsley	0	13	0.00
Flooding	Prattville	5	13	0.38
Flooding	Elmore County	22	13	1.69
Flooding	Coosada	0	13	0.00
Flooding	Deatsville	1	13	0.08
Flooding	Eclectic	1	13	0.08
Flooding	Elmore	0	13	0.00
Flooding	Millbrook	8	13	0.62
Flooding	Tallassee	0	13	0.00
Flooding	Prattville	5	13	0.38
Flooding	Unincorporated Elmore County	4	13	0.31
Flooding	Wetumpka	6	13	0.46
Flooding	Montgomery County	15	13	1.15
Flooding	Montgomery	11	13	0.85
Flooding	Unincorporated Montgomery County	4	13	0.31
Flooding	Pike Road	0	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

3.8 Hail

3.8.1 Description

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.

Annually, hail causes over 1 billion dollars in damage to crops and property nationwide. All jurisdiction in Autauga, Elmore, and Montgomery counties are susceptible to the occurrence of hail and numerous instances reported according to NOAA.

3.8.2 Extent by Jurisdiction

The size of hailstones is related to the intensity of the thunderstorms that produce them, and to the temperature at the surface. The average size of hailstone that falls to earth is 6.35 mm. 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. Table 3.20 demonstrates the extent of hail damage all jurisdictions can experience.

Table 3.20: Hail Extent of All Jurisdictions

Hazard	Extent (All Jurisdictions)
Hail	Hail larger than 2-3 diameter resulting in property damage

Table 3.21: TORRO Hail Intensity Scale

Intensity	Typical Hail Diameter (mm)	Intensity Category	Probable Damage
H0	5	Hard Hail	No damage
H1	5-15	Potentially Damaging	Slight general damage to plants, crops
H2	10-20	Significant	Significant damage to fruit, crops, vegetation
H3	20-30	Severe	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	25-40	Severe	Widespread glass damage, vehicle bodywork damage
H5	30-50	Destructive	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	40-60	Destructive	Bodywork of grounded aircraft dented, brick walls pitted
H7	50-75	Destructive	Severe roof damage, risk of serious injuries
H8	60-90	Destructive	Severe damage to aircraft bodywork
H9	75-100	Super Hailstorms	Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open
H10	Greater than 100	Super Hailstorms	Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open

Source: State of Alabama HMP, 2018

The TORRO Hailstorm Intensity Scale, table 3.21, relates the size of hailstones to the probable crop and property damage. The damage caused by hail is often compounded by the other hazards that tend to accompany hailstorms, tornadoes or thunderstorms. It is common to have large hail north of a tornado track.

3.8.3 Previous Occurrences and Impact

Hail events are very common in Autauga, Elmore, and Montgomery counties. Since 2006, there have been 79 recorded instances of hail storms. On April 11th, 2007 a supercell thunderstorm hit the communities of Friendship, Tallassee, Wetumpka, and Millbrook in the late afternoon and early evening. This storm brought 69.85 mm hail to the community of Friendship, and 44.45 mm hail to Tallassee, Wetumpka, and Millbrook. According to the NOAA Storm Event Database this natural hazard event in Millbrook damaged 1 home's porch and blew out windows resulting in $5,000 of property damage. No injuries or deaths were reported as a result of these events.

3.8.4 Probability of Future Occurrences

The probability of future hail events has been determined to be high for the planning area signifying 100% annual probability for occurrence. The probability of a hail event in Autauga, Elmore or Montgomery County was to be Minor to Limited with minimal disruption. Table 3.22 shows the future probability of future occurrences for hail event.

Table 3.22: Probability of Future Occurrences Hail

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Hail	Autauga County	23	13	1.77
Hail	Autaugaville	1	13	0.00
Hail	Unincorporated Autauga County	15	13	0.00
Hail	Prattville	6	13	0.46
Hail	Billingsley	1	13	0.00
Hail	Elmore County	37	13	2.85
Hail	Coosada	1	13	0.00
Hail	Deatsville	0	13	0.00
Hail	Eclectic	0	13	0.00
Hail	Elmore	0	13	0.00
Hail	Millbrook	11	13	0.00
Hail	Tallassee	3	13	0.00
Hail	Unincorporated Elmore County	14	13	0.00
Hail	Wetumpka	8	13	0.00
Hail	Montgomery County	18	13	1.38
Hail	Montgomery	10	13	0.77
Hail	Unincorporated Montgomery County	8	13	0.62
Hail	Pike Road	0	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

3.9 High Winds & Thunderstorms

3.9.1 Description

Autauga, Elmore, and Montgomery counties are highly susceptible to high winds and thunderstorms. High wind events may occur any time of year, but occur more often in spring, summer, and fall seasons. Thunderstorms are weather events that form through the clash of different air masses, which may cause storms that occur singularly, in lines, or in clusters – sometime with very little warning. The effects of thunderstorms may impact a small area or multiple jurisdictions. Thunderstorm events may cause straight-line winds, hail, and lightning, and if long-lasting or severe, may cause flooding or tornadic activity. Severe thunderstorms may produce damage equivalent to tornadoes over a larger spatial area. Severe thunderstorm events may occur year-round in the region, but the peak of severe thunderstorm events is in spring with a smaller peak in fall.

The Division D Emergency Management Directors chose to address tornadoes as a separate hazard event.

3.9.2 Extent by Jurisdiction

Severe thunderstorms are defined by the National Weather Service as having wind speeds of 58 miles per hour or higher, producing hail at least ¾" in diameter, or possessing tornadic capabilities. The effects of severe thunderstorms will have varying spatial effects throughout the region area from widespread to localized impacts. Table 3.23 showcases the extent of damage that can occur from high winds/thunderstorms for all jurisdictions.

Table 3.23: High Winds and Thunderstorms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
High Winds & Thunderstorms	The National Weather Service defines high winds as "Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration." The National Weather Service defines a severe thunderstorm as "A thunderstorm that produces a tornado, winds of at least 58 mph (50 knots or ~93 km/h), and/or hail at least 1" in diameter. Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots or ~64 km/h) and/or hail of at least ½" is defined as approaching severe."

3.9.3 Previous Occurrences and Impact

Each jurisdiction in Autauga, Elmore, and Montgomery counties are vulnerable to the effects of high winds/thunderstorms and each county will experience multiple occurrences of this hazard every year. There have been 312 documented severe Thunderstorm/Wind events between January 1st of 2006 and January 1st 2020. During these events, there was $1,228,000 in property damages, $0 in crop damage, 3 injuries from severe Thunderstorm/Wind events in the region. Due to the

isolated nature of these events, it is probable that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.
All of Autauga, Elmore, and Montgomery counties are uniformly susceptible to the occurrence of severe thunderstorms and high winds. High winds/severe thunderstorms can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific areas of storm effects. The average wind speeds are around 55 mph with guest up to 80 during these severe thunderstorm events. The following events are examples of impacts felt by various jurisdictions in Autauga, Elmore and Montgomery counties due to high winds and thunderstorm events.

The most serve damage took place in Montgomery County on May 5th, 2008 and generated $500,000 in property damages. The storm produced straight line winds of 100 mph causing damage to an automobile shop, collapsed a strip mall wall, removed apartment's roofs, downed power line, and damaged an elementary school. On March 26th, 2011 the community of Vida in Autauga County suffered damage from a storm that also produced 100 mph straight line winds that were 1.5 miles long and 3 miles wide. The damage incurred from the storm resulted in the destruction of manufactured homes and automobiles, and toppled hundreds of trees.

In 2012 a woman was injured at her residence after a patio cover was down during a severe thunderstorm, and in 2017 a woman was injured when a wall cinderblock wall collapsed on her during a storm, both incidences took place in Elmore County. In 2014 one person was injured when a tree fell on their vehicle during a severe thunderstorm. Zero deaths were reported from severe thunderstorm events. Due to the isolated nature of these events, it is probable that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.

3.9.5 Probability of Future Occurrences

Severe thunderstorm/high wind events that cause property damage and potential injuries/death may affect the planning area throughout the year and have averaged multiple occurrences a year in recent history. The probability of these events has been identified as High, with a 100% annual probability. The impact has been determined to be Limited.

Table 3.24 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
High Winds/ Thunderstorms	Autauga County	92	13	7.08
High Winds/ Thunderstorms	Autaugaville	8	13	0.62
High Winds/ Thunderstorms	Unincorporated Autauga County	55	13	4.23
High Winds/ Thunderstorms	Prattville	25	13	1.92
High Winds/ Thunderstorms	Billingsley	4	13	0.31
High Winds/ Thunderstorms	Elmore County	151	13	11.62
High Winds/ Thunderstorms	Coosada	7	13	0.54
High Winds/ Thunderstorms	Deatsville	6	13	0.46
High Winds/ Thunderstorms	Eclectic	6	13	0.46
High Winds/ Thunderstorms	Elmore	6	13	0.46
High Winds/ Thunderstorms	Millbrook	19	13	1.46
High Winds/ Thunderstorms	Tallassee	9	13	0.69
High Winds/ Thunderstorms	Unincorporated Elmore County	70	13	5.38
High Winds/ Thunderstorms	Wetumpka	29	13	2.23
High Winds/ Thunderstorms	Montgomery County	63	13	4.85
High Winds/ Thunderstorms	Montgomery	46	13	3.54
High Winds/ Thunderstorms	Unincorporated Montgomery County	15	13	1.15
High Winds/ Thunderstorms	Pike Road	2	13	0.15

Source: National Weather Service, Storm Event Database, 2020)

3.10 Landslides

3.10.1 Description

A landslide is a gravity-aided downward and outward movement of soil, rock, and vegetation that lies normally on a sloped surface. Landslides can occur from both natural and human-induced events. Common causes are composition changes on the surface, excessive rain, and construction practices.

Typically, areas that are prone to landslides are on or at the base of steep slopes, base of drainage channels, developed hillsides where leach field septic systems are used, and near previous landslide areas.

3.10. Extent by Jurisdiction

The Geologic Survey of Alabama has developed a map of landslide susceptibility based on state data, on Alabama rock types and USGS data on topography. Autauga, Elmore and Montgomery counties generally have a Very Low to None landslide susceptibility risk, with very isolated pockets of high risk. Up to this point there have not been any landslides recorded by the EMA offices in Autauga, Elmore or Montgomery County.

There is not a magnitude scale for landslides. Therefore, defining the extent of landslides is subjective and difficult to predict. Due to the lack of susceptibility throughout the planning area, the extent of landslide incidents are estimated to be primarily isolated damages to structures and infrastructure.

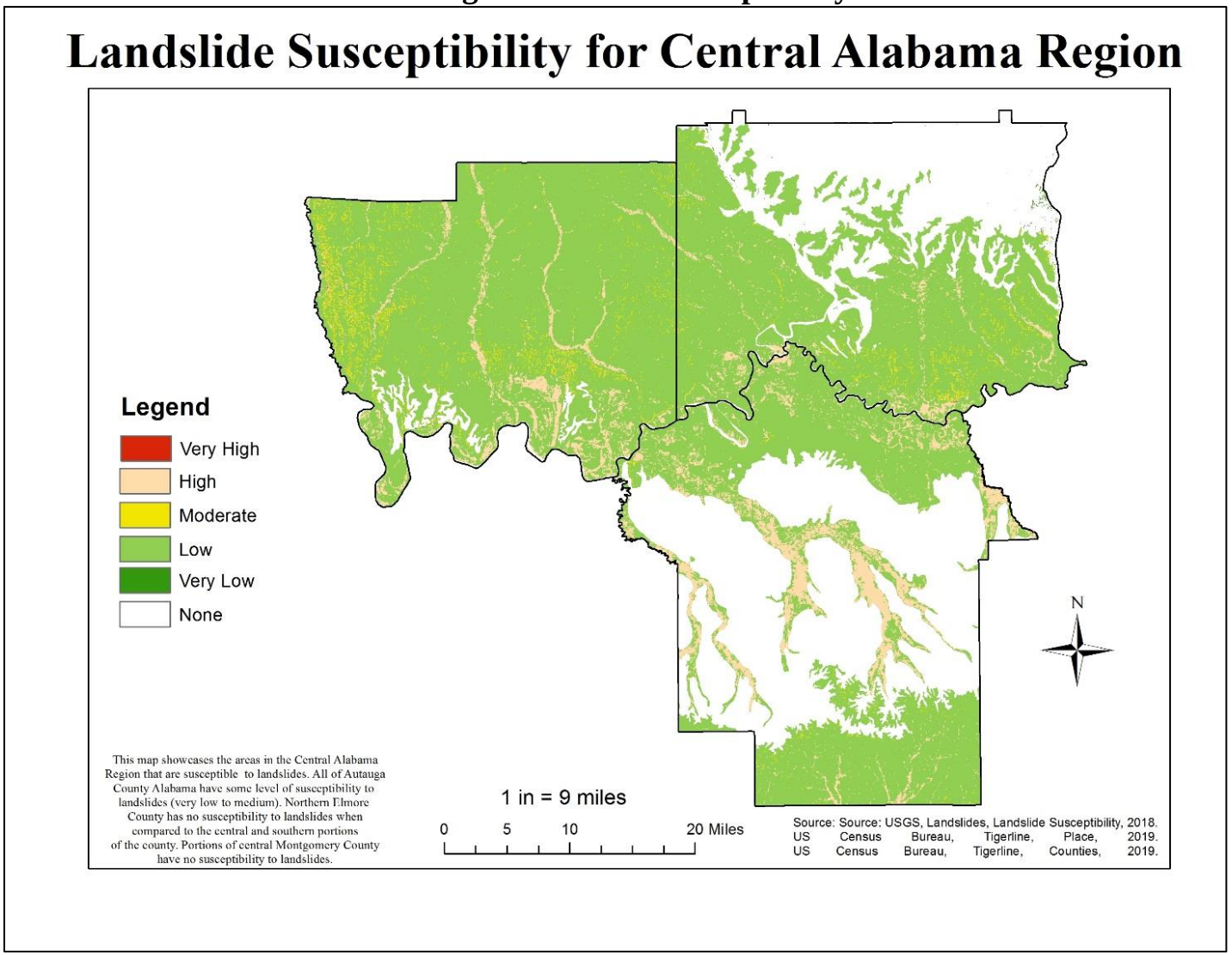
Table 3.25: Landslides Extent of All Jurisdictions

Autauga County	**Extent**
Autaugaville	Movement of land beneath several acres Affecting multiple homes and businesses
Prattville	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Autauga County	Movement of land beneath several acres Affecting multiple homes and businesses
Billingsley	Movement of land beneath several acres Affecting multiple homes and businesses
Elmore County	Movement of land beneath several acres Affecting multiple homes and businesses
Coosada	Movement of land beneath several acres Affecting multiple homes and businesses
Deatsville	Movement of land beneath several acres Affecting multiple homes and businesses
Eclectic	Movement of land beneath several acres Affecting multiple homes and businesses
Elmore	Movement of land beneath several acres Affecting multiple homes and businesses
Millbrook	Movement of land beneath several acres Affecting multiple homes and businesses
Tallassee	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Elmore County	Movement of land beneath several acres Affecting multiple homes and businesses
Wetumpka	Movement of land beneath several acres Affecting multiple homes and businesses
Montgomery County	Movement of land beneath several acres Affecting multiple homes and businesses
Montgomery	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Montgomery County	Movement of land beneath several acres Affecting multiple homes and businesses
Pike Road	Movement of land beneath several acres Affecting multiple homes and businesses

3.10.3 Previous Occurrences

The GSA map does not have dates listed detailing time frame, so it is from an indeterminate amount of time. There are zero landslides reported in historical record Autauga, Elmore, Montgomery counties since the last update. No injuries, deaths, or damage estimates were reported. Figure 31 depicts that a majority of Autauga, Elmore and Montgomery counties have low to none susceptibility to landslides.

Figure 31: Land Susceptibility



3.10.4 Probability of Future Occurrences

Based on historical information and local knowledge, the probability of landslides in Autauga, Elmore and Montgomery counties was ranked as Moderate to None. The impact was ranked as minor, for Autauga, Elmore and Montgomery counties.

3.11 Lightning

3.11.1 Description

Lightning is a discharge of electrical energy that creates a "bolt" that may stretch from clouds to the ground. An actual lightning strike only affects a small area, though many storms have thousands of lightning strikes that occur during an event. According to the National Weather Service, lightning will follow a path of least resistance, typically striking the tallest object in a given area, which could include a person, a power pole, or trees. Lightning may cause building damage due to starting a fire, deaths through striking a person directly or in the immediate vicinity, and may cause wildfire in some cases.

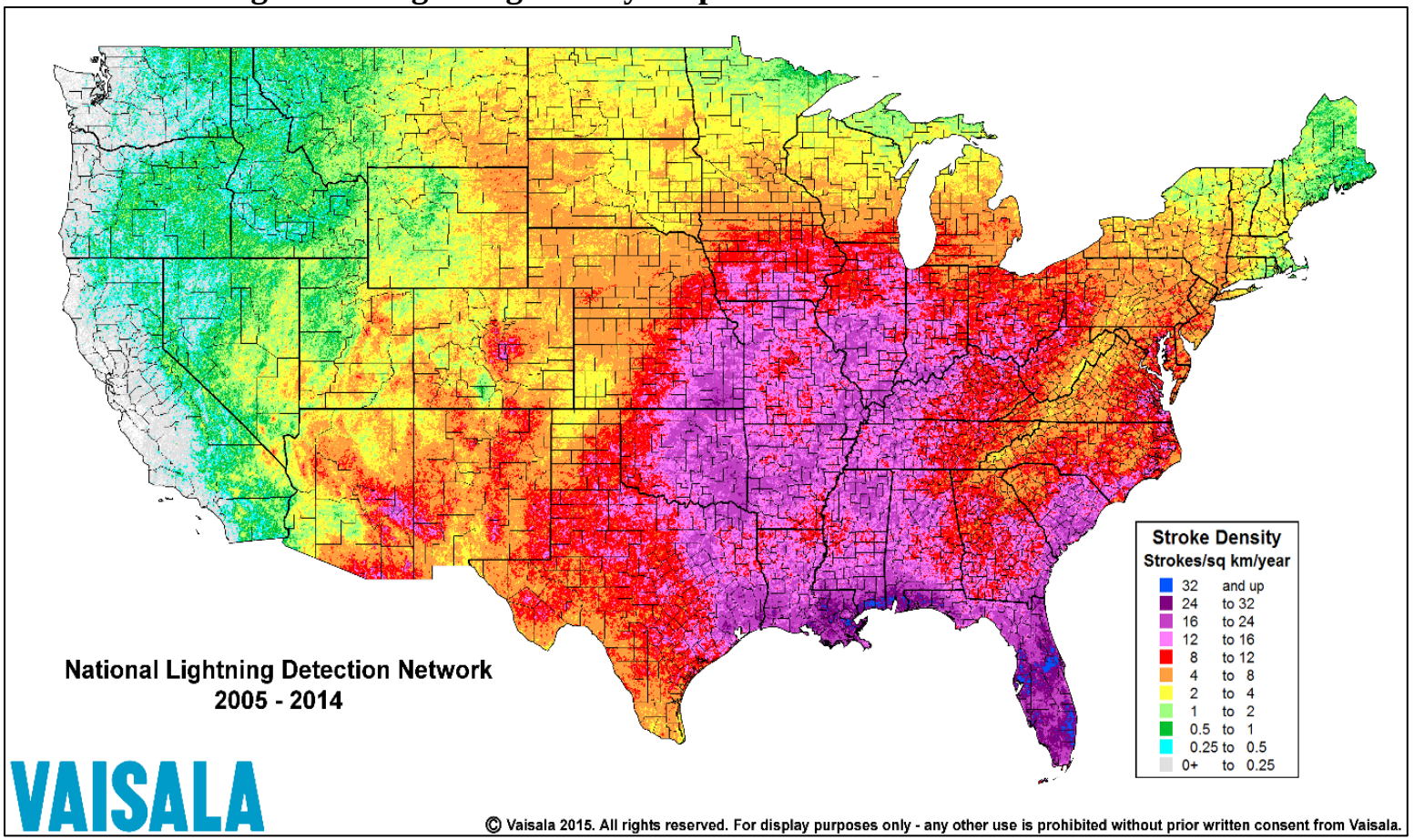
3.11.2 Extent by Jurisdiction

There are some 16 million lightning storms in the world every year. The rapid heating and cooling of air near the lightning cause thunder. Lightning is a major threat during a thunderstorm. In the atmospheric electrical discharge, a leader of a bolt of lightning can travel at speeds of 130,000 mph and can reach temperatures approaching 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. Table 3.26 shows the extent to which all jurisdictions in Autauga, Elmore, and Montgomery counties are susceptible to frequent lightning. Figure 31 is a lightning density map, which showcases that Autauga, Elmore, and Montgomery counties receive 8 to 12 strikes of lightning per km per year.

Table 3.26: Lightning Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Lightning	Lightning considered frequent when 4 to11 flashes take place per square km

Figure 32: Lightning Density Map



3.11.3 Previous Occurrences and Impact

Autauga, Elmore, and Montgomery have been subjected to storms and strikes. Since 2006 $162,500 in property damage, one death in 2015, and two injuries in 2009 and 2007 were reported as a result of lightning.

All jurisdictions in Autuaga, Elmore, and Montgomery counties are uniformly susceptible to the occurrence of lightning, which can result in injury to a person, damage or destruction to a home, damage to electronics, and start fires. The following examples show how lightning could impact each jurisdiction in Autauga, Elmore, and Montgomery counties.

Autauga, Elmore, Montgomery have been subjected to lightning storms and strikes, and since 2006 there has been $162,500 in property damages. The damages reported from the communities of Millbrook, unincorporated Elmore County, Wetumpka, and unincorporated Autauga County included house fires and fallen trees due to lightning strikes. According to NOAA two persons has been injured by lightning strikes while working on construction in a home (2007) and on Bouldin Dam Road (2009). One individual lost her life on June 23rd, 2015 when she was struck by lightning while picking blueberries in her yard.

3.11.4 Probability of Future Occurrences

Lightning events that have the potential to cause property damage and potential injury/casualty may affect Autaugqa, Elmore and Montgomery counties throughout the year. The probability of these events is high for all three counties, however, the impact ranges between minor and limited. Table 3.26 shows the probability of future lightning occurrences in Autauga, Elmore and Montgomery counties.

Table 3:26 Probability of Future Occurrences for Lightning

Hazard	Jurisdiction	Number Previous Events	2006-2019	Frequency Event per Year
Lightning	Autauga County	3	13	0.23
Lightning	Autaugaville	0	13	0.00
Lightning	Prattville	1	13	0.08
Lightning	Unincorporated Autauga County	2	13	0.15
Lightning	Billingsley	0	13	0.00
Lightning	Elmore County	9	13	0.69
Lightning	Coosada	0	13	0.00
Lightning	Deatsville	0	13	0.00
Lightning	Eclectic	2	13	0.15
Lightning	Elmore	1	13	0.08
Lightning	Millbrook	2	13	0.15
Lightning	Tallassee	0	13	0.00
Lightning	Unincorporated Elmore County	1	13	0.08
Lightning	Wetumpka	3	13	0.23
Lightning	Montgomery County	0	13	0.00
Lightning	Montgomery	0	13	0.00
Lightning	Unincorporated Montgomery County	0	13	0.00
Lightning	Pike Road	0	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

3.12 Sinkholes

3.12.1 Description

According to the Geological Survey of Alabama (GSA), the most common cause of land subsidence in Alabama is the development of sinkholes in areas that have underlying soluble limestone, dolomite, or salt rocks, such as karst terrain. Activities that can cause land subsidence, or sinkholes, include a change in the water table level, change in groundwater flow characteristic, and surface loading that puts pressure on the land surface, including human-induced causes.

3.12.2 Extent by Jurisdiction

The Alabama State Hazard Mitigation Plan states that the GSA considers sinkholes to be more prevalent in northern Alabama due to geology. The state plan also indicates that groundwater withdrawal is an important driver of sinkhole development in Alabama. A previous study estimated that more than 4,000 human-induced sinkholes and areas of subsidence have occurred in Alabama since 1900. Most have occurred since 1950, and most have resulted from a decline in the water table associated with groundwater withdrawals. Sinkholes related to wells tend to be located within 150 meters of the site of the withdrawal, while sinkholes related to quarry operations tend to be located within 600 meters of the site of withdrawal. According to the Alabama State Hazard Mitigation Plan, recent sinkholes associated with groundwater withdrawal have ranged from 1 to 90 meters in diameter, and from 0.3 to 30 meters in depth.

There is no magnitude scale for land subsidence or sinkholes. Therefore, defining the extent of these hazards is subjective and difficult to predict.

Table 3.27 Sinkhole Extent by Jurisdiction

Jurisdiction	Extent
Autauga County	Movement of land beneath several acres Affecting multiple homes and businesses
Autaugaville	Movement of land beneath several acres Affecting multiple homes and businesses
Prattville	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Autauga County	Movement of land beneath several acres Affecting multiple homes and businesses
Billingsley	Movement of land beneath several acres Affecting multiple homes and businesses
Elmore County	Movement of land beneath several acres Affecting multiple homes and businesses
Coosada	Movement of land beneath several acres Affecting multiple homes and businesses
Deatsville	Movement of land beneath several acres Affecting multiple homes and businesses
Eclectic	Movement of land beneath several acres Affecting multiple homes and businesses
Elmore	Movement of land beneath several acres Affecting multiple homes and businesses
Millbrook	Movement of land beneath several acres Affecting multiple homes and businesses
Tallassee	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Elmore County	Movement of land beneath several acres Affecting multiple homes and businesses
Wetumpka	Movement of land beneath several acres Affecting multiple homes and businesses
Montgomery County	Movement of land beneath several acres Affecting multiple homes and businesses
Montgomery	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated Montgomery County	Movement of land beneath several acres Affecting multiple homes and businesses
Pike Road	Movement of land beneath several acres Affecting multiple homes and businesses

3.12.3 Previous Occurrences and Impact

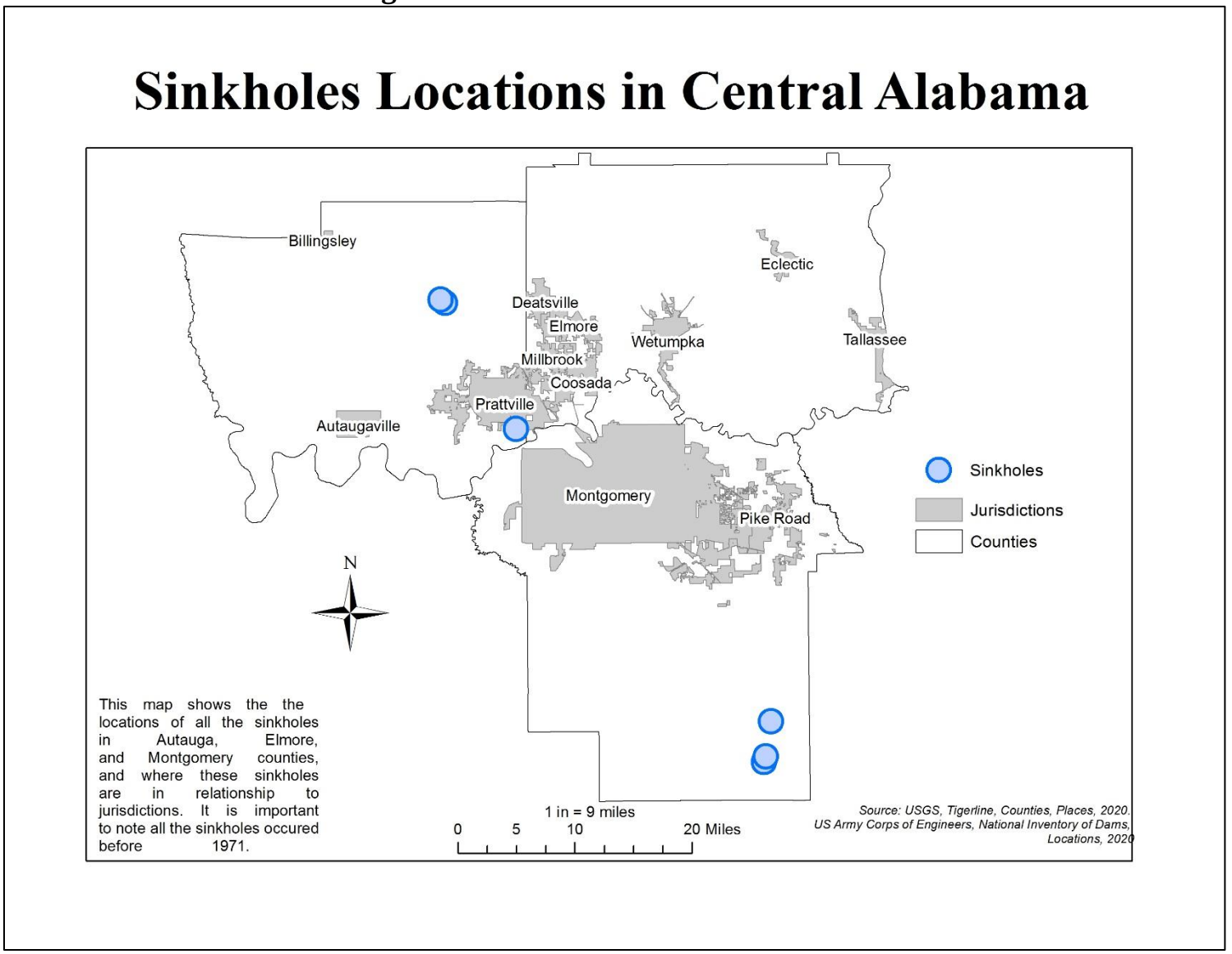
Incidents of manmade sinkholes were reported in the Autauga, Elmore, and Montgomery counties, primarily since the early 2000s. The sinkholes are suspected to have been caused by drainage issues and past mining operations (rock quarry). There were damages related to structures, septic systems, vehicles, and injuries involved.

The following examples show how sinkholes could impact each jurisdiction in Autauga, Elmore, and Montgomery counties. Since the sinkholes are considered to be manmade the jurisdictions do not keep records not are official measurements of sinkholes are not recorded by any jurisdiction. In certain cases, the media may have estimated the size of the sinkholes.

Incidents of sinkholes were reported in the Central Alabama Region, but vary from county to county due to the different soil quality.

A sinkhole closed Company Street in Wetumpka, Alabama when portions of the road and a sanitary sewer pipe were washed away in March of 2017. On June 23rd, 2017 a sinkhole closed Redland Road in Elmore County between Rifle Range Road and Highway 231. A car was swallowed by a sinkhole on Hill Street in Wetumpka in 2019. In 2015 a sinkhole in the shoulder of McQueen Smith Road resulted in the road being closed between Tara Drive and U.S. 82. According to Alabama News, a 100 ft. deep sinkhole occurred in backyard of residents living along Mara Court a Prattville neighborhood. These events were seen as manmade sinkholes. There have been zero sinkhole reported in Montgomery County since the last update. There were damages related to structures, septic systems, vehicles and injuries involved. Figure 33 shows the historical sinkholes that have occurred in Autauga, Elmore, and Montgomery counties prior to 1971.

Figure 33: Historic Sinkholes Locations



3.12.4 Probability of Future Occurrences

Although sinkholes in the planning area are possible, they have been rated as a very low probability of occurrence. The impact has been determined to be minor.

Table 3.28: Probability of Future Occurrences Sinkholes

Hazard	Jurisdiction	Number of Previous Events	1958 to 2019	Frequency Event per Year
Sinkholes	Autauga County	0	61	0.00
Sinkholes	Prattville	0	61	0.00
Sinkholes	Autaugaville	0	61	0.00
Sinkholes	Unincorporated Autauga County	0	61	0.00
Sinkholes	Billingsley	0	61	0.00
Sinkholes	Elmore County	0	61	0.00
Sinkholes	Coosada	0	61	0.00
Sinkholes	Deatsville	0	61	0.00
Sinkholes	Eclectic	0	61	0.00
Sinkholes	Elmore	0	61	0.00
Sinkholes	Millbrook	0	61	0.00
Sinkholes	Tallassee	0	61	0.00
Sinkholes	Unincorporated Elmore County	0	61	0.00
Sinkholes	Wetumpka	0	61	0.00
Sinkholes	Montgomery County	0	61	0.00
Sinkholes	Montgomery	0	61	0.00
Sinkholes	Unincorporated Montgomery County	0	61	0.00
Sinkholes	Pike Road	0	61	0.00

Source: Geological Survey of Alabama, Sinkhole Data, 2020.

*****There are no record of naturally made sinkholes since 1971, according to the Geological Survey of Alabama.

3.13 Tornadoes

3.13.1 Description

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 the year. 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 weather event. According to NOAA, 13 minutes is the average amount of time a person has to find a safe place from a tornado.

Tornadoes are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks 4th nationally for the number of killer tornadoes experienced, and 5th for the number of fatalities as a result of a tornado. The entire state and Autauga, Elmore, Montgomery counties are susceptible to tornadoes. Tornadoes can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific area of tornado strikes.

3.13.2 Extent by Jurisdiction

Tornado intensity is classified using the Enhanced Fujita (EF) Scale, which is an update to the original Fujita Scale, implemented in February 2007. The EF Scale is still primarily a wind estimate indicator that is based on three-second gust derived by the levels of damage that occur during a tornado event. Table 3.30 shows the breakdown of the Enhanced Fujita Scale, and Table 3.29 shows the extent of damage all jurisdictions can receive.

Table 3.29 Tornado Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tornado	All jurisdictions can be impacted by tornadoes. Tornadoes can be as minor as EF0, which would product limited damage such as broken branches, minor roof damage, small or trees were blown down. These events can be as deadly and dangerous as a EF5, which would produce total destruction of foundational homes, trees snapped/uprooted, or total destruction of vehicles.

Table 3.30: Enhanced Fujita Scale

EF/F Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	Damage Description
0	45-78	0	65-85	Light Damage: Some damage to chimneys; tree branches broken off; shallow-rooted trees pushed over; sign boards damaged.
1	79-117	1	86-110	Moderate Damage: The lower limit is the beginning of hurricane wind speed. Roof surfaces peeled off; mobile homes pushed off foundations or overturned; moving autos pushed off roads.
2	118-161	2	111-135	Considerable Damage: Roofs torn off from houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
3	162-209	3	136-165	Severe Damage: Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown; large missiles generated.
4	210-261	4	166-200	Devastating Damage: Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown; large missiles generated.
5	262-317	5	Over 200	Incredible Damage: Strong framed houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through air in excess of 100 yards; trees debarked.

Source: NOAA, NWS, Weather Forecast Office Norman, Oklahoma, Enhanced Fujita Scale

3.13.3 Previous Occurrences and Impact

According to the National Centers for Environmental Information, Storm Events Database, since 1996 there have been 92 documented tornado events in the Central Alabama Region, resulting in 11 fatalities and 110 injuries. Over $74 million were reported in estimated property damage.

According to the historical record the deadliest tornadoes struck Autauga, Elmore and Montgomery counties on April 27th, 2007. This tornado was a part of a powerful storm system that would bring a deadly trail of destruction to the entire Southeast, and would ultimately break the record for number of tornadoes in Alabama in a single day. The tornado touched down in central Elmore County at 19:12 (7:12pm) moved towards Lafayette, Alabama, and caused a 20.83 mile long path of destruction according to NOAA. Major destruction (complete destruction and damage) of homes, businesses, places of worship, and manufactured homes) was found along the storm's trail. By the end at 19:36 (7:36pm) this tornado would kill six women living in manufactured homes, injure twenty persons, and cause $50,000,000 in property damages. A few days prior, Autauga County was hit with its deadliest tornado on record. According to NOAA, at 22:01 (10:01pm). A tornado touched down east of the Old Kingston Community in Autauga County. This storm resulted in a 9 mile long path of destruction. Numerous homes, business, and manufactured homes were damaged or destroyed as a result of the tornado. When this storm dissipated three persons were killed, four injured, and $1,240,000 in property damages were

reported. Fifty persons were injured in Prattville, Alabama when an EF3 tornado touched down on February 17th, 2008. The tornado would destroy and damage around 200 homes, 40 businesses, and blow down hundreds of trees along its path of destruction.

Between Autauga, Elmore, and Montgomery counties saw a total of ninety-two tornadoes since 1996, but 2011 was the deadliest and most costly year in twenty-three years. During 2011 a total of fifteen tornadoes were reported in the Between Autauga, Elmore, and Montgomery counties with 7 EF0, 4 EF1, 2 EF2, and 2 EF3 tornadoes. Out of those fifteen tornadoes, nine deaths, 24 injuries, and over $54,000,000 in property damages were recorded. 2002, 2013, 2014, and 2015 were the only years with zero tornadoes reported in the region. Since 2011 there have been thirty tornadoes reported in the region, but zero deaths have been recorded and only six injuries.

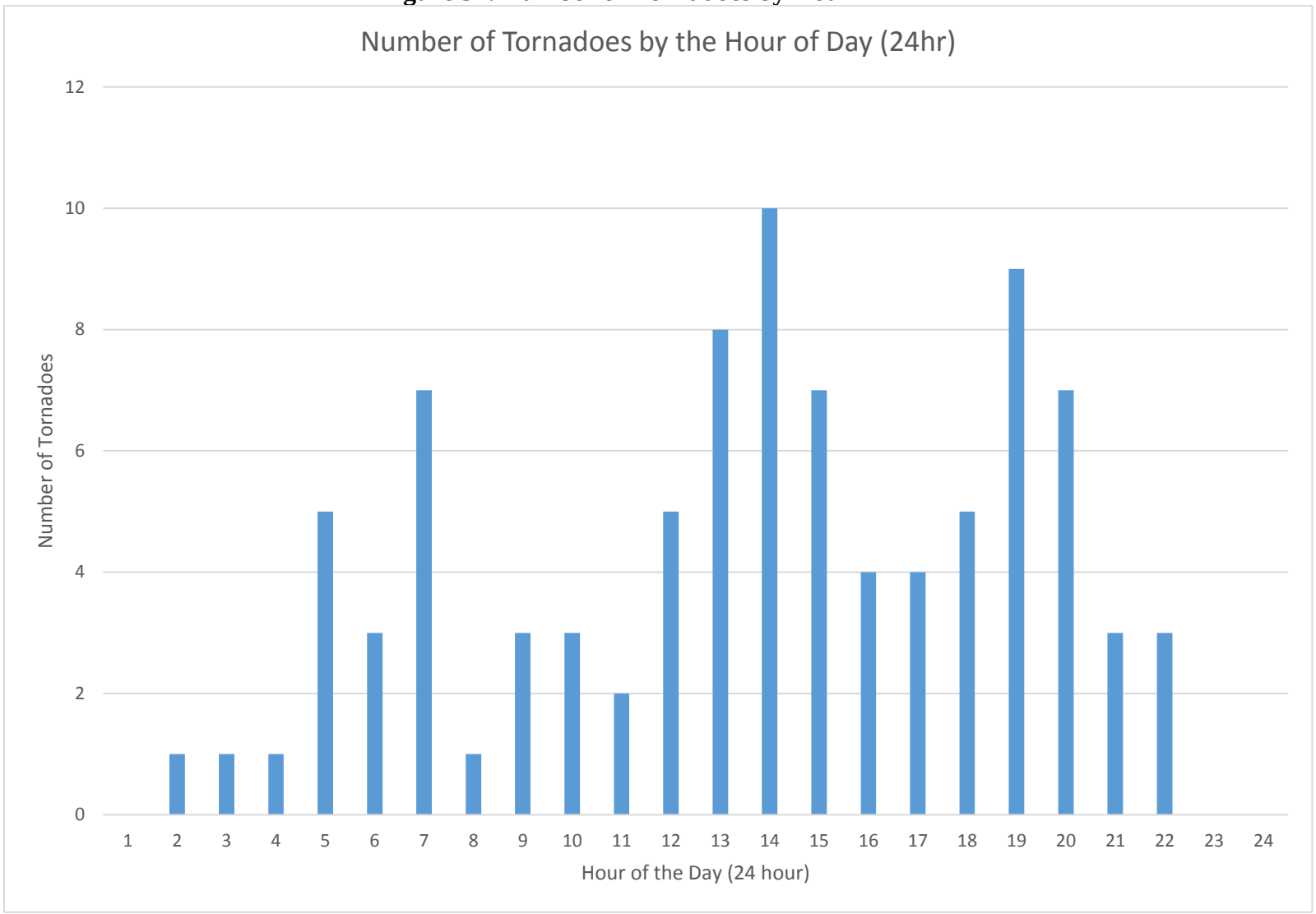
Over the last twenty-three years the majority of tornadoes occurred during the hours of 12 to14 (12pm to 2pm) and 18 to 20 (6pm to 8pm). Please refer to Figure 34 for more details about what hour of the days tornadoes tend to occur.

Table 3.31: Annual Tornado Summary – Central Alabama Region

Year	Number	Fatalities	Injuries	Property Damage	Crop Damage	F0/EF0	F1/EF1	F2/EF2	F3/EF3	F4/EF4	F5/EF5
1996	8	2	17	$ 5,600,000.00	$ 100,000.00	-	5	2	1	-	-
1997	1	0	0	$ 45,000.00	$ -	-	1	-	-	-	-
1998	1	0	0	$ 18,000.00	$ -	1	-	-	-	-	-
1999	3	0	0	$ 1,000.00	$ -	3	-	-	-	-	-
2000	6	0	0	$ 71,000.00	$ -	4	2	-	-	-	-
2001	4	0	4	$ 627,000.00	$ -	2	2	-	-	-	
2002	0	0	0	$ -	$ -	-	-	-	-	-	-
2003	2	0	0	$ 80,000.00	$ -	2	-	-	-	-	-
2004	5	0	1	$ 1,100,000.00	$ -	3	-	2	-	-	-
2005	9	0	0	$ 252,000.00	$ -	1	8		-	-	-
2006	4	0	6	$ 705,000.00	$ -		3	1	-	-	-
2007	3	0	2	$ 665,000.00	$ -	2	1		-	-	-
2008	4	0	50	$ 10,000,000.00	$ -	2	1	3	-	-	-
2009	4	0	0	$ 402,000.00	$ -	2	2		-	-	-
2010	2	0	0	$ 93,000.00	$ -	1	1		-	-	-
2011	15	9	24	$ 54,526,500.00	$ -	7	4	2	2		-
2012	3	0	0	$ -	$ -	0	3	-	-	-	-
2013	0	-	-	-	-	-	-	-	-	-	-
2014	0	-	-	-	-	-	-	-	-	-	-
2015	0	-	-	-	-	-	-	-	-	-	-
2016	3	0	0	$ -	$ -	3	-	-	-	-	-
2017	6	0	0	$ -	$ -	2	4	-	-	-	-
2018	3	0	0	$ -	$ -	3	-	-	-	-	-
2019	6	0	6	$ -	$ -	2	2	2	-	-	-
Total	**92**	**11**	**110**	**$ 74,185,500.00**	**$ 100,000.00**	**40**	**39**	**12**	**3**	**0**	**0**

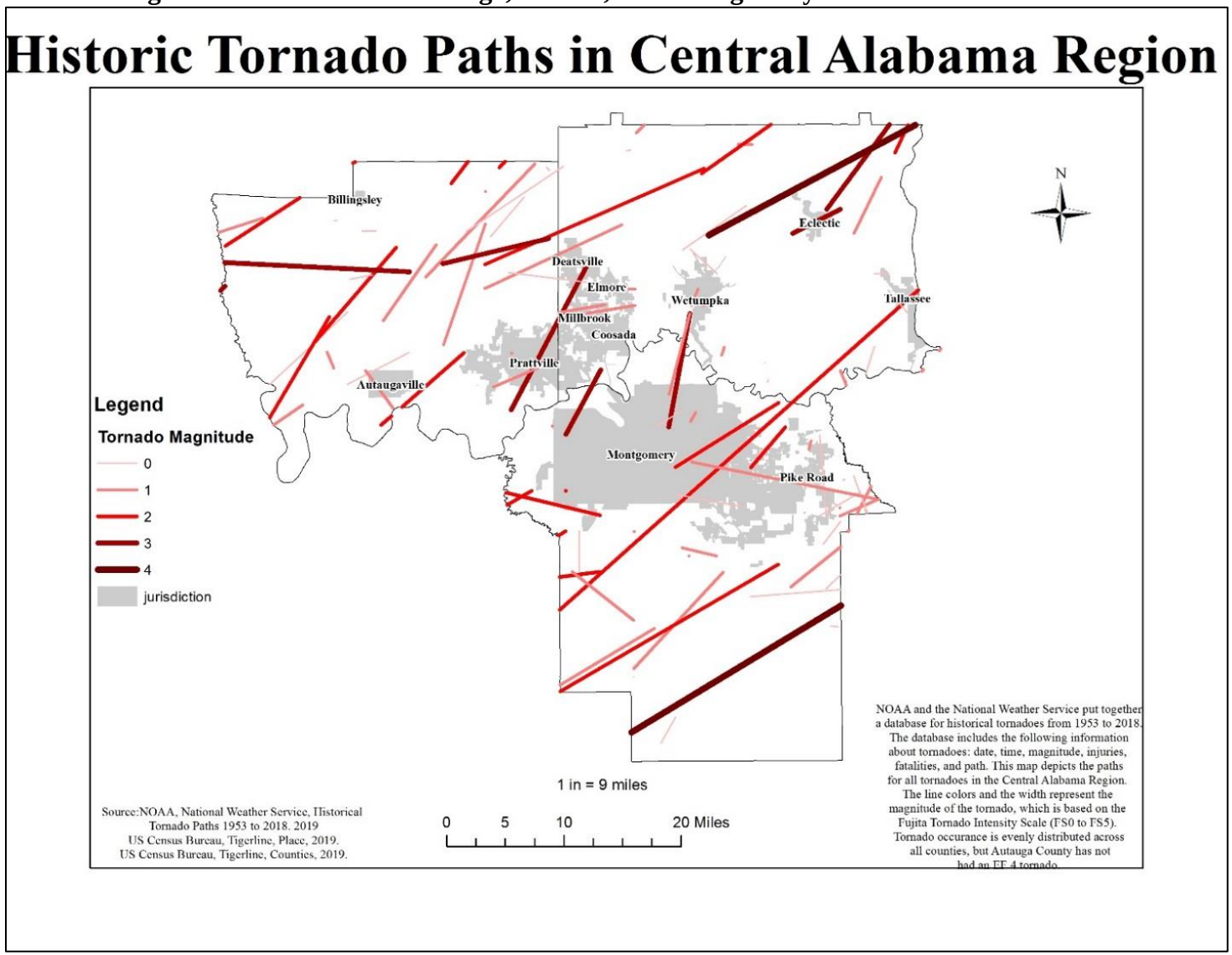
Source: *NOAA, National Centers for Environmental Information, Storm Events Database, Autauga County, Elmore County, and Montgomery County, 1996-2019.*

Figure 34: Number of Tornadoes by Hour



Source: *NOAA, National Centers for Environmental Information, Storm Events Database, Autauga County, Elmore County, and Montgomery County, 1996-2019.*

Figure 35: Tornadoes in Autauga, Elmore, and Montgomery counties



Source: NOAA, National Centers for Environmental Information, Storm Events Database, Autauga, Elmore, and Montgomery counties 1996-2019.

3.13.4 Probability of Future Occurrences

All jurisdictions in the Autauga, Elmore, and Montgomery counties are vulnerable to tornadoes. Based on historical data, the annual probability of a tornado event has been deemed High. The impact of tornadoes in this region is identified as Catastrophic. Table 3.3 shows the future probability that a tornado will occurrence in each jurisdiction.

Table 3.31 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Tornado	Autauga County	21	13	1.62
Tornado	Autaugaville	1	13	0.00
Tornado	Unincorporated Autauga County	15	13	0.00
Tornado	Billingsley	1	13	0.00
Tornado	Prattville	0	13	0.00
Tornado	Elmore County	57	13	4.38
Tornado	Coosada	0	13	0.00
Tornado	Deatsville	1	13	0.08
Tornado	Eclectic	0	13	0.00
Tornado	Elmore	0	13	0.00
Tornado	Millbrook	3	13	0.23
Tornado	Tallassee	0	13	0.00
Tornado	Unincorporated Elmore County	9	13	0.69
Tornado	Wetumpka	4	13	0.31
Tornado	Montgomery County	14	13	1.08
Tornado	Montgomery	2	13	0.15
Tornado	Unincorporated Montgomery County	12	13	0.92
Tornado	Pike Road	0	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

3.14 Tropical Depression/ Tropical Storm / Hurricane

3.14.1 Description

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 Strom: A tropical cyclone with maximum sustained winds of 39-73 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 are 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 rotating low-pressure weather system that has organized thunderstorms with constant wind speeds of 74 mph. At the center of a hurricane is an eye, which is a peaceful break from the storm. As a hurricane approaches shores, the sky will darken, winds will pick up, and the water will be pushed inland. Once a hurricane moves onto land it will quickly weaken due to the lack of access to warm water, which is the energy source of the storm. Since Autauga, Elmore, and Montgomery counties are hundreds of miles from the Atlantic Ocean or the Gulf of Mexico, these jurisdiction are not at have only expired tropical storms or tropical depressions because hurricanes cannot maintain their strength this far inland.

Historically Autauga, Elmore, and Montgomery counties have never been hit by a hurricane, only the degraded remnants of a hurricane, tropical storm, or tropical depression, but Autauga, Elmore, and Montgomery counties have been impacted. All jurisdictions in Autauga, Elmore and Russell counties are susceptible to the occurrence of sustained high heavy rainfall, and tornadoes that are associated with a tropical storm, or tropical depression.

3.14.2 Extent by Jurisdiction

Hurricane Intensity is classified using the Saffir-Simpson Hurricane Wind Scale, which categorizes hurricane events primarily using maximum sustained winds, but also examining barometric pressure readings and potential storm surge. This gives an estimate of the potential damage that will occur from a hurricane. The Saffir-Simpson Scale is shown in Table 3.32.

Table 3.32: Saffir-Simpson Hurricane Wind Scale

Category	Sustained Wind Speed	Type of Damage Due to Hurricane Winds
1	74-95	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, and 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	Extremely dangerous winds will cause extensive damage: 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	Devastating damage will occur: Well-build framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156	Catastrophic damage will occur: 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.
5	157 or higher	Catastrophic damage will occur: 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.

Source: National Weather Service National Hurricane Center (2014)

Table 3.33 demonstrates the extent of damage all jurisdictions in Autauga, Elmore, and Montgomery counties could expect if a tropical event like a tropical storm or tropical depression occurs.

Table 3.33: Tropical Depression and Tropical Storm Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tropical Depressions/ Tropical Storms/ Hurricanes	A tropical storm with the maximum sustained surface winds ranging from 39-73 mph or a Category 1 (or higher) hurricane with maximum sustained winds 74 mph (up to +157 mph) will produce damage to homes, persons, utilities, close roads/bridges, structures, crops, and timber. These events can also bring localized flooding.

3.14.3 Previous Occurrences and Impact

According to NCDC/NOAA historical records, there have been six documented tropical depressions/tropical storms that have impacted these counties, not including Hurricane Opal which

resulted in the State of Alabama being a presidential disaster declaration. This declaration included Autauga, Elmore and Montgomery counties.

The tropical depressions/Storms that have impacted the area resulted in property damage of $142,000 as of the 2009 reporting. The property damage has not been listed for the 2017 and 2018 Tropical Storms that affected the area.

Tropical Depression Fay arrived in Autauga, Elmore, and Montgomery counties on August 25th, 2008 bringing heavy rains, sustained winds of 35mph, wind gust up to 49 mph. Downed trees, loss of power, and downed power lines were reported all throughout the Central Alabama region.

Tropical Depression Ida arrived in Autauga, Elmore, and Montgomery counties on September 11th, 2009, resulting in $2,000 worth of damages in each county. Winds up to 40 mph, heavy rains, and uprooted trees were reported.
Hurricane Irma brought sustained winds of 30 to 45mph with strong wind gust and heavy rain on September 10th, 2012. While Autauga, Elmore, and Montgomery counties report $0 in damages there were reports of downed trees, loss of power, downed power line, and roads blocked.
This storm still brought heavy rains and winds up to 45mph. Zero monetary or structural damages were reported in Elmore County, but many downed trees and power lines were reported.

3.14.4 Probability of Future Occurrences

Autauga, Elmore and Montgomery counties are vulnerable to the effects of any tropical events as the storm moves inland. Typically, tropical events will be downgraded to tropical storms and tropical depressions by the time the storm arrives in the region. Tropical depressions and tropical storms have a low to medium probability of occurring, however, the impact in the region has been deemed to be Critical. Table 3.34 shows the probability of future occurrences in of a tropical depression, tropical storm and hurricane in Autauga, Elmore and Montgomery counties.

Table 3.34: Probability of Future Occurrences Hurricanes

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Tropical Depression/ Tropical Storm/ Hurricane	Autauga County	3	13	0.23
Tropical Depression/ Tropical Storm/ Hurricane	Autaugaville	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Prattville	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Unincorporated Autauga County	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Billingsley	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Elmore County	5	13	0.38
Tropical Depression/ Tropical Storm/ Hurricane	Coosada	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Deatsville	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Eclectic	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Elmore	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Millbrook	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Tallassee	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Unincorporated Elmore County	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Wetumpka	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Montgomery County	4	13	0.31
Tropical Depression/ Tropical Storm/ Hurricane	Montgomery	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Unincorporated Montgomery County	NA*	13	0.00
Tropical Depression/ Tropical Storm/ Hurricane	Pike Road	NA*	13	0.00

Source: National Weather Service, Storm Event Database, 2020)

*** (Tropical Storms/ Tropical Depressions are only recorded at the county level)*

3.15 Wildfires

3.15.1 Description

According to the Alabama State Hazard Mitigation Plan, 2018, a wildfire can be defined as any non-structural fire that occurs in the wild. Wildfires are uncontrolled blazes fueled by weather, wind, and dry underbrush that have the ability to burn a significant amount of land in a very short period of time. Three conditions need to be present for a wildfire to burn: fuel, oxygen, and a heat source.

A Wildland-Urban Interface Fire is a fire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

Wildfires have a significant impact on the United States. Over 100,000 wildfires clear up to 5 million acres of US land every year. Wildfires have the ability to destroy everything in their path. Three distinct types of wildland fires have been defined and include: naturally occurring wildfire, human-caused wildfire, and prescribed fire. Wildfires are typically human-caused, which distinguishes them from other natural disasters.

Based on an analysis by the Alabama Forestry Commission, there are 1,350 potential wildland-urban interface communities at risk of wildfire damage in Alabama, and the number of these communities is projected to increase with time, according to the Alabama HMP.

3.15.2 Extent by Jurisdiction

The magnitude of wildfire events is often classified as total number of acres burned and destructive impacts to people and property, including house fires and casualties. These elements are greatly dependent on other factors, such as weather conditions, available fuel, topography, and existing wildfire mitigation capabilities. Table 3.35 shows the extent or damage a wildfire could have on each jurisdiction.

Table 3.35: Wildfire Extent by Jurisdiction

Jurisdiction	Extent
Autauga County	Property and timber damage over large acreage (100+)
Autaugaville	Property and timber damage over very small acreage (5+)
Prattville	Property and timber damage over very small acreage (5+)
Unincorporated Autauga County	Property and timber damage over very small acreage (5+)
Billingsley	Property and timber damage over very small acreage (5+)
Elmore County	Property and timber damage over large acreage (100+)
Coosada	Property and timber damage over very small acreage (5+)
Deatsville	Property and timber damage over very small acreage (5+)
Eclectic	Property and timber damage over very small acreage (5+)
Elmore	Property and timber damage over very small acreage (5+)
Millbrook	Property and timber damage over very small acreage (5+)
Tallassee	Property and timber damage over very small acreage (5+)
Unincorporated Elmore County	Property and timber damage over very small acreage (5+)
Wetumpka	Property and timber damage over very small acreage (5+)
Montgomery County	Property and timber damage over large acreage (100+)
Montgomery	Property and timber damage over very small acreage (5+)
Unincorporated Montgomery County	Property and timber damage over very small acreage (5+)
Pike Road	Property and timber damage over very small acreage (5+)

3.15.3 Previous Occurrences and Impact

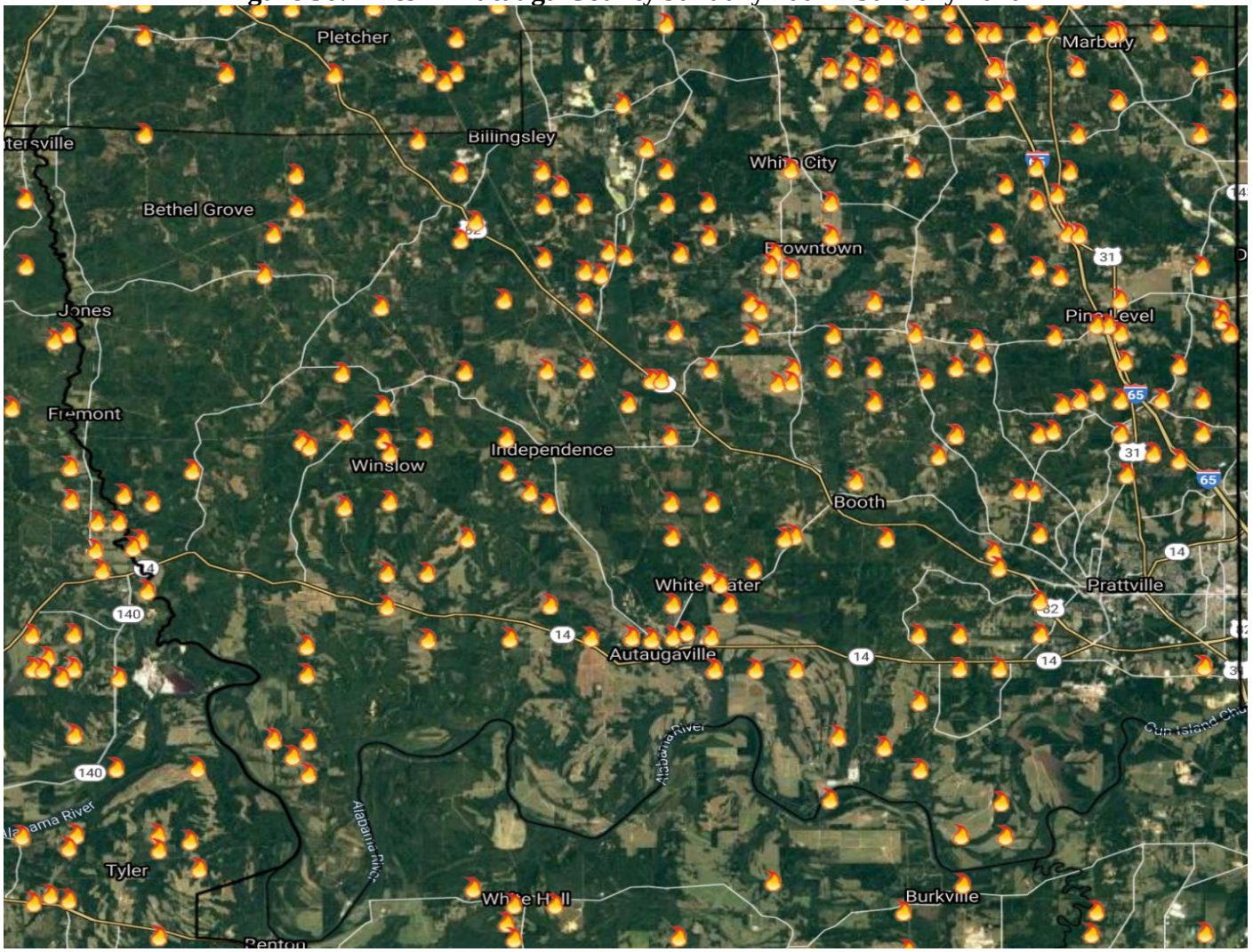
Over the last 13 years, there have been 791 fires, affecting 6,946.7 acres in these three counties. Autauga County had the most fires, 392, and acres burned, 2,536 acres, since 2006. Elmore County had the least number of fires, 189, but had more acres burned, 2,353 acres, than Montgomery County. There were 210 fires and 2,056 acres burned in Montgomery County since 2006. The most common cause of wildfires in this region is debris burning by residents.

228 acres burned in Autauga County after a fire broke out on April 11th, 2018, which burned until it was contained on April 16th, 2018. This was the largest fire reported in Autauga County since 2006. The average fire size over the last 13 years in Autauga County burned 6.5 acres.

On March 24th, 2011 a large fire was reported in Elmore County. This fire burned through 809 acres and was contained on March 24th, 2011. This is the largest fire reported in Elmore County since 2006. The average fire size over the last 13 years in Elmore County burned 12.5 acres.

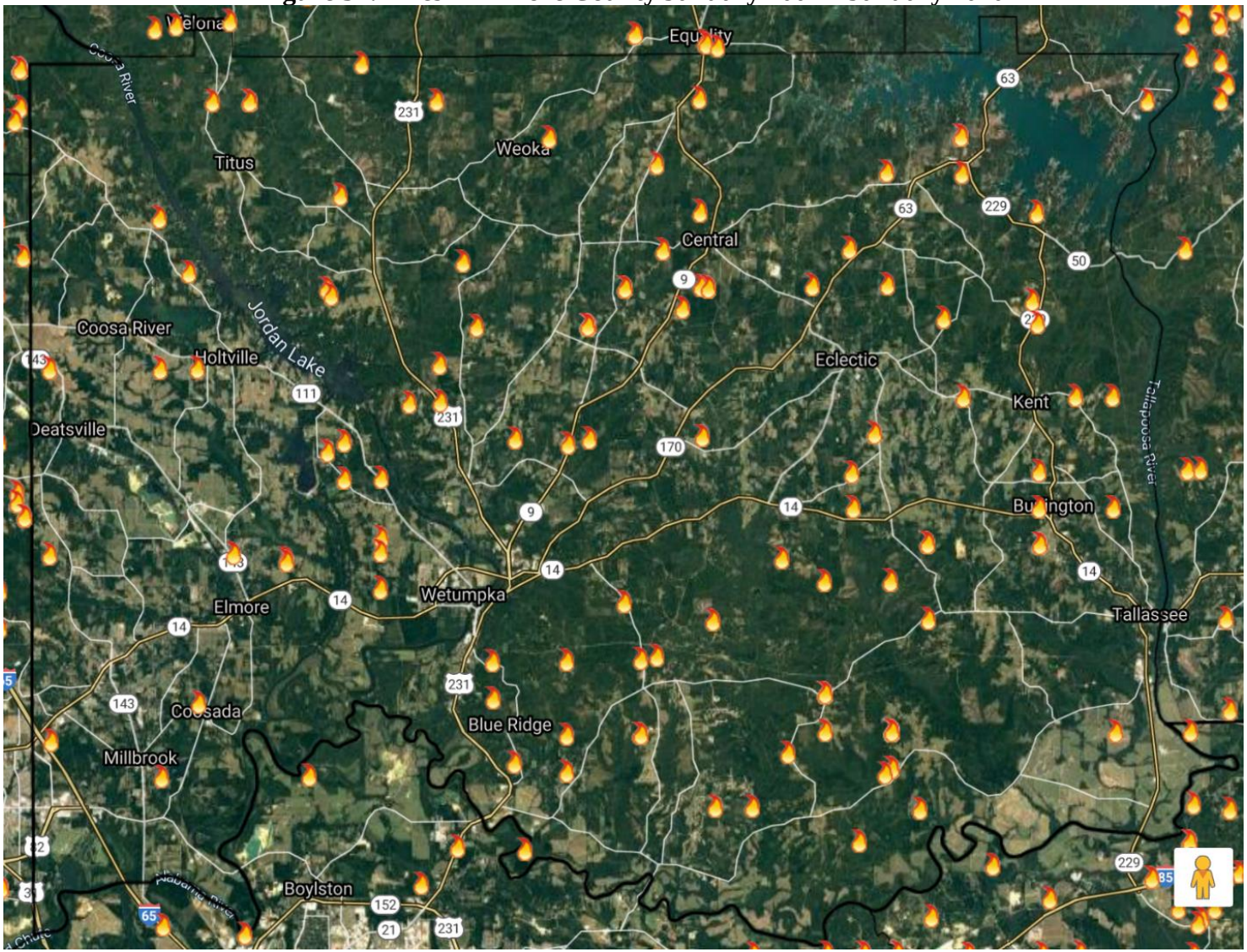
In Montgomery County 219 acres were burned on July 2nd, 2011 when a fire broke out, but it was contained in five hour later. This was the largest fire reported in Montgomery County since 2006. The average fire size over the last 13 years in Montgomery County burned 9.7 acres. Due to the lack of data collection on fires, the details of these fires are not available. Figure 36 to 38 showcase the location of all wildfires hot have taken place in Autauga, Elmore, or Montgomery counties since January 2009.

Figure 36: Fires in Autauga County January 2007 – January 2020



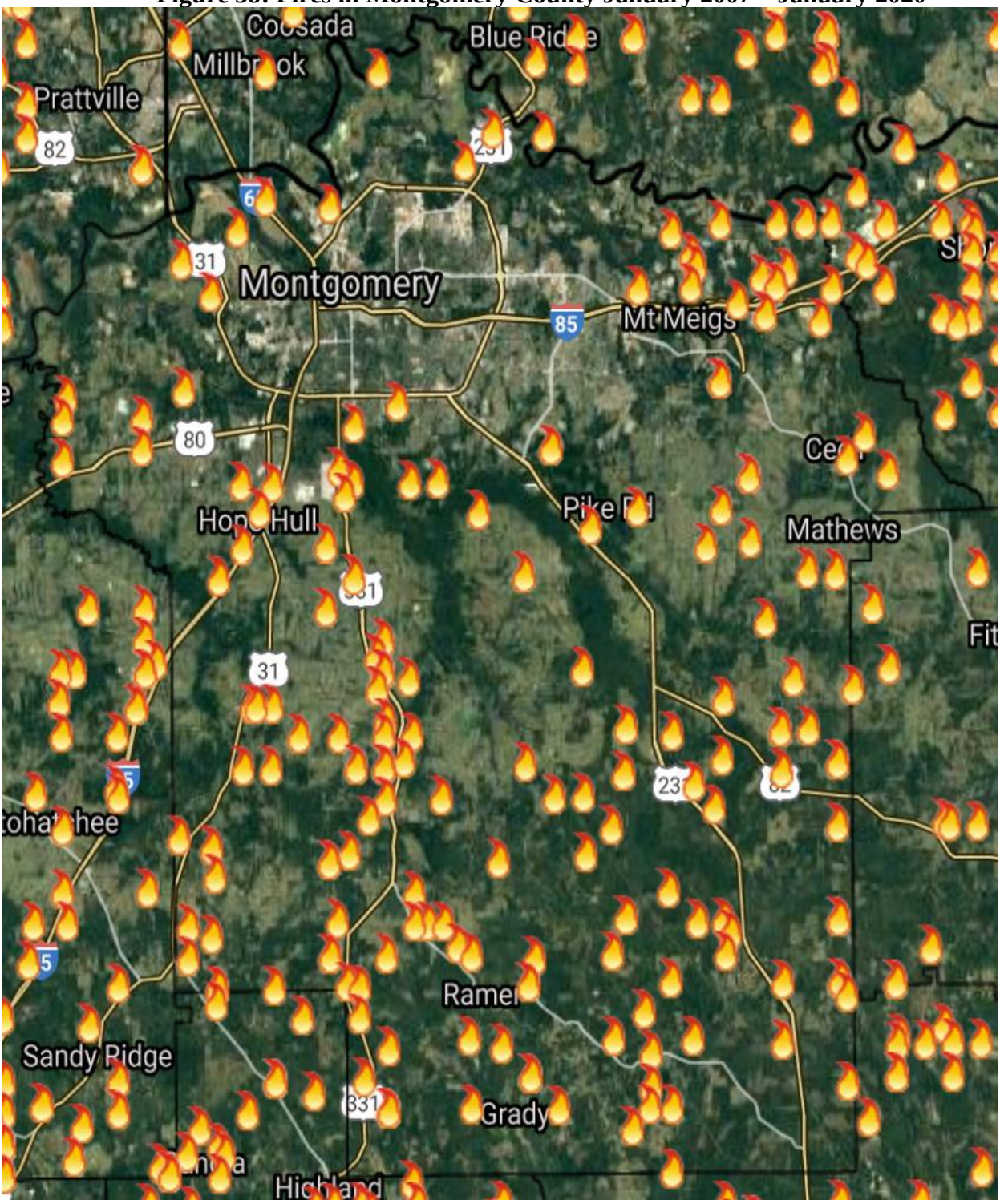
Source: Alabama Forestry Commission, Autauga County, Fire Locations, 2019.

Figure 37: Fires in Elmore County January 2007 – January 2020



Source: Alabama Forestry Commission, , Elmore County, Fire Locations 2019.

Figure 38: Fires in Montgomery County January 2007 – January 2020



Source: Alabama Forestry Commission, , Montgomery County, Fire Locations 2019

3.15.4 Probability of Future Occurrences

The jurisdictions in Autauga, Elmore, and Montgomery counties are vulnerable to wildfires. The Alabama Forestry Commission classifies the jurisdictions in Autauga, Elmore, Montgomery counties as having a range of low fire occurrence to Extreme as indicated on the map. The overall probability of this hazard risk has been determined to be very low to medium depending upon the amount of urbanization. Although the Wildland-Urban Interface is high at these same locations. The impact has been deemed to be minor/limited. Please refer to Table 3.36 for the probability of future wildfire occurrences.

Table 3.36: Probability of Future Occurrences Wildfires

Hazard	Jurisdiction	Number Previous Events	Acres Burned	2006 to 2019	Frequency Event per Year	Average Acres Burned a Year
Wild Fires	Autauga County	392	2,541.20	13	30.15	195.48
Wild Fires	Autaugaville	NA*	NA*	13	0.00	NA*
Wild Fires	Unincorporated Autauga County	NA*	NA*	13	0.00	NA*
Wild Fires	Billingsley	NA*	NA*	13	0.00	NA*
Wild Fires	Elmore County	198	2,353.60	13	15.23	181.05
Wild Fires	Coosada	NA*	NA*	13	0.00	NA*
Wild Fires	Deatsville	NA*	NA*	13	0.00	NA*
Wild Fires	Eclectic	NA*	NA*	13	0.00	NA*
Wild Fires	Elmore	NA*	NA*	13	0.00	NA*
Wild Fires	Millbrook	NA*	NA*	13	0.00	NA*
Wild Fires	Tallassee	NA*	NA*	13	0.00	NA*
Wild Fires	Unincorporated Elmore County	NA*	NA*	13	0.00	NA*
Wild Fires	Wetumpka	NA*	NA*	13	0.00	NA*
Wild Fires	Montgomery County	210	2,056.90	13	16.15	158.22
Wild Fires	Montgomery	NA*	NA*	13	0.00	NA*
Wild Fires	Unincorporated Montgomery County	NA*	NA*	13	0.00	NA*
Wild Fires	Pike Road	NA*	NA*	13	0.00	NA*

Source :(Alabama Forestry Commission, Autauga, Elmore, and Montgomery counties, 2020)
*** (This data is not recorded by the Alabama Forestry Commission by jurisdiction, but only at the county level)*

3.16 Winter Storms

3.16.1 Description

Winter storms normally cause heavy amounts of frozen precipitation (snow, freezing rain, and ice), windy conditions, and extreme cold. The effect of winter storms on a community depends on how equipped the community is to handle the storm, as winter storms can cause owner outages, transportation problems, and collapsed roofs on structures. These events may make roads impassable and disrupt power. Loss of communications is a common occurrence during a severe winter storm. In Alabama, a snowfall of two inches or more is considered heavy snow, especially the further south you get in the state at the storm southern end of the state.

The related emergencies include hypothermia and other cold-related maladies. Fires break out due to improvised heating apparatuses is common, as is carbon monoxide poisoning. There usually is sufficient warning for the public to take protective steps. The facilitation of emergency heating and food is critical, with emergency heating centers and the rescuing of stranded motorists becoming priorities. These events are typically short-lived in the Autauga, Elmore, and Montgomery counties. The immediate threat from a winter storm, heavy snow or ice storm is traffic accidents, people trapped in their homes without supplies or hear, power outages, frozen water lines, and physical overexertion. The long-term damages of a multiple-day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages.

Areas in Central Alabama receive winter storms infrequently and have only minor recorded damages. The entire Autauga, Elmore, and Montgomery counties are susceptible if a winter storm developed in the region.

3.16.2 Extent by Jurisdiction

Winter storms may have varying effects on the planning area dependent upon the severity and length of time. There is limited documentation on winter storms in the Autauga, Elmore, and Montgomery counties because these events do not take place annually. Table 3.37 demonstrates the extent of damages that can take place during a winter storm in all jurisdictions.

Table 3.37: Winter Storms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Winter Storms	Snow (six or more inches) and ice cause damage to homes, utilities, car accidents, close roads/bridges, and down trees.

3.16.3 Previous Occurrences and Impact

Since 2006, Autauga, Elmore and Montgomery counties have experienced three winter storms and three winter weather events, which resulted in snow, ice, or mixture. According to the historical record there have been zero amount of damages recorded from winter weather. In 2011, Autauga and Elmore counties received four to six inches of snowfall during a winter storm. A winter storm in January of 2014 a mixture of snow and ice impacted the Central Alabama Region due to the accumulation of ice and snow on roadways causing travel to be dangerous. Typically these events

caused road closures, vehicle accidents, and limited visibility in the region, but zero damages, injuries or deaths were directly caused by a winter storm since 2006.

December 15th, 2010 a weak winter storm arrived in Central Alabama, which resulted in temperatures near or below freezing in Autauga, Elmore, and Montgomery counties. According to NOAA this winter storm brought widespread freezing and sleet, which resulted in the accumulation of ice on the roads making driving conditions hazardous. These conditions resulted in many vehicles accidents after roads and bridges were iced over, and resulted in one death (indirectly) when an EMS worker was struck by a passing vehicle.

In the evening of January 16th of 2018 a winter struck Alabama resulting in 2 or more inches of snowfall in Autauga, Elmore, and Montgomery counties.

3.16.4 Probability of Future Occurrences

Based on previous episodes of winter storms in Autauga, Elmore, and Montgomery counties the probability of future storms is relatively low/medium. However, the impact can be critical based on historical events. Please refer to Table 3.38 for the probability of each winter storm occurrence in each jurisdiction.

Table 3.38: Probability of Future Occurrences Winter Storms

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Winter Storms	Autauga County	6	13	0.46
Winter Storms	Autaugaville	NA*	13	0.00
Winter Storms	Prattville	NA*	13	0.00
Winter Storms	Unincorporated Autauga County	NA*	13	0.00
Winter Storms	Billingsley	NA*	13	0.00
Winter Storms	Elmore County	6	13	0.46
Winter Storms	Coosada	NA*	13	0.00
Winter Storms	Deatsville	NA*	13	0.00
Winter Storms	Eclectic	NA*	13	0.00
Winter Storms	Elmore	NA*	13	0.00
Winter Storms	Millbrook	NA*	13	0.00
Winter Storms	Tallassee	NA*	13	0.00
Winter Storms	Unincorporated Elmore County	NA*	13	0.00
Winter Storms	Wetumpka	NA*	13	0.00
Winter Storms	Montgomery County	4	13	0.31
Winter Storms	Montgomery	NA*	13	0.00
Winter Storms	Unincorporated Montgomery County	NA*	13	0.00
Winter Storms	Pike Road	NA*	13	0.00

Source: National Weather Service, Storm Event Database, 2020)
*** (winter storms are only recorded at the county level)*

3.17 Technological and Human Caused

Autauga, Elmore, and Montgomery counties have a susceptibility to technological and human-caused hazards. General discussions of hazards that may affect the area are described in the subsections below.

3.17.1 Structural Fire

The building codes and zoning ordinances prevent and control structures in most jurisdictions. Structures in commercial districts are the most vulnerable to fire separate from wildfires. This vulnerability can be attributed to more urban building patterns where these structures are located. Rural jurisdictions are typically served by volunteer fire departments, which continuously improve the services to the community. Larger jurisdictions in the planning area are better equipped to deal with responding to structural fires.

3.17.2 Hazardous Material

A hazardous material is handled at some industrial and commercial businesses located in the planning area, which is an ongoing hazard due to the transportation of material. An accident with hazardous material could have negative impacts on the nearby areas. This section will be updated when more information regarding hazardous material is received

3.17.3 Terrorism

FEMA classifies terrorism as using illegal force or violence against persons or property for the purpose of intimidation or ransom, performed by a domestic or international group. The threat of terrorism places certain facilities at greater risk, including government facilities, high profile areas, and utility infrastructure. Please refer to the examples below about different types of terror acts.

Biological or Chemical Attack: Liquid or other containments that can be dispersed to cause causalities and negative psychological impact

Conventional Attacks: Active shooter, an individual or small group, which actively engaged in killing or attempting to kill people in a populated area.

Cyber Attacks: Normally used to gain information or negatively affect operations fuel to intrusion into a computer system or server.

Hostage Situation: Holding people against their will in order to achieve demands, which can be on the realm from international political situations to local domestic situations.

State and local agencies regularly conduct exercises and plan for these hazards.

SECTION 4. Vulnerability

4.1 Jurisdictional Vulnerability by Hazard
4.2 Risk Index
4.3 Probability of Future Occurrences
4.4 Total Population and Property Valuation Summary by Jurisdiction
4.5 Critical Facilities/ Infrastructure by Jurisdiction

4.1 Jurisdictional Vulnerability by Hazard

The stakeholders Autauga, Elmore and Montgomery counties considered all the natural hazards that could affect the citizens and property in Autauga, Elmore and Montgomery counties. The stakeholders used personal and professional experience, internet information, and risk assessment reports, past occurrences, public input, and other resources to identify hazards that are most likely to affect each jurisdiction in Autauga, Elmore, and Montgomery counties.

This section focuses on 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.

4.1.1 Dams

In Autauga County, two dams' hazard potential are classified as high, Pickering Lake Dam and Crystal Lake Dam. In the event that one of these dams failed the areas, persons, infrastructure, and buildings could be impacted: unincorporated western Autauga County, eastern Autagauville, and unincorporated southern Autauga County.

In Elmore County, eight dams' hazard potential are classified as high, Martin Dam, Jordan Dam, Walter Bouldin Saddle Dike, Pigeon Roost Creek, Walter Bouldin, Spiegner, Yates, and Thurlow. In the event that one of these dams failed the areas, persons, infrastructure, and buildings /structures could have devastating impacted. The largest dams in Elmore County are Martin (1,622,000 acres), Jordan (235,000 acres), and Yates (54,000 acres). In the even that one of these large dams failed the damage would be catastrophic to the communities in the surrounding area resulting in major destruction, injury, or loss of life. Fortunately, the likelihood of a failure from one of these large dams is extremely unlikely due to federal regulations.

In Montgomery County, four dams' hazard potential are classified as high, Duggar, Newell Lake, Dabss Lake, and EC Lane Lake. In the event that one of these dams failed the areas, persons, infrastructure, and buildings could be impacted: unincorporated southwest Montgomery County along Highway 31; east of the City of Montgomery and south of I-85; east of the City of Montgomery and north of I-85; southwest of unincorporated Montgomery County and southeast of I-65; northeast of the Montgomery Regional Airport and south of Highway 80.

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any jurisdiction in Autauga, Elmore and Montgomery counties. This information will be provided in the next Hazard Mitigation Plan in five years.

4.1.2 Drought

There is not a risk of losses for droughts based on a calculation from the historical record because zero damages have been reported for Autauga, Elmore and Montgomery counties. The lack of evidence does not dismiss the risk associated with drought since qualitative records exist to show

evidence of significant crop losses and risk to public water supply during drought. Drought are potentially damaging to local agriculture and place the public at risk through water shortages in all jurisdictions in central Alabama. A significant drought could impact the drinking water supply from the following sources: Lake Martin, Lake Jordan, well water/groundwater, and Tallapoosa River. The sources serve the following jurisdictions: Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery. When a severer drought occurs the water levels are depleting any jurisdiction (public water system or private well) resulting in a water shortage for the communities, which would impact all 363,353 person water supply or private wells. If agricultural lands and crops fail due to drought it would impact 0.9% of Autauga County's, 0.9% of Elmore County's, and 0.1% Montgomery County. The livestock and agricultural lands are mostly in unincorporated portions of Autauga, Elmore, and Montgomery counties. The rivers and lakes such as Lake Martin, Lake Jordan, Alabama River, Coosa River, or Tallapoosa River provide large areas for recreation for locals and tourist. The people bring in outside dollars for the local economies, but when a drought takes place the local economy suffers due to water shortages.

A Drought can potentially impact all 363,353 residents, living in any jurisdiction in Autauga, Elmore and Montgomery counties. The impacts felt by the communities would be as followed: diminished ground and surface water; loss of crops; decrease in drinking water supply; private and public wells dry up. A drought can lead to shortages of water, strain public utilities, and major agriculture and tourism losses. The risk of drought is low to medium.

4.1.3 Earthquakes

While damage from a major earthquake could be catastrophic, the risks are very low for Autauga, Elmore and Montgomery counties. According to the USGS historical records, zero earthquakes have been reported in Autauga, Elmore and Montgomery counties.

Earthquakes could potentially impact all 363,353 residents and 180,794 structures Autauga, Elmore and Montgomery counties. If a large earthquake from the new madrid, South Carolina seismic zone, or the southern Appalachian seismic zone. A significant earthquake is highly unlikely while a improbable one could result in widespread damage and destruction. Since the overall risk of an earthquake is very low, the risk to lives and buildings minimal. While the risk is very low, it is important that the mitigation practices for earthquakes compliment other mitigation strategies and should be reviewed and incorporated into the mitigation plan.

The losses from earthquakes cannot be calculated based on the historical recorder since there have been zero earthquakes recorded in Autauga, Elmore and Montgomery counties. This evidence does not dismiss the risk associated with earthquakes. The probability of any type of losses from an earthquake in any jurisdiction in Autauga, Elmore and Montgomery counties is very low.

4.1.4 Extreme Temperature

Extreme temperatures in Autauga, Elmore, and Montgomery counties can impact all 363,353 residents. Prolonged periods of high or low temperatures are not likely to impact the structures and facilities. However, these events might work in tandem with droughts or winter storm events. The

probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of a cold event is rated as low to critical largely based on duration these events in the region have been short-lived. The following persons, industry, and assets are vulnerable to extreme temperatures in the Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Town of Pike Road, and City of Montgomery, and unincorporated Autauga, Elmore and Montgomery counties: elderly population (75+), children, water sources (public and private), livestock/animals, agricultural products, persons living in manufactured homes, a person under the poverty line, bridges (extreme cold), fisheries, forestry, as well as utilities such as power lines and water lines/pipes (extreme cold.). It necessitates a review of mitigation planning techniques to avoid injury to vulnerable populations, in particular the elderly population.

4.1.5 Flooding

Flooding is localized to areas close to surface water such as along the Coosa, Tallapoosa and Alabama Rivers, any major tributaries, or any additional areas with poor drainage. Flood hazard areas are most readily identifiable when they appear on a flood hazard map produced by FEMA. However, flooding can impact a larger area than the properties shown of the FEMA Flood maps when unpredictable weather patterns occur or changes to drainage features take place. Due to lack of data, it is unclear how many persons are vulnerable to flooding across Autauga, Elmore, and Montgomery counties. There are 95 NFIP policies in Autauga County. Based on the FEMA Flood Map persons living in flood zones in the town of Autagaville, Town of Billingsley, City of Prattville and Unincorporated Autauga County are the most at risk compared to those living in the flood zones.

The Town of Autaugaville has a small floodplain compared to other jurisdictions in Autauga County. The floodplain is towards the eastern and southern portions of town. The flooding that occurs in Autaugaville is associated with creeks and streams overflowing their banks. When flooding occurs, residential homes, businesses, roads, utilities, bridges, and recreational facilities are vulnerable. Particularly those persons in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Autaugaville's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, which can place a financial strain on the town and the local economy.

In the Town of Billingsley, the floodplains are located towards the western and southern portions of the cities along creek and streams. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Billingsley is associated with creeks and streams overflowing their banks. When flooding occurs residential homes, businesses, roads, utilities, and bridges are vulnerable. Particularly, those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Billingsley's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain.

In the City of Prattville, the floodplains are located throughout the entire city along creek and streams. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Prattville is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain in an urban area with lots of impervious surfaces. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat the flood. The City of Prattville's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain. On September 19, 2019, the community of Pine Flat suffered 1million dollars of property damage due to a flash flooding event.

The unincorporated areas of Autauga County do have potions of each county that are located in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and the Alabama River. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development storm water management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Autauga Countiy can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process.

There are 478 NFIP policies are in Elmore County, but based on the FEMA Flood Map persons living in flood zones in the Town of Coosada, Town of Deatsville, Town of Eclectic, Town of Elmore, Town of Tallassee and Unincorporated Elmore County are the most at risk compared to those living in the flood zones.

In the Town of Coosada, the floodplain goes right through the heart of the town. Citizens, commercial buildings, structures, roads, utilities, post office, Town Hall, senior center, and some residential housing are all vulnerable to flooding. This flooding is associated with poor storm water management and creeks that run through the town. A flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Coosada's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town has to continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding.

The Town of Deatsville's floodplain goes through a portion of the city, but the majority of it goes along the Northern border of the city. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to

recover, to relocate, or to evacuation. Deatsville's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

In the Town of Eclectic, the floodplain is not near the town limits. Still, a flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuate. The Town of Eclectic's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town has to continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding.

The Town of Elmore's floodplain goes through a large portion of the town. The floodplain comes from Mortar Creek, which runs through the center of the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Elmore's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

In the Town of Tallaassee, the floodplain goes right along the eastern border of the town. Citizens, commercial buildings, structures, roads, utilities, post office, Town Hall, senior center, and some residential housing are all vulnerable to flooding. This flooding is associated with poor storm water management and creeks that run through the town. A flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Tallaassee's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town has to continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding.

In the City of Wetumpka, the floodplains in the center of the city due to the Coosa River running through the center. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Prattville is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain in an urban area with lots of impervious surfaces. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat the flood. The City of Wetumpka's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain.

The unincorporated areas of Elmore County does have potions of each county that are located in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and the Coosa River. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development storm water management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Elmore County can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process. The risk associated with flooding was assessed to be high for Elmore County. On May 7, 2009, the town of Millbrook suffered 4.9 million dollars of property damage caused by a flash flooding event. Since floods cause significant damage to large numbers of structures, it is necessary to improve and continue the mitigation action plan to address potential losses.

There are 1,264 NFIP policies are in Montgomery County, but based on the FEMA Flood Map persons living in flood zones in the City of Montgomery, the Town of Pike Road and Unincorporated Montgomery County are the most at risk compared to those living in the flood zones.

In the City of Montgomery, the floodplains in the center of the city due to the Alabama River and Gun Island Chute running through the northern center of the city. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Prattville is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain in an urban area with lots of impervious surfaces. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat the flood. The City of Montgomery's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain.

The Town of Pike Road's floodplain goes through a small portion of the town. The floodplain runs through the south western portion of the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Pike Road's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

The unincorporated areas of Montgomery County does have potions of each county that are located in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and the Alabama River. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would be

persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development storm water management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Montgomery County can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process. The risk associated with flooding was assessed to be high for Montgomery County. On May 7, 2009, the City of Montgomery suffered 1.8 million dollars of property damage caused by a flash flooding event. Since floods cause significant damage to large numbers of structures, it is necessary to improve and continue the mitigation action plan to address potential losses.

Please refer to Table 4.1 to see the NFIP repetitive loss information for Autauga, Elmore, and Montgomery counties.

Table 4.1 NFIP Repetitive Loss Properties

County Name	Community Name	Occupancy	FMA RL Properties	Insured FMA RL Properties	Total Paid in Claims on FMA RL Properties	NFIP RL Properties	Insured NFIP RL Properties	Total Paid in Claims on NFIP RL Properties
AUTAUGA COUNTY	AUTAUGA COUNTY *	SINGLE FMLY	-	-	$-	1	-	$50,310
AUTAUGA COUNTY	MONTGOMERY, CITY OF	ASSMD CONDO	-	-	$-	1	1	$28,972
AUTAUGA COUNTY	MONTGOMERY, CITY OF	OTHR-NONRES	-	-	$-	3	-	$334,730
AUTAUGA COUNTY	MONTGOMERY, CITY OF	OTHR-NONRES	-	-	$-	1	-	$126,199
AUTAUGA COUNTY	MONTGOMERY, CITY OF	SINGLE FMLY	-	-	$-	12	4	$353,453
AUTAUGA COUNTY	MONTGOMERY, CITY OF	SINGLE FMLY	4	-	$326,724	4	-	$528,943
AUTAUGA COUNTY	PRATTVILLE, CITY OF	OTHR-NONRES	-	-	$-	1	-	$196,702
AUTAUGA COUNTY	PRATTVILLE, CITY OF	SINGLE FMLY	-	-	$-	3	3	$39,123
ELMORE COUNTY	WETUMPKA, CITY OF	SINGLE FMLY	-	-	$ -	1	1	$ 29,789
MONTGOMERY COUNTY	MONTGOMERY COUNTY *	SINGLE FMLY	-	-	$ -	2	1	$ 83,333

Source: FEMA, Repetitive Loss Properties, 2020

4.1.6 Hail

Hail can impact all 363,353 residents living and all 180,794 structures in Autauga, Elmore, and Montgomery counties. The following persons, industry, and assets are vulnerable to hail in the Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Town of Pike Road, and City of Montgomery, and unincorporated Autauga, Elmore and Montgomery counties:vehicles (damage), home roofs (damage/destruction), windows (break/crack), person (injury or kill), livestock/animals (injury or kill), damage to crops and timber, manufactured homes, buildings walls (not brick), and power lines. The vulnerability to hail is sporadic due to the nature of damages incurred from hail, such as roofs, windows, homes, and automobiles. The overall risk from hail is low to medium, but due to the community's capacity to implement mitigation strategies against hail is nearly impossible. Protection is largely limited to property design, maintenance, and insurance, which are individual responsibilities. Unfortunately, due to the isolation of hail events, it is not feasible to conduct through public education and community investments.

4.1.7 Landslides

Zero landslide have been recorded by the any of the EMA offices in Autauga, Elmore, or Montgomery counties. Since these counties have not experienced a landslide I is difficult to estimate the future damages or the probability of future occurrences. The Primary effects of a landslides in Autauga, Elmore, and Montgomery counties would include property damages, road closures, erosion of soil, and infrastructure damages. The overall risk for landslides is low.

4.1.8 Lightning

Lightning strikes can impact all 363,353 residents living, all 180,794 structures in Autauga, Elmore, and Montgomery counties. Vulnerability to lightning is limited to scattered injury or loss of life as well as damages to properties such as homes, electronics, structures, and data losses. The following persons, industry, and assets are vulnerable to lightning in the Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery.: elderly persons, children, persons outside during lightning events, power lines, timber/trees, manufactured homes, crops, homes, structures, data not backed up, livestock/animals, electronics plugged into an outlet (computers, household appliances, or data servers), and any person in or on water (pool or boat). The overall risk from lightening is medium, it is necessary to review potential and current mitigation strategies due to how common and highly destructive lightning can be to a community.

4.1.9 Sinkholes

Sinkholes are a minor threat to all jurisdictions Autauga, Elmore, and Montgomery counties because these sinkholes are typically manmade. Since sinkhole events are sporadic and rare, these events can potentially cause damage to life or property on a small scale. Homes, manufactured homes, structures, roads, utilities, persons, livestock /animals, and vehicles in all jurisdictions could be vulnerable to a manmade sinkhole. Due to the lack of data on sinkholes in the Autauga, Elmore, and Montgomery counties at this time, it is not possible to know how many persons, structures, buildings, and infrastructure are vulnerable to sinkholes in each jurisdiction. However,

a mitigation plan is provided for sinkholes based on the ability of local jurisdictions to encourage thoughtful land use regulation and good infrastructure design.

4.1.10 Tornadoes

All 363,353 residents living and all 180,794 structures in Autauga, Elmore, and Montgomery counties are vulnerable to tornadoes. Although the location of where tornadoes take place is sporadic, losses from these tornado events can impact a wide variety of persons, assets, and infrastructure in each jurisdiction. The following persons, assets, and industry in Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery: elderly person, children, education institutions, medical facilities, persons in vehicles, vehicles, group homes, apartment complexes, manufactured homes, power lines, timber/trees, livestock/ animals, manufacturing facilities, residential homes, dilapidated homes, buildings, structures, roofs, and Frank Plant (Power Plant in Smiths Station).

All 13,764 manufactured homes in Autauga, Elmore, and Montgomery counties are at risk of tornado depression because these homes are not built to withstand winds greater than 70 mph. These homes can be toppled, walls roofs can be ripped, or the home can be completed destroyed in a tornado. Persons living in manufactured homes, elderly persons, persons living in apartment complexes, persons living in poverty, and children at home alone may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a tornado event, which can put their lives at risk. These persons are found in every jurisdiction in Autauga, Elmore, and Montgomery counties. The economy is also vulnerable to tornadoes if jurisdiction is hit hard enough destroying major retail stores, residential areas, schools, major employers, or utilities. Losing these assets will take a community year to recover and lots of money, which puts negative strains on the economy and causes the local jurisdiction to lose tax revenue. The overall risk from tornadoes is high, it is necessary to review potential and current mitigation strategies due to how sudden and destructive tornadoes can be to a community.

4.1.11 Tropical Depression / Tropical Storm/ Hurricane

A tropical depression, tropical storm, or hurricane can impact all 363,353 residents living and all 180,794 structures in Autauga, Elmore, and Montgomery counties. Losses from high winds, heavy rains, and tornadoes from a tropical depression, tropical storm, or hurricane can impact homes, crops, timber, and infrastructure in all jurisdictions in Autauga, Elmore, and Montgomery counties. Risk tropical depression, tropical storm, or hurricane are high and require mitigating responses from all levels of government and from individuals throughout the region.

The potential areas of vulnerability during a tropical depression or tropical storm would be similar to those felt during a severe thunderstorm, flash flooding, or a tornado. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to high winds/thunderstorms in the Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery: elderly persons, persons driving vehicles, vehicles, manufactured homes, power lines, power, crops and timber, injury to a person, buildings constructed of wooden or vinyl,

dilapidated homes/structures, vehicles, persons living below the poverty line, and windows. Each jurisdiction can have issues due to the damages that high winds and thunderstorms can cause such as roads may be closed due to debris blocking the roads, downed "live" power lines can cause injury or death to persons, loss of power, loss of working traffic signals, disrupted utilities from uprooted trees, and communication issues due to loss of power.

All 13,764 manufactured homes in Autauga, Elmore, and Montgomery counties are at risk during a tropical depression or tropical storm because the building materials can suffer from severe damage due to a strong straight line. These homes can be toppled as well as walls and roofs can be ripped off if the straight-line winds are strong enough. Those people may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a high wind and thunderstorm event, which can put their lives at risk.

4.1.12 Wildfire

Wildfires are a potentially damaging hazard that is experienced in Autauga, Elmore, and Montgomery counties. The areas that are closest to fuel sources such as uncleared forestland and timberland can be impacted negatively if a wildfire breaks out. While wildfires can impact all 363,353 residents living and all 180,794 structures in Autauga, Elmore, and Montgomery counties. All persons living in rural areas, 7,908 households in unincorporated Autauga County, 3,892 households in unincorporated Elmore County, and 6,377 households in unincorporated Montgomery County are at a greater risk to wildfires than those living in urban areas because of the long emergency response times and longer report times. The elderly living in each jurisdiction are vulnerable to wildfire because these persons may not be able to evacuate, or they may start the fire on accident. Timber, property, wildlife, and injury or loss of human life are all vulnerable to wildfires in each jurisdiction.

4.1.13 Winter Storm

Although winter storms are infrequent, these storms threaten all 363,353 residents living and all 180,794 structures in Autauga, Elmore, and Montgomery counties. Although a catastrophic loss is unlikely, all of the jurisdictions in Autauga, Elmore, and Montgomery counties are at risk from winter storms. These storms can damage structures that cannot properly bear the weight of ice and snow and can cause injury and loss of life where extended power outages and poor heating conditions may lead to exposure to the elements. The potential areas of vulnerability during the winter storm would be similar to those felt during extremely cold temperatures. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to winter storms in the Autauga County, Town of Autaugaville, Town of Billingsley, City of Prattville, Town of Elmore, Elmore County, Town of Deatsville, Town Coosada, Town of Eclectic, City Millbrook, Town Tallassee, Town Wetumpka, Montgomery County, Town of Pike Road, and City of Montgomery: elderly persons, utilities (water lines, power, power lines), persons driving vehicles, animals/ livestock, and trees/timber. Each jurisdiction's roads, bridges, traffic signals, and utilities can be vulnerable to winter storms if ice and/or snow accumulated in the jurisdictions. Persons living in poverty are more vulnerable to winter storms because they may not have the means to keep themselves and family members warm with or without power. The Town of Billingsley has the largest portion of their population living below the poverty line 32.2%, Town of Coosada has a poverty rate of 27.6%, the City of Tallassee's poverty rate is 23.7%, and in the City of Montgomery 21.90% of the population is living below the poverty line. Montgomery

County has 45,863, which largest population of people living below the poverty line in area according to the ACS 2018 5 year ACS Estimates.

4.2 Risk Index

The result of this process was the creation of a risk index, which established numeric ratings for each hazard relative to one another at the end of this section. Based on this analysis, the Stakeholder identified the following Tables 4.2 to 4.15 show the natural hazards as ones that continuously impact the jurisdictions of Autauga, Elmore, and Montgomery counties:

Table 4.2: Risk Index for Coosada

Coosada						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	Town does border on Alabama river. Failure would have drastic effect on several neighborhoods along the south side of the town.
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	8	All residential areas around the Alabama river and Coosada Creek are vulnerable. Also, several roads and streets in the neighborhoods area have the potential for localized flooding. Lower Gibson Town Rd and Pecan Grove Rd are areas prone to localized flooding

Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in town with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Town has not had any sinkholes in recent memory, but is in an area with a large creek.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Adjoining town was struck by straightline winds. This town is similar and would have same type damages.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the nursing home and could cause loss of life to the elderly within the town. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.3 Risk Index for Deatsville

Deatsville						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	● Highly Likely ● Likely ● Possible ● Unlikely	● Large ● Moderate ● Small ● Very Small	● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	● Long ● Med. ● Short	Rank From 1-10 10=High 1=Low (Median)	What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Unlikely	Very Small	N	Short	1	Unlikely. Closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas are vulnerable. Also, several roads and streets in the neighborhoods have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in town with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or

						damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Town has not had any sinkholes in recent memory. Also, if sinkhole developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the town. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.4 Risk Index for Unincorporated Elmore County

Unincorporated Elmore						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Possible	Large	Catastrophic	Long	8	Many unincorporated areas lie along one of the three rivers in the county. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along Tallapoosa, Coosa, and Alabama rivers are at risk. Also, the area below the Walter Bouldin Dam from Lake Jordan is at risk.
Drought	Likely	Moderate	Limited	Med	9	Would cause major issues to farmers within the county. Also, could cause issues with providing drinking water to communities.
Earthquake	Possible	Large	CR	Long	5	County is near some fault lines. Could cause damage to major infrastructure and industries that have hazardous materials.
Extreme Temperatures	Likely	Small	Limited	Short	8	Temps would affect the elderly community and the nursing homes in the unincorporated area such as Charleton Place. Could also cause cases of heat exhaustion or stroke to anyone working or playing outside.
Flooding	Highly Likely	Moderate	Limited	Short	8	Flooding is possible along the three rivers that run throughout the county. Most flood plain in the unincorporated areas is pasture or farmland that affects

						those sectors. Extreme flooding of the Tallapoosa or Alabama rivers can reach and affect homes and neighborhoods along the Rifle Range Rd, Dozier Rd., Alabama River Pkwy, and south of Prattville areas. Severe flooding along the Tallapoosa south of Tallassee could cause issues with industrial businesses along Hwy 229. Coosa River flooding north of Wetumpka could cause issues to homes and neighborhoods between Lake Jordan and Wetumpka. Finally, any flooding of Lake Jordan or Lake Martin would cause issues to neighborhoods and lake homes along these major lakes.
Hazard						
Landslides	Possible	Small	Limited	Short	3	Landslides would be possible in some of the areas in Redland or Emerald Mountain areas. Would affect homes and neighborhoods. Could affect some state and county roads that are primary routes for communities.
Lightning	Highly Likely	Moderate	Limited	Short	9	Lightning could damage homes or businesses throughout the unincorporated area. Also, could cause fires during droughts. Many outdoor activities that put citizens are risk of lightning.
Sinkholes	Likely	Moderate	Limited	Med	5	Sinkholes have developed in the recetn past, mainly along low lying areas or parts of the county that have rivers or streams. Could damage homes or major roadways that would have major effects on commuting, transit, or access to local hospitals.
Thunderstorm	Highly Likely	Small	Limited	Short	9	Storm damage would have effects on neighborhoods, businesses and industry. Damage could cause electrical

						issues that would have major impacts on a variety of critical infrastructure.
Tropical Storm /Tropical Depression / Hurricane	Likely	Large	CR	Long	5	A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. People in areas along the rural parts of the county, like around Lake Jordan and Lake Martin, could see power outages for several days. The power outages then would affect the fresh water supply.
Winter Storm	Likely	Large	CR	Short	6	Winter storm could cause loss of life to the elderly within the town. Also, would cause major travel issues along the major state highways.
Wildfire						Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.5 Risk Index for the Town of Elmore

Elmore						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Unlikely	Very Small	N	Short	1	Unlikely. Closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas around Mortar Creek are vulnerable. Also, several roads and streets in the Mercer Acres area have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in town with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Town has not had any sinkholes in recent memory, but is in an area with a large creek. Also, if sinkhole developed on two major state highways it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Town was recently struck by straightline wind event that caused

						large scale tree downing and damage to over 150 homes.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the nursing home and could cause loss of life to the elderly within the town. Also, would cause major travel issues along the two major state highways.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Tale 4.6 Risk Index for the Town of Eclectic

Eclectic						
Hazard	Frequency • Highly Likely • Likely • Possible • Unlikely	Magnitude • Large • Moderate • Small • Very Small	Severity • Catastrophic (C) • Critical (CR) • Limited (L) • Negligible (N)	Duration • Long • Med. • Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Unlikely	Very Small	N	Short	1	Unlikely. Closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas are vulnerable. Also, several roads and streets in the neighborhoods have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in town with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Town has not had any sinkholes in recent memory. Also, if sinkhole developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and

/Tropical Depression / Hurricane						localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the town. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.7: Risk Index for the City of Millbrook

Millbrook						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Possible	Large	Catastrophic	Long	8	Many unincorporated areas lie along one of the three rivers in the county. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along Tallapoosa, Coosa, and Alabama rivers are at risk. Also, the area below the Walter Bouldin Dam from Lake Jordan is at risk. Millbrook would be affected by this type of event.
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas around Mill Creek are vulnerable. Also, several roads and streets in the Main Street and Pine leaf Drive area have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in the city with hilly or elevated areas at risk to landslides

Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Millbrook has not had any sinkholes in recent memory. Also, if sinkhole developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the city jurisdiction.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the community. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.8 Risk Index for the City of Prattville

City of Prattville						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Possible	Large	Catastrophic	Long	8	Prattville and Autauga County have no large dams but would defiantly be affected by the five in Elmore County. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along the Alabama river are at risk. Autauga Creek would flood
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire city
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas around Cooter's Pond are vulnerable. Also, several roads and streets in the area have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in the city with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Prattville has not had any sinkholes in recent memory. Also, if sinkhole

						developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the community.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the community. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.9: Risk Index for the City of Tallassee

Tallassee						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Possible	Large	Catastrophic	Long	8	Many unincorporated areas lie along one of the three rivers in the county. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along Tallapoosa, Coosa, and Alabama rivers are at risk. Martin Dam is the catalyst if it fails Yates and Thurlow are sure to fail as well this could cause the Benjamin Fitzpatrick Bridge to fail causing the city to be divided geographically.
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in the community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire city
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas around the city are vulnerable. Also, several roads and streets in the Southside area have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in the city with hilly or elevated areas at risk to slides
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system

Sinkholes	Possible	Small	Limited	Med	3	City has not had any sinkholes in recent memory. Also, if sinkhole developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the community.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the community. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.10: Risk Index for the Town of Wetumpka

Wetumpka						
Hazard	Frequency ● Highly Likely ● Likely ● Possible ● Unlikely	Magnitude ● Large ● Moderate ● Small ● Very Small	Severity ● Catastrophic (C) ● Critical (CR) ● Limited (L) ● Negligible (N)	Duration ● Long ● Med. ● Short	Vulnerability Rank From 1-10 10=High 1=Low (Median)	Geographic Locations Vulnerable What specific areas/persons /infrastructure are at risk to this hazard
Dam failure	Possible	Large	Catastrophic	Long	8	Many unincorporated areas lie along one of the three rivers in the county. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along Tallapoosa, Coosa, and Alabama rivers are at risk. Also, the area below the Walter Bouldin Dam from Lake Jordan, Downtown Wetumpka, Hwy 231 @ Redland Road behind Camo Country are at risk.
Drought	Highly Likely	Large	L	Long	7	Drought would affect farmers in community
Earthquake	Possible	Very Small	N	Short	3	Would impact entire city
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire community but especially the elderly
Flooding	Likely	Small	Limited	Short	5	All residential areas around, Downtown Wetumpka, Hwy 231 @ Redland Road behind Camo Country are at risk and are vulnerable. Also, several roads and streets in the White Water Ridge area have the potential for localized flooding
Hazard						
Landslides	Unlikely	Very Small	Negligible	Short	1	Not any areas in the city with hilly or elevated areas at risk to slides The area on

						Hwy 231 near the rest area have been prone to some slides during periods of heavy rain.
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	City has had two major sinkholes in recent memory both occurred near downtown. Also, if sinkhole developed on major state highway it could have lasting issues within the community
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Many areas nearby have been affected greatly by thunderstorm damage recently.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the community.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm could cause loss of life to the elderly within the community. Also, would cause major travel issues along the major state highway
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.11 Risk Index for Autaugaville

Autaugaville						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Large	Catastrophic	Long	8	Autaugaville, Alabama River Area
Drought	Likely	Moderate	Limited	Medium	5	Autaugaville
Earthquake	Unlikely	Very Small	Negligible	Short	1	Autaugaville
Extreme Temperatures	Highly Likely	Moderate	Limited	Short	6	Autaugaville
Flooding	Highly Likely	Large	Critical	Medium	8	Autaugaville, Alabama River Area
Landslides	Unlikely	Very small	Negligible	Short	1	Autaugaville
Lightning	Likely	Small	Limited	Short	5	Autaugaville
Sinkholes	Unlikely	Small	Negligible	Short	1	Autaugaville
Thunderstorm	Highly Likely	Moderate	Limited	Short	8	Autaugaville

Tropical Storm /Tropical Depression Hurricane	Possible Possible Possible	Moderate Moderate Moderate	Limited Limited Limited	Short Short Short	3 3 3	Autaugaville Autaugaville Autaugaville
Winter Storm	Possible	Small	Limited	Short	4	Autaugaville
Wildfire	Likely	Moderate	Limited	Short	7	Autaugaville

Table 4.12: Risk Index for the Town of Billingsley

Billingsley						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	

	● Possible ● Unlikely	● Small ● Very Small	● Limited (L) ● Negligible (N)	● Short		
Dam failure	Unlikely	Small	Limited	Short	2	Billingsley
Drought	Likely	Moderate	Limited	Short	7	Billingsley
Earthquake	Unlikely	Small	Negligible	Short	1	Billingsley
Extreme Temperatures	Highly Likely	Moderate	Critical	Medium	8	Billingsley
Flooding	Unlikely	Small	Limited	Short	2	Billingsley
Landslides	Unlikely	Small	Negligible	Short	2	Billingsley
Lightning	Highly Likely	Moderate	Limited	Short	8	Billingsley
Sinkholes	Unlikely	Small	Negligible	Short	2	Billingsley
Thunderstorm	Highly Likely	Moderate	Limited	Short	8	Billingsley
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Medium	3	Billingsley
Winter Storm	Likely	Moderate	Limited	Short	5	Billingsley, Hwy 82, County Road 1
Wildfire	Likely	Moderate	Limited	Short	7	Billingsley

Table 4.13: Risk Index for Unincorporated Autauga County

Unincorporated Autauga						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	• Highly Likely	• Large	• Catastrophic (C)	• Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	• Likely	• Moderate	• Critical (CR)	• Med.	From 1-10 10=High 1=Low (Median)	
	• Possible	• Small	• Limited (L)	• Short		
	• Unlikely	• Very Small	• Negligible (N)			
Dam failure	Possible	Large	Critical	Long	3	County Wide
Drought	Likely	Moderate	Limited	Short	5	County Wide
Earthquake	Unlikely	Moderate	Limited	Short	2	County Wide
Extreme Temperatures	Highly Likely	Moderate	Limited	Short	8	County Wide
Flooding	Possible	Large	Critical	Long	6	County Wide
Landslides	Unlikely	Small	Limited	Short	2	County Wide
Lightning	Highly Likely	Moderate	Limited	Short	8	County Wide
Sinkholes	Unlikely	Small	Limited	Short	2	County Wide
Thunderstorm	Highly Likely	Moderate	Limited	Short	8	County Wide
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Short	4	County Wide
Winter Storm	Likely	Moderate	Limited	Short	5	County Wide

Wildfire	Highly Likely	Moderate	Limited	Medium	7	County Wide

Table 4.14: Risk Index for the City of Prattville

Prattville						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Large	Catastrophic	Long	7	Downtown Prattville, Allenville Road
Drought	Likely	Moderate	Limited	Short	6	City of Prattville
Earthquake	Unlikely	Small	Limited	Short	1	City of Prattville
Extreme Temperatures	Highly Likely	Moderate	Limited	Short	7	City of Prattville
Flooding	Possible	Large	Catastrophic	Long	8	City of Prattville
Landslides	Unlikely	Small	Negligible	Short	1	City of Prattville
Lightning	Likely	Moderate	Limited	Short	7	City of Prattville
Sinkholes	Unlikely	Small	Limited	Short	1	City of Prattville
Thunderstorm	Likely	Moderate	Limited	Short	7	City of Prattville
Tropical Storm /Tropical	Possible	Moderate	Limited	Medium	3	City of Prattville

Depression / Hurricane						
Winter Storm	Likely	Moderate	Limited	Short	5	City of Prattville
Wildfire	Possible	Moderate	Limited	Short	3	City of Prattville

Table 4.15: Risk Index for the Town of Pike Road

All Jurisdiction In Montgomery County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerable
	• Highly Likely	• Large	• Catastrophic (C)	• Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	• Likely	• Moderate	• Critical (CR)	• Med.	From 1-10 10=High 1=Low (Median)	
	• Possible	• Small	• Limited (L)	• Short		
	• Unlikely	• Very Small	• Negligible (N)			
Dam failure						Northern part of Montgomery County would be affect/vulnerable to dam failure.
Drought						All of Montgomery County is vulnerable to drought.
Earthquake	Unlikely	Very Small				There are no records of past earthquakes affecting jurisdictions in Montgomery County. However, if an earthquake did occur all jurisdictions would be vulnerable.
Extreme Temperatures						All of Montgomery County is vulnerable to extreme temperatures.

Flooding						All of Montgomery County is vulnerable to flood. However, repetitive flooding occurs in the following areas. A. Dozier Road B. Old Selma C. Cedar Point D. Madison Park - Water Plant E. Louis Preiter F. Anderson Road G. Coosada Ferry Area
Landslides						No threat of landslides.
Lightning						All Montgomery County is vulnerable to lighting.
Sinkholes						No sinkhole threat in Montgomery County, but understanding that the areas listed for repetitive flooding could possibly have an issue. (see list below, same list as flooding above) A. Dozier Road B. Old Selma C. Cedar Point D. Madison Park - Water Plant E. Louis Preiter F. Anderson Road G. Coosada Ferry Area

Thunderstorm						All of Montgomery County is vulnerable to thunderstorms.
Tropical Storm /Tropical Depression / Hurricane						All of Montgomery County is vulnerable to tropical storms, tropical depression and hurricane as well.
Winter Storm						All of Montgomery County is vulnerable to winter storm.

Wildfire						Heavily wooded and grassed areas of Montgomery County area vulnerable to wildfires.

4.3 Probability of Future Occurrences and Damage Estimates

Tables 4.16 to 4.18 estimates hazard event frequency of occurrence cumulatively for Autauga, Elmore, and Montgomery counties. These estimates were calculated from events recorded over approximately a 13-year time period, 2006 to 2019 based on data from NOAA and local EMA. There is no guarantee the recorded level of hazard events will continue into the future at the same rate. However, the figures below will provide at least a possible estimate of potential damages.

Table 4.16: Probability of future Occurrence and Estimated Damages for Autauga County

Hazard	Occurrences	Time (Years) 2006-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	8 years in this time frame have been associated with a drought event	13	N/A	0.615	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	4 events (Heat & Cold)	13	$0	0.307 event per year	$0
Flooding***	14 events	13	$1,580,000	1.08 events per year	$112,857
Hail	23 events	13	$0	1.77 events per year	$0
High Winds/Thunderstorms	92	13	$232,000	7.08 events per year	$2,521
Landslides	N/A	13	N/A	N/A	N/A
Lightning	3 Lightning events resulting in damage/injury/death	13	$47,500	0.23 annual chance of lightning event resulting in damage/injury/death	$15,833
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	3 events	13	$7,000	0.1 event per year	$2,333
Tornadoes	21 events	13	$12,689,000	1.62 events per year	$604,238
Wildfire**	392 events	13	2,541.20 acres burned	30.15 events per year	6.4 acres
Winter Storms	6 event days	13	$0	0.46 event per year	$0

**The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision.*

***Due to the historical record on monitory figures for wildfires in Alabama this information was left blank.*

****Flooding figures may not be accurate due to information available.*

Table 4.17: Probability of future Occurrence and Estimated Damages for Elmore County

Hazard	Occurrences	Time (Years) 2006-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	10 years in this time frame have been associated with a drought event	13	N/A	0.769 event per year	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	7 events (Heat & Cold)	13	$0	0.53 event per year	$0
Flooding***	22 events	13	$4,902,000	1.69 events per year	$222,818
Hail	37 events	13	$5,000	2.85 events per year	$135.14
High Winds/Thunderstorms	92	13	$232,000	7.08 events per year	$2,521
Landslides	N/A	13	N/A	N/A	N/A
Lightning	9 Lightning events resulting in damage/injury/death	13	$115,000	0.69 annual chance of lightning event resulting in damage/injury/death	$12,777
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	5 events	13	$10,000	0.38 event per year	$2,000
Tornadoes	57 events	13	$51,613,000	4.38 events per year	$905,491
Wildfire**	198 events	13	2,353.60 acres burned	15.23 events per year	12.44 acres
Winter Storms	6 event days	13	$0	0.46 event per year	$0

**The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision. **Due to the historical record on monitory figures for wildfires in Alabama this information was left blank. ***Flooding figures may not be accurate due to information available.*

Table 4.18: Probability of Future Occurrence and Estimated Damages for Montgomery County

Hazard	Occurrences	Time (Years) 2006-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	10 years in this time frame have been associated with a drought event	13	N/A	0.769 event per year	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	11 events (Heat & Cold)	13	$150,000	0.85	$13,636
Flooding***	15 events	13	$1,800,000	1.15 events per year	$120,000
Hail	18 events	13	$0	1.38 events per year	$0
High Winds/Thunderstorms	63	13	$232,000	7.08 events per year	$2,521
Landslides	N/A	13	N/A	N/A	N/A
Lightning	0 Lightning events resulting in damage/injury/death	13	$	N/A	$0
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	4 events	13	$13,000	0.31 event per year	$3,250
Tornadoes	14 events	13	$2,192,000	1.08 events per year	$156,571
Wildfire**	210 events	13	2,353.60 acres burned	15.23 events per year	12.44 acres
Winter Storms	4 event days	13	$0	0.31 event per year	$0

The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision. **Due to the historical record on monitory figures for wildfires in Alabama this information was left blank.*Flooding figures may not be accurate due to information available.*

4. 4 Total Population and Property Valuation Summary by Jurisdiction

This data in Table 4.19 is derived from local municipal government and tax valuation from the local revenue offices, as well as the 2010 Census population. This data is for Tax Year 2019. This data provides an estimate of total exposure in the planning area.

Table 4.19: Total Population and Property Information by Jurisdiction

Jurisdiction	2018 Population	Number of Buildings	Tax Appraised Value of Improvements
Autauga County	55,200	35,989	$441,841,460
Town of Autaugaville	821	20,279	$939,939,040
Town of Billingsley	121	13,900	$386,677,600
City of Pratville	35,657	*14	$3,825,052
Elmore County	81,212	5,1836	3,074,354,420
Town of Coosada	1,116	1060	$57,181,990
Town of Deatsville	1,350	932	$81,641,110
Town of Eclectic	1,042	1,249	$137,447,570
Town of Elmore	1,607	800	$25,745,70
City of Prattville	35,657	743	$240,605,150
Town of Tallaasee	5,015	2,538	$180,521,110
City of Wetumpka	8,117	4,417	$335,966,870
Montgomery County	225,763	**88,581	**$10,708,326
City of Montgomery	NA***	NA***	NA***
Town of Pike Road	NA***	NA***	NA***

***It is important to note that actual values may be somewhat higher than those values assigned for tax purposes. Also, these values do not include tax-exempt structures such as government buildings and churches.*

****The individual data was unavailable at this time for Montgomery and Pike Road will be updated in 2025. This information was lumped into the Montgomery County data.*

4.5 Critical Facilities/Infrastructure by Jurisdiction

Critical facilities are defined as facilities that are essential to the community or may be crucial to the delivery of vital services, such as utilities and public safety. Critical facilities may also house or serve an at-risk population such as schools, hospitals, or nursing homes. Critical facilities would also likely result in catastrophic financial loss if severely damaged or destroyed, such as major industrial buildings, courthouses, and other government facilities. Critical facilities may vary from a transmission line that provides vital electricity to the community, to a hospital that provides medical care, or to the public safety facilities that serve a community.

A concerted effort was made using information from the public, EMA, local government officials, and industry stakeholders to identify the critical facilities. Such facilities were considered vital to transportation, energy, communication, health care, utility systems, food services, and the delivery of public safety. Structures that are occupied by at-risk populations such as schools are also

included. They are listed with the most current estimated replacement cost, according to their insured values in Table 4.20 through 4.22. The information listed below was provided by the individual jurisdictions.

Other critical facilities locations are the facilities that store Extremely Hazardous Substances (EPCRA Section 302-Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA, Section 313 Toxic Chemicals, CAA 122) Regulated Chemicals for Accidental Release Prevention and other facilities that are covered. Local EMA offices maintain these lists.

Table 4.21 to Table 4.23 are a list of critical facilities summarized by type in the planning area. This list is not all-inclusive and includes facilities prioritized by specific jurisdictions. An inventory of critical facilities will be reviewed periodically and continually updated to reflect any changes in each of the jurisdictions.

Table 4.20: Critical Facilities Asset Inventory and Estimates Values

Autauga County Critical Facilities within Floodways				
County	**Jurisdiction**	**Critical Facilities**	**Address**	**Estimated Cost**
Autauga	Autauga County	Courthouse	134 North Court Street	$ 22,332,252.84
Autauga	Autauga County	Courthouse Security	135 North Court Street	$ 392,251.40
Autauga	Autauga County	Courthouse Renovation	136 North Court Street	$ 980,098.37
Autauga	Autauga County	Lobby-Courthouse Security	137 North Court Street	$ 621,833.06
Autauga	Autauga County	Parking Lot Improvements Courthouse	138 North Court Street	$ 33,263.12
Autauga	Autauga County	Honeywell Energy Management System-Courthouse		$ 386,007.30
Autauga	Autauga County	Autauga County Jail	136 North Court Street	$ 3,025,691.70
Autauga	Autauga County	Autauga County Jail Annex Renovation	137 North Court Street	$ 71,144.75
Autauga	Autauga County	Human Resources/ Pension & Security	203 North Court Street	$ 923,216.08
Autauga	Autauga County	Board of Education	153 West 4th Street	$ 325,033.91
Autauga	Autauga County	Engineering Building	511m West 4th Street	$ 530,227.05
Autauga	Autauga County	County Maintenance Shop Building	511m West 4th Street	$ 488,998.47
Autauga	Autauga County	Newton Park Voting Site	101 Walker Street	$ 584,669.41
Autauga	Autauga County	Probate Building	176 West 5th Street	$ 1,144,174.68
Autauga	Autauga County	Revenue Building	218 North Court Street	$ 649,724.36
Autauga	Autauga County	Sheriff Department Renovation	164 West 4th Street	$ 318,917.91
Autauga	Autauga County	Sheriff Department Renovation	165 West 4th Street	$ 1,989,811.71
Total				**$ 34,797,316.12**
Autauga	City of Prattville	Autauga Creek Wastewater Treatment Plant	Reuben Road	$ 15,642,630.45
Autauga	City of Prattville	Pine Creek Wastewater Treatment Plant	100 Pine Creek Drive	$ 2,717,379.75
Autauga	City of Prattville	Prattville City Hall	101 West Main Street	$ 3,082,905.90
Autauga	City of Prattville	Prattville City Hall Annex	102 West Main Street	$ 1,103,953.15
Autauga	City of Prattville	Public Safety Building	201 Gin shop Hill Road	$ 2,421,100.00
Total				**$ 24,967,969.25**

Table 4.21: Critical Facilities Asset Inventory and Estimates Values

Elmore County Critical Public Facilities Listing			
JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Elmore County Commission	Essential/Law Enforcement	Judicial Building 8935 US Hwy 231	$10,256,400
	Essential/Law Enforcement	County Jail & Sheriff's Office, Comms. Bldg. 8955 US Hwy 231	$11,319,600
	Essential/Law Enforcement	Sheriff's Training Center 8923 US Hwy 231	$18,208,022
	Essential/Law Enforcement	Drug Task Force 8923 US Hwy 231	$1,785,715
	Essential/Medical Facility	County Health Department 7967 US Hwy 231	$1,302,900
	Essential/Governmental Ag/Family Services	County Extension Office Barn, Stalls & Sheds 100 Queen Ann Dr.	$868,500
	Essential/Governmental Ag/Family Services	County Extension Kitchen 100 Queen Ann Dr.	$81,600
	Essential/Governmental	Vacant Building 250 Hill St., Wetumpka, AL, 36092	$509,100
	Essential/Governmental Services	Courthouse & Annex 100 Commerce St.	$7,389,900
	Essential/Governmental Services - Hwy Infrastructure	Heavy Equipment Shop Open Shed and Fuel Island 155 County Shop Rd.	$1,088,400
	Essential/Governmental Hwy Infrastructure	County Engineers Office 155 County Shop Rd.	$1,939,200
	Essential/Governmental Emergency Support Function	EMA Storage Facility & Generator 8905 US Hwy 231	$1,159,200

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Elmore County Commission	Essential/Governmental Emergency Support Function/Command & Control	Elmore County EMA/EOC Dispatch/911 Administrative 8917 US Hwy 231	$5,175,300
	Essential/Governmental	Tenant Occupied People That Care 210 Old Mont. Hwy	$93,700
	Essential/Governmental	Crenshaw Park Complex Building, Restrooms, Pavillion, Concession, Rec Eqpt, and fences 100 Crenshaw Road	$426,900
	Essential/Governmental	Voting House 295 Old Ware Rd. Tallasse, 36078	$28,500
	Essential/Governmental	Radio Tower 2 Buildings w/ fences 2878 Fire Tower Road	$125450
	Essential/Governmental Emergency Public Information	Outdoor Siren – Santuck #1 7470 Central Plank Road Wetumpka, 36092	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Central 11575 Central Plank RD Wetumpka, 36092	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Seman 65 Tower Road Equality	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Holtville 160 Lightwood Rd Deatsville, 36022	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Friendship 4544 Friendship Rd Tallassee, 36078	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Redland #1 4367 Redland Rd Wetumpka, 36092	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Redland #2 6473 Redland Rd Wetumpka, 36093	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – REA Sub. Redland Road Wetumpka 36092	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Red Hill Hwy 229 & Hwy 50 Tallassee.36078	$33,700
	Essential/Governmental Emergency Public Information	Outdoor Siren – Santuck #2 5354 Georgia Rd Wetumpka, 36092	$33,700

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENTCOST
	Essential/Governmental Emergency Public Information	Outdoor Siren – Byuck #2 125 Laurel Creek Rd Titus, 36080	$33,700
		Outdoor Siren - Titus VFD 5879 Titus Road Titus, 36080	$33,700
		Outdoor Siren – Lightwood 6250 Lightwood Rd Deatsville 36022	$33,700
		Outdoor Siren – Five Star Five Star Water Treatment Wetumpka 36092	$33,700
		Outdoor Siren – Weoka CC 9745 Weoka Rd Wetumpka 36092	$33,700
		Outdoor Siren – Real Island 1495 Real Island Rd Equality, 36024	$33,700
		Outdoor Siren– Kowaliga #1 1240 Prospect Rd Eclectic 36025	$33,700
		Outdoor Siren – Windermere 3050 Crosswinds Alexander City, 35010	$33,700
		Outdoor Siren – The Ridge Thompson Road @ Ridge Alexander City 35010	$33,700
		Outdoor Siren – Friendship 2400 Dark Corners Rd Tallassee, 36078	$33,700
		Outdoor Siren – Ware Rd Voting Ware Rd @ Osborne LN Tallassee, 36078	$33,700
		Outdoor Siren– YMCA Camp Chandler 1240 Jordan Lake Rd Wetumpka, 36092	$33,700
		Outdoor Siren – Island Road End of Island Road Titus, 36080	$33,700
		Outdoor Siren– Kowaliga #2 4805 Mt Hebron Rd Eclectic, 36024	$33,700
		Outdoor Siren – Old Farm Old Farm Road Prattville, 36067	$33,700

		Outdoor Siren – Legends Park, Behind Home Depot Prattville, 36067	$33,700
Sub Total			$58,681,622.00

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENTCOST
Elmore County Board of Education	Essential/Education	Service Center, Eclectic, AL	$4,336,243
	Essential/Education	Coosada Elementary School	$11,440,362
	Essential/Education	Eclectic Elementary School	$8,915,597
	Essential/Education	Eclectic Middle School	$8,322,203
	Essential/Education	Elmore County High School	$11,721,497
	Essential/Education	Holtville Elementary School	$8,287,218
	Essential/Education	Holtville Middle School	$7,145,352
	Essential/Education	Holtville High School	$11,539,630
	Essential/Education	Millbrook Middle Junior High School	$14,886,648
	Essential/Education	Robinson Springs Elementary School	$7,062,010
	Essential/Education	Coosada Elementary School	$11,440,362
	Essential/Education	Stanhope Elmore High School	$14,825,378
	Essential/Education	Wetumpka Elementary School	$13,010,178
	Essential/Education	Wetumpka High School	$16,916,131
	Essential/Education	Wetumpka Middle School	$14,425,303
	Essential/Education	Wetumpka Junior High School	$8,119,057
	Essential/Education	Elmore County Area Vocational School	$5,336,479

Sub Total			$166,289,286

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Town of Coosada	Essential/Governmental	City Hall, 5800 Coosada Rd., 36020	500,000
	Infrastructure	Building/Shop	60,000
	Essential/Fire	Station #1 5830 Coosada Rd. C64	350,000
	Essential	Community Center	250,000
	Infrastructure/Public Works	Sewer Pump Station	100,000
Sub Total			1,260,000
Town of Eclectic	Essential/Government	City Hall, 50 Main St., 36024	$163,218
	Essential/Government	Municipal Building, 145 Main St.	$200,000
	Essential/Government	Conference Room 50 Main St.	$56,276
	Essential	Recreation Hall, 12 1/2 ® College St.	$26,139
	Essential/Fire	Fire Station, 140 First Ave.	$130,000
	Infrastructure/Public Works	Pumping Station, 335 Union Rd.	$28,139
	Infrastructure/Public Works	Pumping Station, 1500 Kowaliga Rd.	$28,139
	Infrastructure/Public Works	Pumping Station, 85 Kowaliga Rd.	$28,139
	Infrastructure/Public Works	Pumping Station, 400 West Collins Way	$28,139
	Infrastructure/Public Works	Pumping Station, 220-B Varner Rd.	$28,139

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Town of Eclectic Continued…	Infrastructure/Public Works	Pumping Station, 500 Nichols Ave.	$28,139
	Infrastructure	Storage Building, 50 Rear Main St.	$52,899
	Infrastructure/Contents	Aerators/Pumps/Panels, 700 N. College Ave.	$166,575
Sub Total			$963,941
Town of Elmore	Essential/Governmental	Town Hall, 36025	$95,000
	Essential/Governmental	Annex Building	$120,000
	Infrastructure	Storage Buildings	$65,000
		Lift Station and Fence	$175,000
		Sewer Meter Station	$25000
		3 Storm Shelters	$375,000
Sub Total			$855,000
City of Millbrook	Essential/Governmental	Police Court (1/1), Millbrook, 36054	$904,672
	Essential/Fire	Fire Station (2/1)	$582,227
	Infrastructure/Public Works	Street Department Shop (3/1)	$180,302
	Essential/Fire	Fire Station (4/1)	$108,911
	Essential/Fire	Fire Station (5/1)	$86,221
	Essential/Governmental	Probate Annex (6/1)	$42,294
	Essential	Activity Center (6/2)	$128,571

	Infrastructure/Public Works	Water Tank	$226,887
	Infrastructure/Public Works	Repeater Station	$13,198

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Sewage Treatment Plant (9/3)	2,348,592
City of Millbrook Continued…	Infrastructure/Public Works	Well & Fence (9/4)	$326,193
	Infrastructure/Public Works	Lift Pump & Fence (10/1)	$32,620
	Infrastructure/Public Works	Lift Pump & Fence (11/1)	$32,620
	Infrastructure/Public Works	Lift Pump & Fence (12/1)	$39,143
	Infrastructure/Public Works	Lift Pump & Fence (13/1)	$39,143
	Infrastructure/Public Works	Lift Pump & Fence (14/1)	$39,143
	Infrastructure/Public Works	Lift Pump & Fence (15/1)	$39,143
	Infrastructure/Public Works	Lift Pump & Fence (16/1)	$32,620
	Infrastructure/Public Works	Lift Pump & Fence (17/1)	$195,715
	Infrastructure/Public Works	Lift Pump & Fence (18/1)	$117,429
	Infrastructure/Public Works	Lift Pump & Fence (19/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (20/1)	$19,571
	Infrastructure/Public Works	Lift Pump & Fence (21/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (22/1)	$26,096

	Infrastructure/Public Works	Lift Pump & Fence (23/1)	$26,096

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Lift Pump & Fence (24/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (25/1)	$26,096
City of Millbrook Continued…	Infrastructure/Public Works	Lift Pump & Fence (26/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (27/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (28/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (29/1)	$63,338
	Infrastructure/Public Works	Lift Pump & Fence (30/1)	$19,571
	Infrastructure/Public Works	Lift Pump & Fence (31/1)	$19,571
	Infrastructure/Public Works	Lift Pump & Fence (34/1)	$32,620
	Infrastructure/Public Works	Lift Pump & Fence (35/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (36/1)	$32,620
	Infrastructure/Public Works	Lift Pump & Fence (37/1)	$26,096
	Infrastructure/Public Works	Lift Pump & Fence (38/1)	$36,533
	Infrastructure/Public Works	Lift Pump & Fence (39/1)	$36,533
	Infrastructure/Public Works	Lift Pump & Fence (40/1)	$32,620
	Infrastructure/Public Works	Lift Pump & fence (41/1)	$19,571

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Water Tank & Fence (42/1)	$652,388
	Essential/Governmental	City Hall (43/1), Millbrook, 36054	$707,399
	Essential	Parks & Recreation Building (45/1)	$59,703
	Essential	Parks & Recreation Building (46/1)	$113,436
	Essential	Civic Center (47/1)	$506,204
	Essential	Meeting Building (48/1)	$30,391
Sub Total			$8,152,149
City of Tallassee	Essential/Governmental	Dept. of Public Safety, 214 Barnett Blvd., 36078	$1,343,915
	Essential/Governmental	Recreation Dept. Building, 450 Gilmer Ave.	$304,412
	Essential/Governmental	City Shop, 450 (R) Gilmer Ave.	$152,091
	Infrastructure/Public Works	Water Filter Plant, 2 Old Bridge St.	$2,678,000
	Infrastructure/Public Works	Waste Water Treatment Plant	$1,345,000
	Essential/Fire	Fire Station #1, 123 North Ann Ave.	$346,057
	Essential/Fire	Fire Station #2, 140 Washington St.	$36,121
	Essential/Fire	Fire Station #3, 139 Twin Creeks Dr.	$279,130

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Essential/Governmental	City Hall & Council Chambers, 3 Freeman Ave.	$2,422,700
	Essential	Community Center, 445 Main St.	$238,810
	Essential/Governmental	Future Police & Jail Building	$505,000
Sub Total			$9,651,236
City of Tallassee Board of Education	Essential/Education	Central Office, 308 King St., 36078	$560,754
	Essential/Education	Southside Middle/Jr. High School 805 Friendship Rd.	$8,793,310
	Essential/Education	Tallassee Elementary School Barnett Blvd/Outer Dr.	$13,800,171
	Essential/Education	Tallassee High School Gilmer Ave.	$16,271,933
Sub Total			$39,426,168
City of Wetumpka	Essential/Governmental	City Hall, Wetumpka, 36092	$2,500,000
	Essential/Law Enforcement	Police Station, 208 Marshall St., Wetumpka, 36092	$1,000,000
	Essential/Fire	Station #1, Wetumpka, 36092	$400,000
	Essential/Fire	Station #2, Wetumpka, 36092	$100,000
	Essential/Fire	Station #3, Wetumpka, 36092	$100,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Essential	Civic Center, Wetumpka, 36092	$3,000,000
	Essential	Fain Sr. Center, Wetumpka, 36092	$400,000
	Infrastructure/Public Works	Public Works Facility, Red Eagle Dr., Wetumpka, 36092	$500,000
	Infrastructure/Public Works	Airport FBO	$650,000
Sub Total			$8,650,000
Fire Departments – Others	Essential/Fire	Santuck #1, 7645 Central Plank Rd.	$185,000
	Essential/Fire	Santuck #2, 5354 Georgia Rd.	$163,200
	Essential/Fire	Santuck #3, 2187 Dexter Rd.	$125.000
	Essential/Fire	Titus #1, Titus Rd.	$210,834
	Essential/Fire	Buyck Station #1 285 Buyck Road	$139,460
		Buyck Station #2, 125 Laurel Creek Rd.	$395,294
	Essential/Fire	Holtville Station #1, 5615 Ceasarville Rd.	$130,000
	Essential/Fire	Seman Station #1, 15915 Central Plank Rd.	$142,800
	Essential/Fire	Seman Station #2, 903 Mt. Hebron Rd.	$85,000
	Essential/Fire	Eclectic Station #1, 140 First St.	$153,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Essential/Fire	Eclectic Station #2, 839 Middle Rd.	$42,000
	Essential/Fire	Friendship Station #1, 4544 Friendship Rd.	$142,800
	Essential/Fire	Kowaliga Station #1, 1240 Prospect Rd.	$210,000
	Essential/Fire	Kowaliga Station #2, Mt. Hebron Rd.	$150,000
	Essential/Fire	Elmore Station #1, 15 Fire Station Rd.	$910,000
	Essential/Fire	Elmore Station #2, AL Hwy 143.	$85,000
	Essential/Fire	Windermere Station #1	$100,000
	Essential/Fire	Coosada Station #1, 5830 Coosada Rd.	$153,000
	Essential/Fire	Red Hill Station #1, 3558 Red Hill Rd.	$68,510
	Essential/Fire	Red Hill Station #2, Channel Creek Rd.	$71,400
	Essential/Fire	Redland Station #1, 4367 Redland Rd.	$130,560
	Essential/Fire	Redland Station #2, 6941 Redland Rd.	$265,800
	Essential/Fire	Lightwood Station #1, 6250 Lightwood Rd.	$85,000
	Essential/Fire	Real Island Station #1, 1495 Real Island Rd.	$276,706
	Essential/Fire	Emerald Mtn Station #1, 1785 Old Ware Rd.	$197,200
	Essential/Fire	Deatsville Station #1, 6940 AL Hwy 143	$173,400
Sub Total			$3,478,710

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST

	Essential/Fire	Eclectic Station #2, 839 Middle Rd.	$42,000
	Essential/Fire	Friendship Station #1, 4544 Friendship Rd.	$142,800
	Essential/Fire	Kowaliga Station #1, 1240 Prospect Rd.	$210,000
	Essential/Fire	Kowaliga Station #2, Mt. Hebron Rd.	$150,000
	Essential/Fire	Elmore Station #1, 15 Fire Station Rd.	$910,000
	Essential/Fire	Elmore Station #2, AL Hwy 143.	$85,000
	Essential/Fire	Windermere Station #1	$100,000
	Essential/Fire	Coosada Station #1, 5830 Coosada Rd.	$153,000
	Essential/Fire	Red Hill Station #1, 3558 Red Hill Rd.	$68,510
	Essential/Fire	Red Hill Station #2, Channel Creek Rd.	$71,400
	Essential/Fire	Redland Station #1, 4367 Redland Rd.	$130,560
	Essential/Fire	Redland Station #2, 6941 Redland Rd.	$265,800
	Essential/Fire	Lightwood Station #1, 6250 Lightwood Rd.	$85,000
	Essential/Fire	Real Island Station #1, 1495 Real Island Rd.	$276,706
	Essential/Fire	Emerald Mtn Station #1, 1785 Old Ware Rd.	$197,200
	Essential/Fire	Deatsville Station #1, 6940 AL Hwy 143	$173,400
Sub Total			$3,478,710

Central Elmore Water & Sewer Authority	Infrastructure/Public Works	Main Office, 716 US Hwy 231, Wetumpka, 36093	$850,000

	Infrastructure/Public Works	Intake, Wave Crest Rd., Eclectic, 36024	$2,500,000
	Infrastructure/Public Works	Filtration Plant, 80 Lake Point Rd., Eclectic, 36024	$10,000,000
	Infrastructure/Public Works	Maintenance Facility (N), 133 Lake Point Rd., Eclectic 36024	$550,000
	Infrastructure/Public Works	Maintenance Facility (S), 6545 Redland Rd., Wetumpka,36093	$900,000
	Infrastructure/Public Works	Water Storage Tank, 185 Middle Rd., Eclectic, 36024	$1,100,000
	Infrastructure/Public Works	Water Storage Tank, 3394 Pleasant Hill Rd., Wetumpka, 36092	$1,100,000
	Infrastructure/Public Works	Water Storage Tank, 6146 Redland Rd., Wetumpka 36093	$1,100,000
	Infrastructure/Public Works	Water Storage Tank, 6545 Redland Rd., Wetumpka 36093	$1,300,000
	Infrastructure/Public Works	Water Storage Tank, 8436 Balm Rd., Eclectic, 36024	$500,000
	Infrastructure/Public Works	Water Storage Tank, 21268 US Hwy 231, Titus, 36080	$650,000
	Infrastructure/Public Works	Water Storage Tank, 1540 Martin Dam Rd., Eclectic, 36024	$650,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Water Storage Tank, 4007 Jasmine Hill Rd, Wetumpka, 36093	$550,000
	Infrastructure/Public Works	Pumping Station, 1935 Jug Factory Rd., Wetumpka, 36092	$500,000

	Infrastructure/Public Works	Pumping Station, 1240 Willow Springs Rd., Wetumpka, 36093	$500,000
	Infrastructure/Public Works	Pumping Station, 168 Sunny Lane, Wetumpka, 36092	$500,000
	Infrastructure/Public Works	Pumping Station, 6830 Titus Rd., Titus, 36080	$650,000
	Infrastructure/Public Works	Pumping Station, 185 Middle Rd., Eclectic 36024	$500,000
Sub Total			$24,415,000
Eclectic Waterworks Board	Infrastructure/Public Works	Office Building (plus contents), 507 Main St., Eclectic, 36024	$300,000
	Infrastructure/Public Works	Water Tank, 507 Main St., Eclectic, 36024	$650,000
	Infrastructure/Public Works	Pump Station, Hwy 14, Eclectic	$50,747
	Infrastructure/Public Works	Pump Station, Hwy 44, Eclectic	$206,000
	Infrastructure/Public Works	Pump Station, Hwy 63, Eclectic	$150,000
	Infrastructure/Public Works	Water Tank, Main St., Eclectic	$252,782
	Infrastructure/Public Works	Water Tank, Hwy 63, Eclectic	$597,027

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Water Tank, Dean Circle, Eclectic	$660,000
Sub Total			$2,866,556

Elmore Water Authority	Infrastructure/Public Works	Airport Rd., Well, 6370 Airport Rd., Elmore, 36054	$207,479
	Infrastructure/Public Works	Blackmon Well, 6330 Airport Rd., Elmore, 36054	$184,481
	Infrastructure/Public Works	Estes Well, 5260 Pineview Rd., Elmore, 36054	$184,481
	Infrastructure/Public Works	Dismukes Well, 20 Mercer Rd., Elmore, 36054	$245,974
	Infrastructure/Public Works	Kenner Well, 28 Kenner Creek Rd., Elmore, 36054	$184,481
	Infrastructure/Public Works	Eagle Rock Well, Little Deer Run, Elmore, 36054	$491,727
	Infrastructure/Public Works	Eagle Rock Tank, Eagle Rock Subdivision, Elmore, 36054	$874,182
	Infrastructure/Public Works	Ingram Rd. Well, 2514 Ingram Rd., Elmore	$430,000
	Infrastructure/Public Works	Roy Tank, 1933 Deatsville Hwy., Elmore	$1,229,874
	Infrastructure/Public Works	Graves Tank, 157 Sevarg Ln., Elmore	$307,468
	Infrastructure/Public Works	Bellview Tank, 4482 Deatsville Hwy., Elmore	$614,938

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Elmore Water Authority cont…	Infrastructure/Public Works	Flatwood Tank, 1525 Flatwood Rd., Elmore	$1,229,874
	Infrastructure/Public Works	Elmore/Montgomery Booster, 158 Blackwell Dr., Elmore	$92,241

	Infrastructure/Public Works	County Rd. 3 Booster, 1915 Ingram Rd., Elmore	$61,493
	Infrastructure/Public Works	Bellview Booster, 3775 Deatsville Hwy., Elmore	$61,493
	Infrastructure/Public Works	Office Building, 1633 AL Hwy 14, Elmore	$750,000
	Infrastructure/Public Works	Maintenance Building, 6370 Airport Rd., Elmore	$323,000
Sub Total			$7,473,186
Five Star Water Supply	Infrastructure/Public Works	Water Treatment Facility, 751 Lakeview Dr., Wetumpka, 36092	$3,690,412
	Infrastructure/Public Works	Booster Station, 2000-A, Hwy 14 E., Prattville, 36066	$133,709
	Infrastructure/Public Works	Booster Station, 4704 Camp Grandview Rd., Millbrook, 36054	$100,283
Five Star Water Supply cont…	Infrastructure/Public Works	Water Tower, 4704 Camp Grandview Rd, Millbrook, 36054	$334,276
	Infrastructure/Public Works	Booster Station, 4616 Ceasarville Rd., Wetumpka, 36092	$77,250
Sub Total			$4,335,930

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Friendship Water Authority	Infrastructure/Public Works	Office at 4540 Friendship Rd., 36078	$50,000
	Infrastructure/Public Works	Tallassee Pump Station, Friendship & Ingram Rds.	$87,500
	Infrastructure/Public Works	Claude Pump Station, Tallassee Hwy & Luke Paschal Rds.	$87,500

Sub Total			$1,025,000
Holtville Water System, Inc.	Infrastructure/Public Works	Office, 10048 Holtville Rd., Deatsville, 36022	$92,000
	Infrastructure/Public Works	Water Filter Plant, Hogan Rd., Deatsville	$138,000
	Infrastructure/Public Works	Warehouse, Hwy 11, Deatsville	$7,000
	Infrastructure/Public Works	Pump Station (Loc 4), Rt 1, Deatsville	$30,000
	Infrastructure/Public Works	Pump Station (Loc 5-1), County Rd 23, Deatsville	$30,000
	Infrastructure/Public Works	Pump Station (Loc 5-2), County Rd 23, Deatsville	$45,000
	Infrastructure/Public Works	Water Tank, (Loc 5-3), County Rd 23, Deatsville	$100,000
	Infrastructure/Public Works	Water Tank (Loc 5-4), County Rd 23, Deatsville	$180,000
	Infrastructure/Public Works	Water Tank (Loc 5-5), County Rd 23, Deatsville	$175,000
	Infrastructure/Public Works	Water Tank (Loc-5-6), County Rd 23, Deatsville	$175,000
	Infrastructure/Public Works	Water Tank, 10578 Holtville Rd., Deatsville	$900,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
	Infrastructure/Public Works	Water Tank, Ruffin Rd., Deatsville	$650,000
	Infrastructure/Public Works	Pump Station, County Rd. 23, Deatsville	$40,000
	Infrastructure/Public Works	Booster Pump Station (Loc-9), Hwy 11, Deatsville	$40,000
Sub Total			$2,602,000

Tallassee Sewer & Water System	Infrastructure/Public Works	Upper Sewer Pumping Station, 590 Noble Rd., Tallassee, 36078	$150,000
	Infrastructure/Public Works	Lower Sewer Pumping Station, 679 Noble Rd., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station (Armory), 2054 Gilmer Ave., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station (GKN), 1227 AL Hwy 229 S., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station (Industrial Park), 20345 Rifle Range Rd.	$150,000
	Infrastructure/Public Works	Sewer Pumping Station, 38 Weldon Dr., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station, 26 Clay St., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station, 407 4th St., Tallassee	$150,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Tallassee Sewer & Water System	Infrastructure/Public Works	Sewer Pumping Station, 2644 Notasulga Rd, Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station, 37 Sherry St., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station (Mill), 1 Lower Tuskeegee Rd, Tallassee	$150,000
	Infrastructure/Public Works	Riverhills Sewer Pumping Station, 438 N. Ann St., Tallassee	$150,000
	Infrastructure/Public Works	Sewer Pumping Station, 50 Hanil Dr., Tallassee	$150,000

	Infrastructure/Public Works	Sewer Pumping Station, 300 North Wesson St., Tallassee	$150,000
	Infrastructure/Public Works	Laney Gin Sewer Pumping Station, AL Hwy 229 S., Tallassee	$150,000
	Infrastructure/Public Works	Water Tank (Burlington), 89020 Tallassee Hwy, Tallassee	$550,000
	Infrastructure/Public Works	Water Tank (Tallaweka), 810 W. Main St., Tallassee	$550,000
	Infrastructure/Public Works	Water Tank (Riverside Heights), 114 McArthur St., Tallassee	$40,000
	Infrastructure/Public Works	Water Tank (Main), 307 Barness Blvd., Tallassee	$800,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Tallassee Sewer & Water System	Infrastructure/Public Works	Carrville Water Tank, 836 Sims Ave., Tallassee	$550,000
Sub Total			$4,890,000
Tri Community Water Systems	Infrastructure/Public Works	Pump House #1 3011 Sandtown Rd., 36054	$171,826
	Infrastructure/Public Works	Pump House #3 1486 AL Hwy 143	$74,263
	Infrastructure/Public Works	Pump House #4 2010 Railroad St.	$74,263
	Infrastructure/Public Works	Office, 2630 Main St.	$112,240
	Infrastructure/Public Works	Pump House #5, 2314 AL River Pkwy	$74,263

	Infrastructure/Public Works	Water Tank, 370 Deatsville Hwy	$636,540
	Infrastructure/Public Works	Water Tank, 1290 Hwy 14	$636,540
	Infrastructure/Public Works	Pump House #6, 2632 Main St.	$403,142
	Infrastructure/Public Works	Property at various locations: Fireplugs, Pipeline	$375,531
Sub Total			$2,558,608
Wetumpka Water Works & Sewer Board	Infrastructure/Public Works	Wilako Waste Water Treatment, 2909 Elmore Road, 36092	13,000,000
	Infrastructure/Public Works	Pumping Station/RTU, Hardee's, 5837 US Hwy 231, Wetumpka, 36092	115,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Wetumpka Water Works & Sewer Board Continued…	Infrastructure/Public Works	Pumping Station/RTU, Cotton/Coosa Fain Cntr, Coosa St, Wetumpka, 360902	115,000
	Infrastructure/Public Works	Pumping Station, 515 Cotton St., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station/RTU, 200 Boundary St., Wetumpka, 36092	115,000
	Infrastructure/Public Works	Pumping Station/RTU, 7969 US Hwy 231	115,000
	Infrastructure/Public Works	Pumping Station, 1009 AL Hwy 9, Cherokee Hwy 9	92,000

	Infrastructure/Public Works	Pumping Station, 220 Ft. Toulouse, Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station/RTU, 1566 Central Plank Rd., Wetumpka, 36092	115,000
	Infrastructure/Public Works	Pumping Station, 128 Queen Ann St., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station, 1574 Georgia Hwy 170, Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station, 1672 Gossum Switch Rd., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station, 4037 US Hwy 231, Wetumpka, 36092	92,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Wetumpka Water Works & Sewer Board Continued…	Infrastructure/Public Works	Pumping Station/RTU, 313 Charles Ave., Wetumpka, 36092	115,000
	Infrastructure/Public Works	Pumping Station, 107 McDonald Dr., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station, 1095 Cotton Lakes Blvd., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station/RTU, 9835 US Hwy 231, Wetumpka, 36092	115,000
	Infrastructure/Public Works	Pumping Station, Adams 2213 Central Plank Rd., Wetumpka, 36092	92,000
	Infrastructure/Public Works	Pumping Station/ Telemetry, 2749 US Hwy 231, Wetumpka, 36092	125,000

	Infrastructure/Public Works	Pumping Station, 1753 US Hwy 231, Wetumpka, 36092	65,000
	Infrastructure/Public Works	Pumping Station/RTU, 1061 US Hwy 231, Wetumpka, 36092	125,000
	Infrastructure/Public Works	Pumping Station/RTU, 2347 Chapel Lakes Ln., Wetumpka, 36092	90,000
	Infrastructure/Public Works	Pumping Station Kennedy Trl Center 523 US Hwy 231	65,000
	Infrastructure/Public Works	Pumping Station/RTU, 399 White Water Ridge, Wetumpka, 36092	140,000
	Infrastructure/Public Works	Pumping Station/RTU, 120 Harrogate Springs Rd., Wetumpka, 36092	115,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Wetumpka Water Works & Sewer Board Continued…	Infrastructure/Public Works	Pumping Station/RTU, 420 Main St., Wetumpka, 36092	75,000
	Infrastructure/Public Works	Pumping Station/RTU, 3526 Elmore Rd., Wetumpka, 36092	75,000
	Infrastructure/Public Works	Water Tank (1), 500 MGD Tower Rd., Wetumpka, 36092	400,000
	Infrastructure/Public Works	Water Tank (2), 500 MGD Tower Rd., Wetumpka, 36092	400,000
	Infrastructure/Public Works	Water Tank, 750 MGD Water Tower Rd., Wetumpka, 36092	500,000
	Infrastructure/Public Works	Water Tank, 2.5 MGD Water Tower Rd., Wetumpka, 36092	750,000

	Infrastructure/Public Works	RTU, Golson Hill Hwy 231, Wetumpka, 36092	20,000
	Infrastructure/Public Works	Water Tank, 250 MGD, Hwy 9, Wetumpka, 36092	400,000
	Infrastructure/Public Works	Valve/RTU, 1566 Central Plank Rd., Wetumpka, 36092	30,000
	Infrastructure/Public Works	Water Tank, 300 MGD Elmore Rd., Wetumpka, 36092	575,000
	Infrastructure/Public Works	RTU, 2909 Elmore Rd., Wetumpka, 36092	20,000
	Infrastructure/Public Works	Filter Plant, River Rd., Wetumpka, 36092	50,000

JURISDICTION	FACILITY TYPE	ADDRESS	REPLACEMENT COST
Wetumpka Water Works & Sewer Board Continued…	Infrastructure/Public Works	Booster Station, 104 Enslen St., Wetumpka, 36092	60,000
	Infrastructure/Public Works	Booster Pump, Golson Hill, Hwy 231, Wetumpka, 36092	60,000
	Infrastructure/Public Works	Parker Control Valve/RTU, 4379 US Hwy 231, Wetumpka, 36092	40,000
	Infrastructure/Public Works	Booster, 1321 US Hwy 231, Wetumpka, 36092	229,000
	Infrastructure/Public Works	Pressure Valve/RTU, AL Hwy 14, Wetumpka, 36092	48,000
	Infrastructure/Public Works	Pole/RTU, AL Hwy 170, Wetumpka, 36092	20,000
	Infrastructure/Public Works	Five Star Wetumpka Meter Pit/RTU, 3488 Elmore Rd., Wetumpka, 36092	60,000

	Infrastructure/Public Works	Five Star Meter Pit/RTU, Ceaserville Rd./Widden Ck., Wetumpka, 36092	20,000
Sub-Total			16,977,000
Totals			$322,034,344

Table 4.22: Critical Facilities Asset Inventory and Estimates Values

Montgomery County Critical Facilities				
FACILITY	**LOCATION**	**AREA**	**USE**	**VALUE**
Medical Care				
Jackson Hospital and Clinic	1725 Pine Street	Montgomery	Large Hospital	$56,528,660
Long Term Care Hospital	1725 Pine Street, 5 North	Montgomery	Small Hospital	$6,035,090
Central Alabama VA Healthcare	215 Perry Hill Road	Montgomery	Large Hospital	$66,989,480
HealthSouth Rehab Hospital	4465 Narrow Lane Road	Montgomery	Medium Hospital	$18,105,270
Baptist Medical Center	2105 East South Blvd.	Montgomery	Large Hospital	$69,001,180
Baptist Medical Center East	400 Taylor Road	Montgomery	Medium Hospital	$26,152,050
Total				$242,811,730
Emergency Operations Center				
Montgomery City-County EMA	14 Madison Ave.	Montgomery	Emergency Ops/Communications Center	$12,000,000
Total				$12,000,000
Fire Departments				
Montgomery Fire Department	103 N. Perry Street	Montgomery	Fire Station	$1,260,000
Pike Road Volunteer Fire Department	3427 Wallahatchie Road	Pike Road	Fire Station	$1,260,000

Rolling Hills Lakes Volunteer Fire Dept.	6120 Trotman Road	Montgomery	Fire Station	$1,260,000
Snowdoun Volunteer Fire Department	219 Hobbie Road	Montgomery	Fire Station	$1,260,000
Pintlala Volunteer Fire Department	250 Federal Road	Hope Hull	Fire Station	$1,260,000
Pisgah Volunteer Fire Department	28 Hollie Street	Pisgah	Fire Station	$1,260,000
Total				$7,560,000
Law Enforcement				
Montgomery Police Radio Shop	1164 S. McDonough Street	Montgomery	Police Department	$1,260,000
Sheriff Dept. Civil Division	115 S. Perry Street	Montgomery	Sheriff Department	$1,260,000
Police Dept. School Security	1153 S. Lawrence Street	Montgomery	Police Department	$1,260,000
Montgomery County Sheriff	129 Main Street	Ramer	Sheriff Department	$1,260,000
Police Dept. Narcotics Bureau	1514 Highland Ave.	Montgomery	Police Department	$1,260,000
Circuit Court Clerk Criminal	251 S. Lawrence St.	Montgomery	Police Department	$1,260,000
Crime Prevention Program	3046 Fairwest Pl.	Montgomery	Police Department	$1,260,000
Montgomery Chief of Police	320 N. Ripley St.	Montgomery	Police Department	$1,260,000
Montgomery Housing Authority	5 Eugene St.	Montgomery	Police Department	$1,260,000
Montgomery Police Dare Supervisor	632 S. Union St.	Montgomery	Police Department	$1,260,000
Police Department Training Division	740 Mildred St.	Montgomery	Police Department	$1,260,000

Montgomery Police Canine Unit	934 N. Ripley St.		Montgomery		Police Department		$1,260,000
Total							$15,120,000
Educational Facilities							
Group Homes For Children Inc.	1426 South Court St.		Montgomery		Public School		
Maxwell AFB Elementary School	800 Magnolia Blvd.		Maxwell AFB		Public School		
St. Jude High School	2048 W. Fairview Ave.		Montgomery		Private School		
Brown's Private School	1130 Bellview Str.		Montgomery		Private School		
Georgia Washington Junior High School	696 Georgia Washington Rd		Pike Road		Public School		
St. Bede Elementary School	3850 Atlanta Highway		Montgomery		Private School		
Alabama Christian Academy	4700 Wares Ferry Road		Montgomery		Private School		
Green Gate School	3265 McGehee Road		Montgomery		Private School		
Our Lady Queen of Mercy School	4437 Narrow Lane Road		Montgomery		Private School		
The Montgomery Academy	3240 Vaughn Road		Montgomery		Private School		
Trinity Presbyterian School, Inc.	1700 East Trinity Blvd.		Montgomery		Private School		
Montgomery Catholic Prepatory	5350 Vaughn Rd.		Montgomery		Private School		
St. James School	6010 Vaughn Rd.		Montgomery		Private School		
Macon-East Montgomery Academy	15396 Vaughn Rd.		Cecil		Private School		
South Montgomery County Academy	10 Old Schoolhouse Rd.		Grady		Private School		
Hooper Academy	380 Fischer Rd.		Hope Hull		Private School		
Total							NA
Government Facilities							
Pike Road Community Center			Town of Pike Road		Community Center		$195,000
Pike Road Town Hall	9575 Vaughn Road		Town of Pike Road		Town Hall		$1,800,000
Total							$1,995,000
Total							**$279,486,730**

(Source: Local and HAZUS-MH 2.1; 2015)

4.6 Vulnerable Populations in Autauga, Elmore, and Montgomery counties

4.6.1 Background

According to the CDC social vulnerability refers to a community's resilience after an external hazard has taken place. These hazards may be natural-caused or human-caused disasters. When a community's social vulnerability is reduced human and economic losses are less likely. The CDC created a Social Vulnerability Index to measure how vulnerable a county or census tract is to any hazard. The measurement is based on a calculation that uses fifteen census variables, which help identify the vulnerable portion of a population. The CDC uses a scale of 0 to 1. A score of 0 indicates that a community has no vulnerable to any hazard, but a score of 1 means a community is extremely vulnerable to any hazard.

4.6.2 Overall Vulnerability

The Figure 39 is based on the data collected from the CDC's Social Vulnerability Index (SVI), which depicts the overall social vulnerability for Lee Russell counties. The overall SVI score for Autauga County is 0.3773, Elmore County is 0.5415, and Montgomery County is 0.8093, which is based on a scale 0 to 1.

Each county has a range of vulnerability from low to high at the census tract level. Montgomery County is the most vulnerable county in Phase II, but the range of vulnerability is from low to high. The eastern portion of unincorporated Montgomery County and Pike Road has the lowest rate of vulnerability. The City of Montgomery and the southern portions of unincorporated Montgomery County have a medium to high vulnerability rate. Elmore County's vulnerability varies widely from around the county. The areas near towns or cities have a low to medium rate of vulnerability, but the Wetumpka area has the highest vulnerability rate. Autauga County is the least vulnerable in Phase II, but the county's most vulnerable population live in the western potions of the county in unincorporated Autauga County, Autaugaville, and Billingsley.

Due to the medium to high vulnerability populations in Elmore and Montgomery counties each jurisdiction should create plans and policies to protect these individuals from injury or death during any hazard. Additional information about those individuals who are the most vulnerable will be added to the update for the Hazard Mitigation Plan. Understanding where the vulnerable population pockets are in each jurisdiction will help identify what hazards will or are more likely to impact these vulnerable people. Even though Autauga County has a low to medium county wide vulnerability each jurisdiction should be aware where these vulnerably population live.

The CDC breaks down the fifteen variables into four themes that summarize how an area is socially vulnerable to a hazard. The themes focus on education, socioeconomic, housing, language skills, housing, ethnicity, family characters, and access to vehicles. Please refer to Figure 39 to Figure 42 for the details regarding vulnerability based on the specific themes.

4.6.3 Housing and transportation

The housing and transportation is based on data from the American Community Survey for 2012-2016 for following variables: multi-unit housing, mobile homes, home crowing, no access to vehicles, and group quarters. Figure 41 shows that there is major despair for portions population

living in Autauga, Elmore, and Montgomery counties to living conditions and access to transportation, thus making these people more vulnerable to natural hazards. Small towns, the City of Montgomery, and unincorporated areas are more likely to be vulnerability to hazards than those persons living in places like Pike Road, Prattville, Millbrook. Persons living in multi-unit housing, manufactured homes, or in a crowded home are vulnerable to natural hazards such as tornadoes, flooding, hail, high winds/ thunderstorms, winter storms, tropical storms, and dam failure because these types of homes do not provide a safe environment to ride out a hazard. These types of homes are not built to the same standards as standalone home, for example manufactured homes are built to withstand maximum winds of 70 mph. These structures will not survive high winds or tornadoes. Persons who do not have access to transportation are vulnerable to dam failure, flooding, high winds/ thunderstorms, tornadoes, wildfire, winter storms because the option to leave their home is at the mercy of obtaining a way to leave such as by vehicle, public transportation, bike, or walking. These modes of transportation are not viable for all individuals due to a lack of access or physical abilities. These persons who do not have the ability to leave are at risk because certain natural hazards provide little warnings such as a wildfire, dam failure, or tornado. If persons do not have a safe place in their home or access to transportation (of any type) then their lives will be vulnerable/ risked during the event of a natural hazard. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.4 Housing Composition and Disability

Figure 40 shows where people live in Autauga, Elmore, and Montgomery counties who are more vulnerable to hazards based on housing composition and the number of persons with disabilities. The housing composition and disability map is based on data from the American Community Survey for 2012-2016 for the following variables: aged 65+, aged 17 and under, single-parent household, aged 5 and over with a disability. All three counties have a range of vulnerability from low to high census tracts based on the housing composition and individuals with disabilities. The rural areas in Elmore County such as Wetumpka, Eclectic, or unincorporated Elmore County have a smaller portions of the population that are highly vulnerable to hazards. The City of Montgomery and the western and southern portion of Montgomery County have the largest portions of the population that are highly vulnerable to hazards. In terms of hazard mitigation, the housing composition is important to understand because children and the elderly are more vulnerable to succumb injuries during a hazard such as extreme heat or tornado event than a young or middle-aged adult. Natural hazards are also dangerous if a child or elderly is home alone during the event because they may not have the knowledge or ability to address or react to a hazardous situation. For example if a child is home alone during a tornado event he or she may not have the knowledge or experience to know where their safe place during a tornado, which makes that child vulnerable. Persons who have a disability (physical or mental) are extremely vulnerable to hazards of any type because they may be socially or logistically isolated when a hazard such as a dam failure, flooding, winter storm, or tornado. These persons may not be able to evacuate quickly, or may not even know the natural hazard event is taking place. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.5 Socioeconomics

Figure 43 shows what census tracts in Autauga, Elmore, and Montgomery counties where people live who are more vulnerable to hazards based on the socioeconomic status of the population living in the planning region. Vulnerability data based on socioeconomic status, refer to the figure below,

is gathered from the American Community Survey for 2012-2106 for following variables: poverty, unemployment, per capita income, and no high school diploma. All but two census tracts in Autauga County have a medium to a high level of vulnerability based on the population's socioeconomic status. The City of Prattville has two census tracts that have a low vulnerability.. Rural Elmore County has a low vulnerability to hazards based on socioeconomic status, but urban areas in Montgomery County, such as the City of Montgomery have a medium to a high level of vulnerability based on the population's socioeconomic status. Vulnerability to natural hazards due to socioeconomics can make a person or a family vulnerable to all hazards. These persons may not have the financial ability to prepare for hazards before the event happens such as winter storms or droughts, but they may not also have the financial ability to recover once a natural hazard event has taken place. The ability to evacuate during or before a hazard happens may not be an option for those persons who have socioeconomic difficulties. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.6 Minority and English Language Proficiency

Figure 42 shows where in Autauga, Elmore, and Montgomery counties persons live who are vulnerable to hazards based on the population's minority status and English language proficiency. The minority and English language proficiency map is based on data from the American Community Survey for 2012-2016 for the following variables: Ethnicity and English language proficiency. Autauga County has the lowest amount of person who are vulnerable based on minority status and English. Proficiency, but there is one census tract in Prattville that has a medium vulnerability rate. Elmore County has a low to medium rate of vulnerable, but the southwest corner of county near the Town of Elmore, Town of Coosda, Town of Millbrook, and City of Prattville have a high pocket of vulnerability. Western and northern, and one census tract in central Montgomery County have the largest portion of person vulnerable to any hazard based on the population's ethnicity and ability to communicate in English. Providing information out in multiple languages is important because not everyone can read, write, or understand verbal English. For those individuals who are not English proficient obtaining useful information about natural hazards is essential to their survival. If a person is unaware that a hazardous event is/going to take place due to a language barrier their life is at stake to all-natural hazards. These persons will essentially be taken by surprise when a tornado, wildfire, winter storm, flood, or dam failure take place in their community. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Figure 39: Social Vulnerability Autauga, Elmore, and Montgomery counties

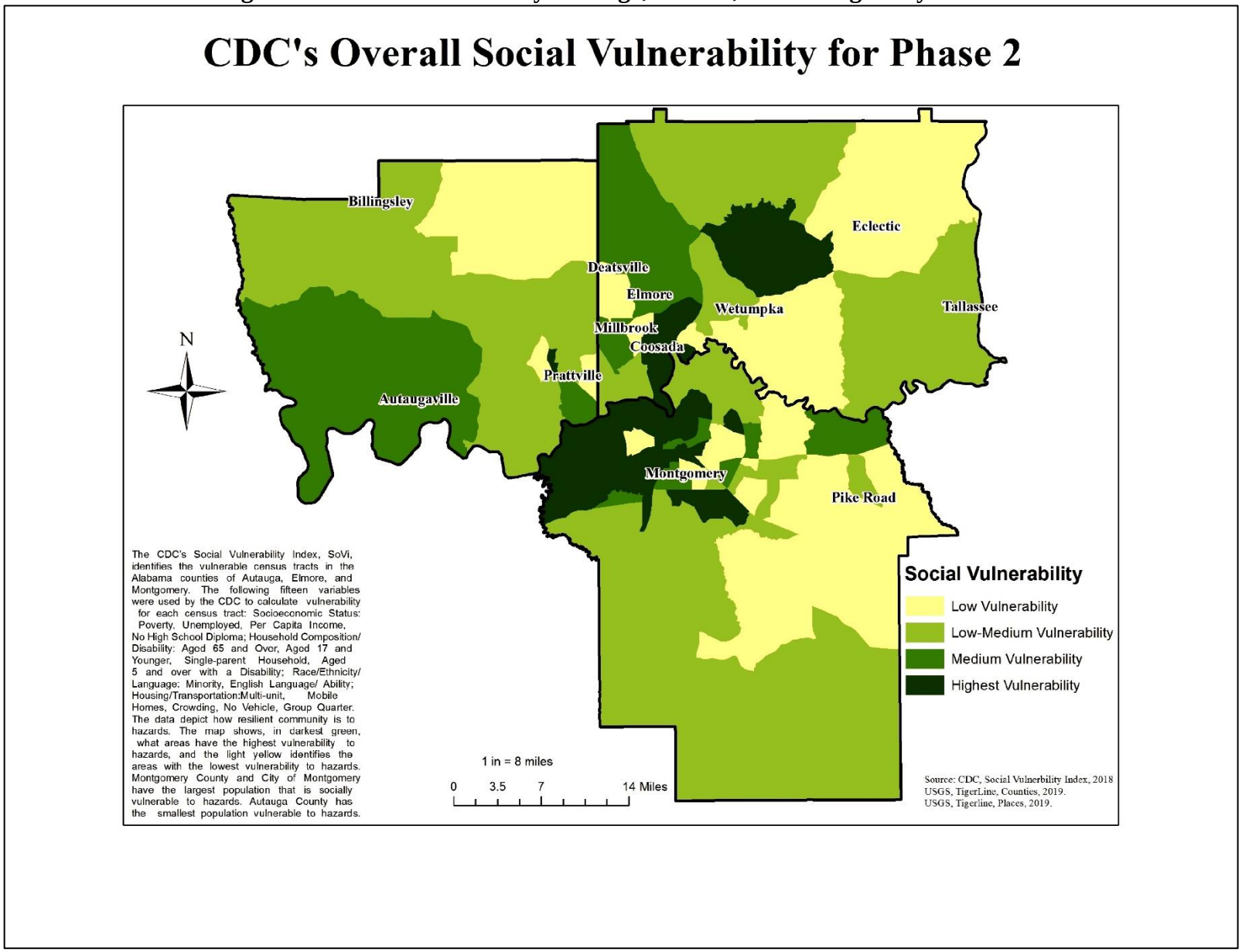


Figure 40: Social Vulnerability Themes Autauga, Elmore, and Montgomery counties

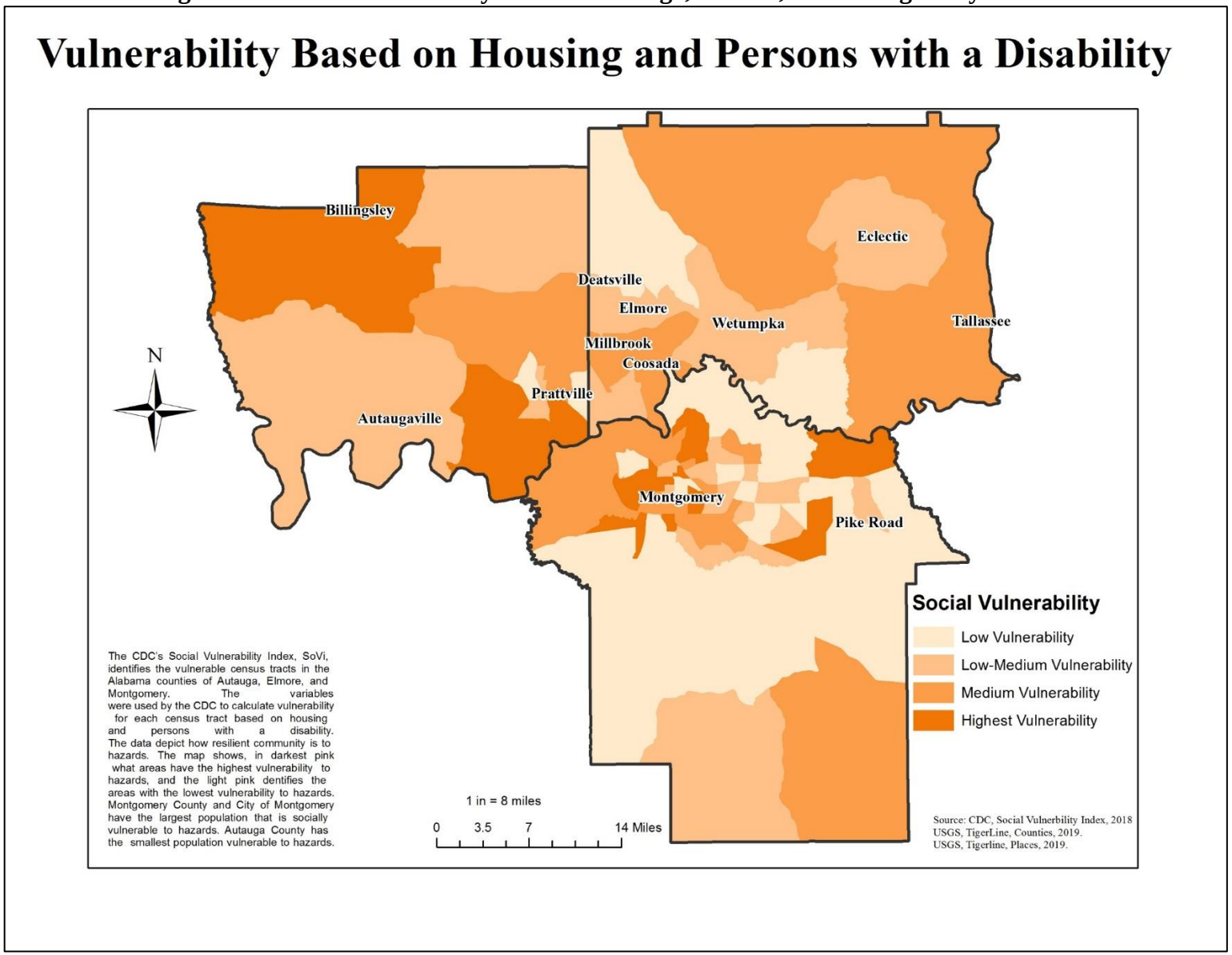


Figure 41: Social Vulnerability Themes Autauga, Elmore, and Montgomery counties

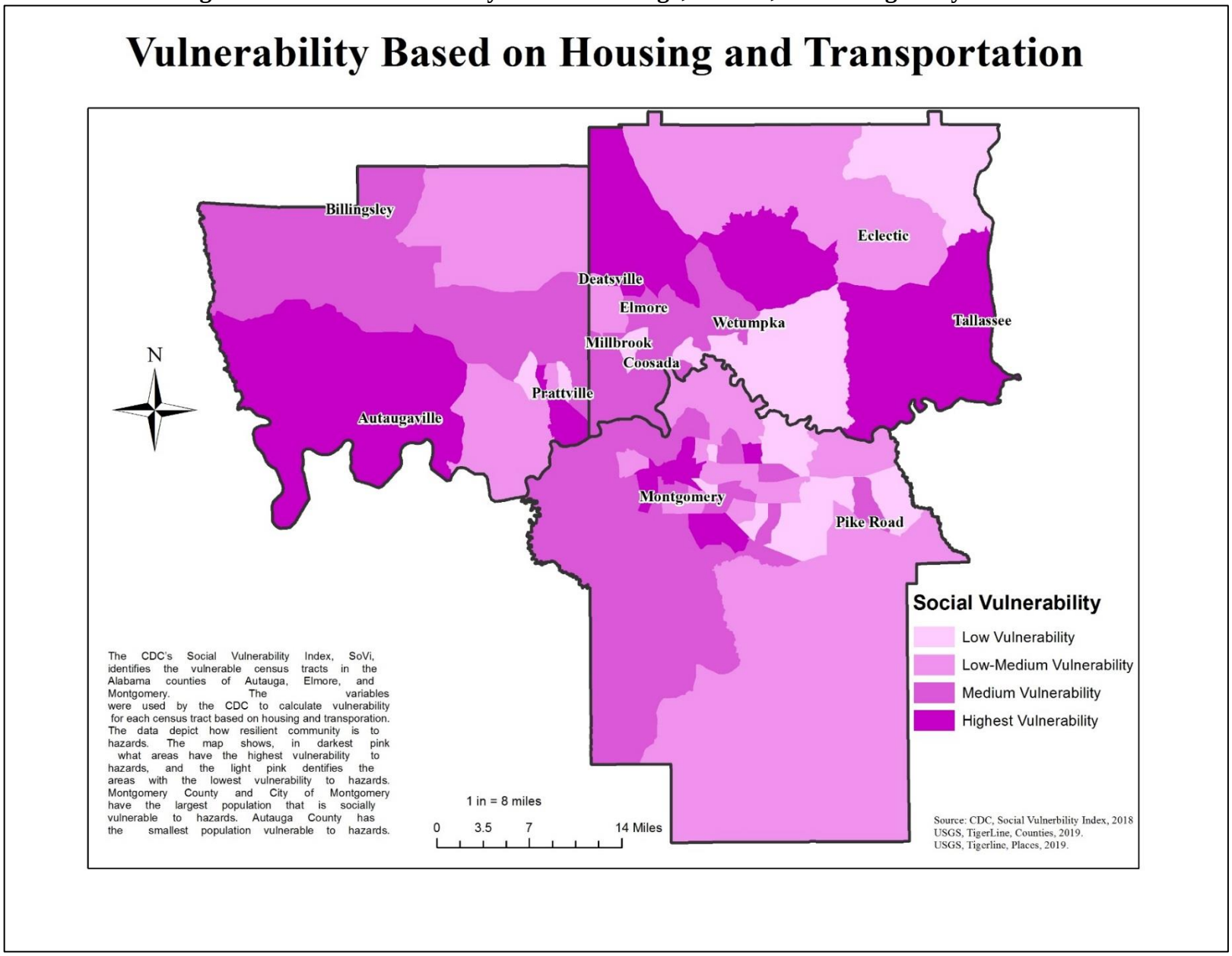


Figure 41: Social Vulnerability Themes Autauga, Elmore, and Montgomery counties

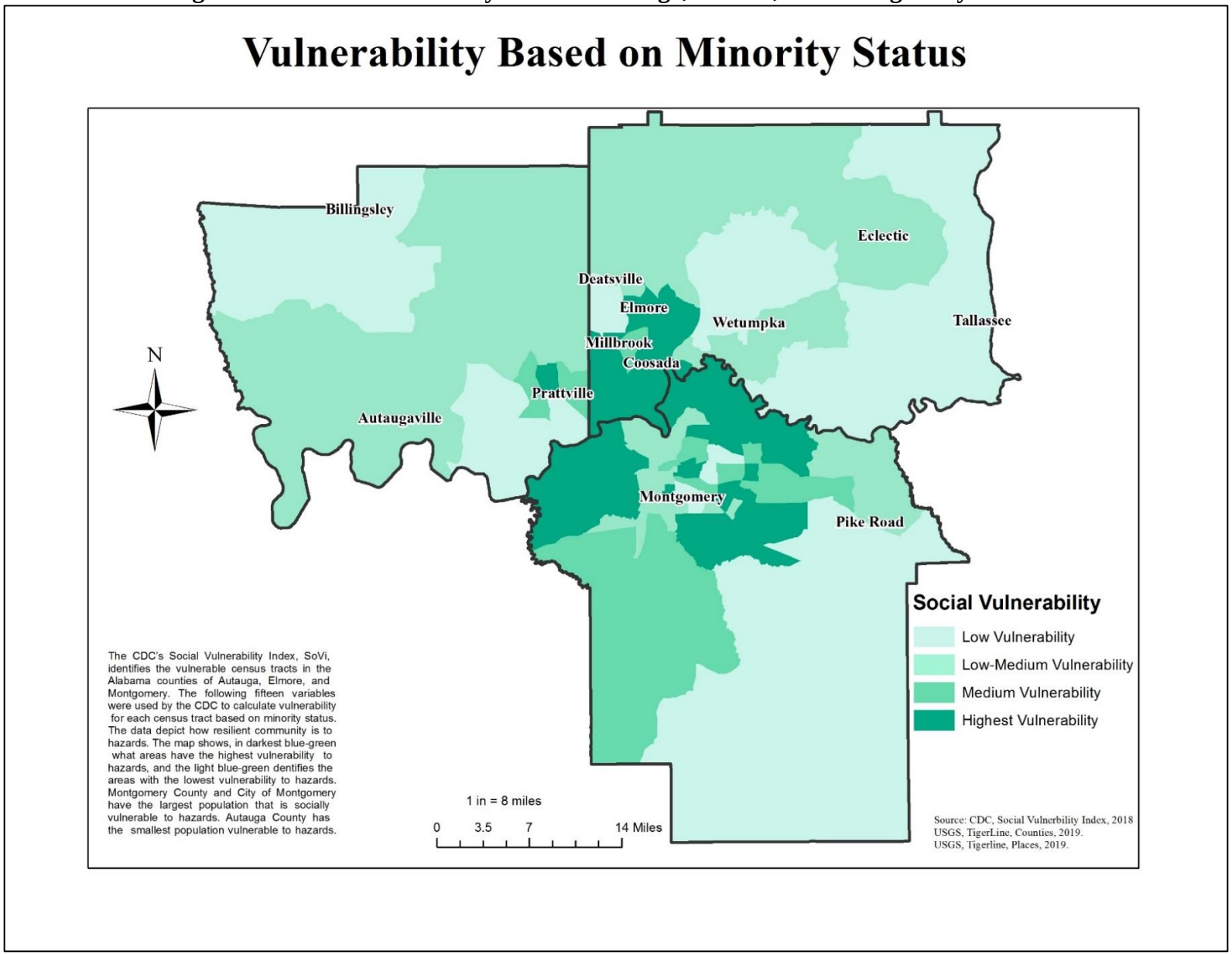
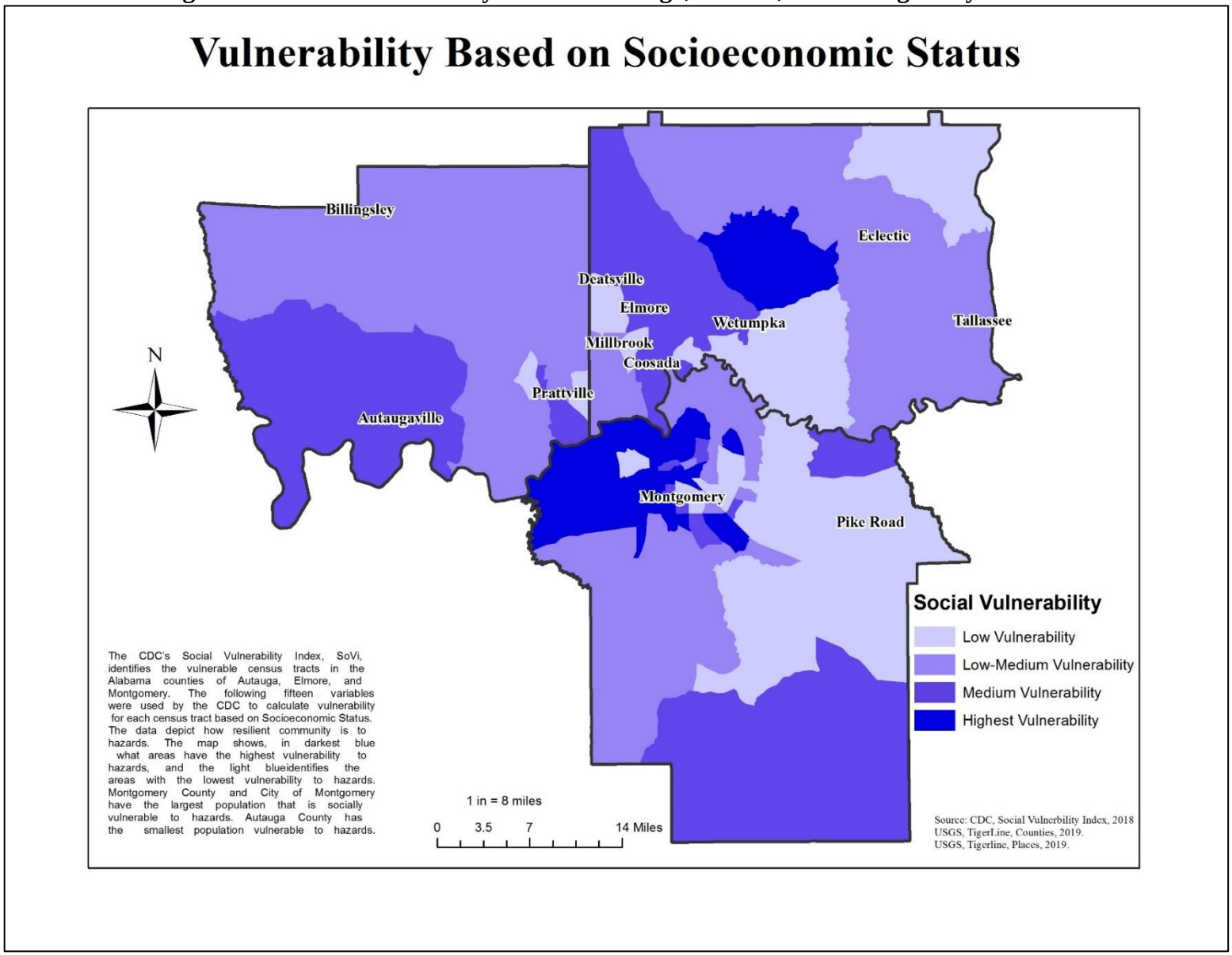


Figure 43: Social Vulnerability Themes Autauga, Elmore, and Montgomery counties



East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan: Phase Three-A

January 2021

A Hazard Mitigation Plan for AEMA Divisions D Counties: Chambers County, Chilton County, and Tallapoosa County

Prepared For:

Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Fredonia, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site

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Section 1: Introduction

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1.1 Introduction

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is a plan that details the multitude of hazards that affect the Alabama Emergency Management Agency (AEMA) Division D area. The Phase III-A, which is covered in this plan, will be adopted by the following jurisdictions Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Points, Town of Fredonia, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site.

Alabama Emergency Management Agency (AEMA) Division D region will include the following counties when it is complete: Chambers County, Chilton County, Tallapoosa County and the jurisdictions within these counties. The remaining counties were addressed in Phase I and Phase II or will be addressed in Phase III-B.

This plan fulfils the requirements set forth by the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires counties to formulate a hazard mitigation plan in order to be eligible for mitigation grants made available by the Federal Emergency Management Agency (FEMA).

Each county in AEMA Division D has an existing multi-jurisdictional hazard mitigation plan. This plan will compile information from each of those existing plans and documents the incorporation of hazard mitigation objectives into the region. The AEMA Division D is diverse in terms of development and physical geography, but many of the hazards affecting the region have similar impacts throughout the area. A community must deal with localized threats such as flooding, wildfires, or sinkholes as well as the hazard that do not have geographical limitations like tornadoes, hail, or high winders. A regional hazard mitigation plan can encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts. Local Emergency management agencies in the counties have a responsibility for both urban and rural areas of varying population density.

1.2 Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a hazard mitigation plan as a condition of receiving federal disaster assistance. These plans should be approved by FEMA and updated every five years.

Funding

Funding for the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan was made available through the Hazard Mitigation Grant Program (HMGP), under Disaster Recovery Declaration 1971 (DR-1971). Supplemental funding was supplied by the county commissions of Chambers, Chilton, and Tallapoosa counties and the Lee-Russell Council of Governments.

Purpose

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an effort to evaluate and identify all prioritized hazards which may affect AEMA Division D. It presents mitigation

strategies that address the hazards identified. This plan is only one of many steps jurisdictions in East Alabama will take to protect the welfare of residents by achieving a safer environment for its residents.

Multi-Jurisdictional Plan Adoption

Chambers County, Chilton County, and Tallapoosa County are the eligible jurisdictions to adopt Phase III-A of the Hazard Mitigation Plan when it is deemed "approvable pending adoption" by the Federal Emergency Management Agency (FEMA). The plan can also be adopted by but not limited to the following: regional planning councils and local governing bodies, including municipal councils, county commissions, and local school districts.

The jurisdiction in the remaining AEMA Division D counties is not eligible to adopt Phase II of the AEMA Division D Hazard Mitigation Plan. Those counties covered in Phase I (Lee and Russell), Phase II (Autauga, Elmore, and Montgomery counties), or Phase III-B (Lowndes and Macon counties) of the Division D Hazard Mitigation plan. At the conclusion of Phase III process, the plan will be compiled to create a regional AEMA Division D Hazard Mitigation Plan with the same deadline/update cycle.

Multi-Jurisdictional Planning Process

Each eligible local jurisdiction: Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Points, Town of Fredonia, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site, provided participation in the development of this regional hazard mitigation plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee.

The jurisdictions that were included in Phases I and Phase II followed the same process, as well as Phase III-B will follow the same process.

Each eligible local jurisdiction, Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Points, Town of Fredonia, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site, participated in the development of the plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee and were involved in the updated hazard mitigation planning process. Participants include but are not limited to local government leaders, members of law enforcement, first responders, school boards, and public utilities. The previous hazard mitigation plan and a presentation were distributed to the participant stakeholders along with surveys for feedback identifying hazards, risks, vulnerabilities, and strategies. A list of stakeholders can be found in Table 1.2. Each participating jurisdiction was represented by personnel that performed a variety of functions including review of the plan at various stages during its drafting, attending meetings and updates on plan progress and contents, and providing feedback, comments, and consultation during the plan's drafting stages. Refer to Table 1.1 and

Table 1.2 for the summary of each jurisdictions' involvement, name the representatives from each jurisdiction involved in the plan, and how involved each jurisdiction was during Phase III-A. Threats are assessed for each jurisdiction so that hazards affecting one jurisdiction are considered to have an equal impact or potential impact on assets located in those jurisdictions. It is assumed those hazards affecting a specific jurisdiction will have a similar impact on school systems and utilities of the jurisdiction.

Hazard Mitigation Plan Process

At the beginning of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan a Division D Core Team was developed through interaction between AEMA Division D EMA Directors, the AEMA Division D Coordinator, and the Lee-Russell Council of Governments. Members of the AEMA Division D Core Team developed county-level planning subcommittees primarily based on past Hazard Mitigation Plan update participants and the Local Emergency Planning Committees. The teams reviewed previous county-wide local hazard mitigation plans and development of the plan requirements and hazards for Division D Region. Regional Planning Commission of Greater Birmingham worked in conjunction with LRCOG to complete Phase III-A.

The AEMA Division D Core Team developed the phased process of preparing the Regional Hazard Mitigation Plan based upon the staggered deadlines for each jurisdiction. The AEMA Division D Core Team met to compare the identified hazards in each individual jurisdiction plan in order to reach a consensus of the identified Regional Hazard Profiles. The AEMA Division D Core Team also met to discuss Division D Mitigation Goals/Strategies based on these items found in each individual jurisdiction plan. The meetings took place on July 29th and September 19th, 2019.

The July 20th, 2019 meeting included discussion of the following:

- Meet with other Division D leaders
- Introduction to hazard mitigation in the region
- Established core planning team responsibilities.
- Identified deadlines.
- Updated and outlined the evaluation process.
- Organize the process.

The September 19th, 2019 meeting included discussion of the following:

- Compared goals and hazards in Division D.
- Identified goals for Division D.
- The Lee-Russell council of local governments (LRCOG) was in charge of the planning process.

Phase III-A of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan was developed through the cooperation between the EMA directors from Chambers, Chilton, and Tallapoosa counties the AEMA Division D Coordinator, and Lee-Russell Council of Governments, as well as stakeholders representing organization such as county commissions, local governments, local school districts, local utility boards, or law enforcement.

The natural hazard that threatens and impacts the jurisdiction in Chambers, Chilton, and Tallapoosa counties were identified by the Division D Core Team, as well as noted in previous county-level hazard plans. The mitigation actions from the previous county-level hazard plans were identified and presented to the stakeholders, local EMA directors, and participating jurisdictions for reviewed and approved. These hazard and mitigation actions were updated to reflect current information, such as hazard frequency and severity, available on natural hazard events in Chambers, Chilton, and Tallapoosa counties. Risk analysis was conducted using historical data estimates of magnitude and extent of damage from events. Results were presented to stakeholders and participating jurisdictions in print format, electronically and in hard copy, and were reviewed in a series of local meetings.

Stakeholders participated and helped facilitate the planning process by:

- Attend scheduled meetings, or if unable to attend, send a designee or make themselves available to discuss the agenda through a phone conversation, email, or in-person meeting.
- Represent their jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Collecting and reviewing information on their jurisdiction's conditions and resources
- Facilitating the development of a comprehensive range of mitigation alternatives
- Recommending selected alternatives for action
- Facilitating information exchange among participating jurisdictions, acting as liaisons to eligible entities of each jurisdiction
- Provide an assessment of prioritized projects that have been completed or are ongoing or changes to prioritization.

The Hazard Mitigation Plan and the Hazard Mitigation Plan Action Strategies were sent to each participant of the county-level subcommittee prior to the meetings held in 2019. The scope of the meetings was to assess the progress of each jurisdiction's mitigation goals and objectives and to determine recent hazard events and how they affected the jurisdictions. From these meetings, hazard profiles were consolidated, updated for the regional scope of the plan, and risk analysis updates were conducted using historical and local documentation. Plan drafts were distributed to stakeholders and local jurisdictions for review and the plan draft was discussed in the realm of public meetings before submission to AEMA and FEMA.

The October 10th and October 17th meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Benefits of Mitigation Planning
- Legal Regulations for Local Hazard Mitigation
- Plan Requirements
- Core Planning Team for Division D
- Responsibilities, Processes, Timeline
- Hazards Introduced
- Risk Index

The October 31st, 2019 and November 5th, 2019 meetings included discussion of the following:

- Divisions in Alabama & Counties in Division D

- Updates to Stakeholders and Technical Advisors
- Plan Requirements, Process, and Timeline
- Role of Stakeholders and Technical Advisors
- Benefits of Mitigation Planning
- Mission Statement
- Hazard Identified
- Historical Hazard Events Recap

June 12th, 2020 made contact with EMA directors.

- Reached out to local EMA directors.
- Received Stakeholder Contact List

September 23rd, 2020 Contacted Stakeholders.

- Emailed: Stakeholders surveys and PowerPoints
- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Division D Goals
- How to Measure Community Resilience
- Hazards Ranked
- Recap Past Hazards Events

September 23rd, 2020 Community Engagement

- Setup Survey for Community Participation
- Collected and Analyzed Data Collected

The December 14th, 2020 to January 14th, 20202 Public Comment Period

- Briefed the public on updates to the plan.
- Received feedback on the Plan.
- Posted Draft on Facebook and Website

Table 1.1: AEMA Division D Core Team

Organization	Contact
Autauga County EMA	Ernie Baggett
Bullock County EMA	Josh Powell
Chambers County EMA	Jessica Yeagar
Chilton County EMA	Derrick Wright
Coosa County EMA	Les Miles
Elmore County EMA	Keith Barnett
Lee County EMA	Rita Smith
Lowndes County EMA	David Butts
Macon County EMA	Frank Lee
Montgomery County EMA	Christina Thornton
Russell County EMA	Robert “Bob” Franklin
Tallapoosa County EMA	Jason Moran
AEMA Division D Coordinator	Monique Smith
Lee-Russell Council of Governments	Lisa Sandt/Tracie Hadaway

Source: Alabama Emergency Management Agency, County EMA Director

Table 1.2: Phase III-A Regional Hazard Mitigation Plan subcommittee

Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Jessica Yeager	All	Director	Chambers Co EMA/911	X	X	X
Kathy Hornsby	All	Deputy Director	Chambers Co EMA/911	X	X	X
**David Ennis	Chambers County	County Representative	Chambers County	X	X	X
Josh Harvill	Chambers County	County Engineer	County Highway Department	X	X	X
Daniel Lundy	Chambers County	Assistant County Engineer	County Highway Department	X	X	X
Jim Doody	City of Lafayette	EMS/Fire Chief	Lafayette EMS/Fire Department	X	X	X
**George Rampey	City of Lafayette	Police Chief	Lafayette Police Department	X	X	X
Louis Davidson	City of Lafayette	City Mayor	City of Lafayette	X	X	X
Johnny Wood	City of Lanett	Police Chief	Lanett Police Department	X	X	X
**Johnny Allen	City of Lanett	EMS/Fire Chief	Lanett EMS & Fire Department	X	X	X
**Tommy Weldon	City of Valley	Police Chief	Valley Police Department	X	X	X
Matt Shiver	Town of Cusseta	Fire Chief	Cusseta Volunteer Fire Department	X	X	X
Jim Allen	Town of Fredonia	Town Council Member	Town of Fredonia	X	X	X
Taylor Meltzer	Town of Waverly	Town Mayor	Town of Waverly	X	X	X
Neal Marberry	Chambers County	EMS/Fire Chief	East AL Water, Sewer & Fire Protection District, Inc.	X	X	X
Kerry Pickard	Chambers County	EMS/Fire Assistant Chief	East AL Water, Sewer & Fire Protection District, Inc.	X	X	X

Jacob Geiger	Chambers County	EMS/Fire Training Officer	East AL Water, Sewer & Fire Protection District, Inc.	X	X	X
Valerie Gray	Chambers County	Executive Director	Chambers County Development Authority	X	X	X
Chris Busby	Chambers County	Community Development Administrator	Chambers County Development Authority	X	X	X
Stan Taylor	Chambers County	Fire Chief	Huguley Fire Department	X	X	X
Willie Kirby	Chambers County	Fire Captain	Huguley Fire Department	X	X	X
Leann McCullars	Chambers County	Engineering Secretary, EC/EM Coordinator	East Alabama medical Center - Lanier	X	X	X
Tawanna Robins	Chambers County	Disaster Program Manager	Central Alabama Red Cross representative	X	X	X
Tracy Taylor	Chambers County	Nurse Supervisor	Chambers County Health Department	X	X	X
**Byron Pigg	Chambers County	CECD Board Member, At Large	Chambers County Emergency Communications District, Inc	X	X	X
**Richard Carter	Chambers County	Chief Deputy	Chambers County Sheriff's Department	X	X	X
Sid Lockhart	Chambers County	Sheriff	Chambers County Sheriff's Department	X	X	X

**Lynn Coker	Chambers County	Fire Chief	Abanda Volunteer Fire Department	X	X	X
James Williams Jr.	Chambers County	Fire Chief	VFD Association Representative & Mt. Olive Volunteer Fire Dept.	X	X	X
James Williams	Chambers County	Commission Member	County Commission Member & AL Forestry	X	X	X
David Logan	Barbour County	EMA Barbour County	EMA Director		X	
Travis McGrady	Talladega County	EMA Talladega County	EMA Director		X	
Kirk Smith	Bibb County	EMA Bibb County	EMA Director		X	
Kelli Hodge	Chambers County	Chambers County BOE	County School Superintendent	X	X	X
George Fannings	Town of Fredonia	Town of Fredonia	Mayor		X	
Derrick L. Wright Sr.	Town of Five Points	Town of Five Points	Mayor		X	

Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Derrick Wright	Chilton County	Chilton County EMA	EMA Director	X	X	X
Tony Wearren	Chilton County	Chilton County	County Engineer	X	X	X
Sylvia Singleton	Chilton County	Chilton County	County Administrator		X	
Nic Bolton	Chilton County	Chilton County EMA	EMA Administrative Assistant		X	

Terra Scott	Chilton County	Chilton County 911	County 911 Director	X	X	X
Bobby Cook	Clanton	City of Clanton	Mayor		X	
David Driver	Clanton	City of Clanton	Fire Department, Chief		X	
Dawn Smitherman	Maplesville	Town of Maplesville	Town Clerk	X	X	X
Josh Parker	Thorsby	Town of Thorsby	Fire Department, Chief		X	
Robert Hight	Thorsby	Town of Thorsby	Mayor		X	
Rodney Barnett	Thorsby	Town of Thorsby	Police Department, Chief		X	
Jason Griffin	Chilton County Board of Education	Chilton County Board of Education	Superintendent		X	
Yvonna Benson	Chilton County Board of Education	Chilton County Board of Education	Certification Officer		X	
Fred Smith	Chilton County Board of Education	Chilton County Board of Education	Maintenance Superintendent		X	
Hub Harvey	Shelby County	Shelby County	EMA Director		X	
Eddie Reed	Jemison	Town of Jemison	Mayor		X	
Jon G. Graham	Calera	Town of Calera	Mayor			
David Logan	Barbour County	EMA Barbour	EMA Director		X	
Travis McGrady	Talladega County	EMA Talladega	EMA Director		X	
Kirk Smith	Bibb County	EMA Bibb	EMA Director		X	
Participant	Jurisdiction	Company	Title	Attended Meeting	Opportunity for Written Comments	Provided Feedback
Sharon Fuller	Tallapoosa County	Lake Martin Area United Way	Executive Director	X	X	X
Cade Cosby	Tallapoosa County	Reeltown Volunteer Fire Dept.	Fire Chief	X	X	X

Andrew Williams	Tallapoosa County	Bill Nichols State Veterans Home	Director of Maintenance & Security	X	X	X
Chance Hunt	Dadeville	Dadeville Police Department	Lieutenant	X	X	X
Misty Anderson	Tallapoosa County	Russell Medical	Director Education, Safety, Accreditation	X	X	X
Clay Greene	Tallapoosa County	Adams Nursing Home	Maintenance Supervisor	X	X	X
Brenda Floyd	Tallapoosa County	Tallapoosa County DHR	County Director	X	X	X
John Hill	Tallapoosa County	Flint Hill Church	Pastor/Law Enforcement Chaplain	X	X	X
Talmadge East	Tallapoosa County	Tallapoosa County	Probate Judge	X	X	X
Courtney Layfield	Tallapoosa County	Lake Martin Area United Way & Tallapoosa Coosa VOAD	Marketing & Initiatives Director; VOAD Secretary Treasurer	X	X	X
Jeremy Spears	Alexander City	Alexander City Fire Department	Fire Marshal	X	X	X
Jonathan Florine	Alexander City	Alexander City Fire Department	Fire Inspector	X	X	X
Cecily Lee	Tallapoosa County	Brown Nursing and Rehabilitation	Administrator	X	X	X
Joseph Moncrief	Tallapoosa County	Tallapoosa County	Asst. County Engineer	X	X	X
Kim Cotney	Tallapoosa County	Tallapoosa County Sheriff's Department	Communications Supervisor	X	X	X
Mike Eubanks	Tallapoosa County	Tallapoosa County 9-1-1	Addressing/GIS Technician	X	X	X
David McMichael	Tallapoosa County	Tallapoosa County Sheriff Department	Chief Deputy	X	X	X
Anita Haggerty	Tallapoosa County	The Tallapoosa County 9-1-1 Board	Tallapoosa County 9-1-1 Coordinator	X	X	X

Anthony Wilkerson	Dadeville	City of Dadeville Fire and Rescue	Fire Chief	X	X	X
Jonathan Floyd	Dadeville	Dadeville Police Department	Chief of Police	X	X	X
David berry	Camp Hill	Camp hill fire dept.	chief	X	X	X
Rusty Marcell	Tallapoosa County	Tallapoosa County EMA	Retired	X	X	X
Casey Davis	Tallapoosa County	Tallapoosa County Board of Education	Director of Student Services	X	X	X
Kim McDonald	Tallapoosa County	LAKE MARTIN COMMUNITY HOSPITAL	RN, Director of Nursing	X	X	X
Randy Anderson	Tallapoosa County	The Deathcare industry	Owner of Radney Funeral Home and Langley Funeral Home	X	X	X
Shelia Fuller	New Site	Town of New Site	Town of New Site - Town Clerk	X	X	X
Jojo Huff	Tallapoosa County	Buttston Fire Dept.	Chief	X	X	X
Angela Cox	Tallapoosa County	Edward Bell Career Technical Center	Health Science Instructor, RN	X	X	X
Donna Carboni	Tallapoosa County	Tallapoosa Co. Building Dept.	Building Dept. Office Manager	X	X	X
Brandi Hardy	Tallapoosa County	Tallapoosa County EMA (Emergency Management Agency)	Administrative Assistant	X	X	X
James Smith	Tallapoosa County	Tallapoosa Baptist Association	mission’s coordinator in the Tallapoosa Baptist Association	X	X	X
ELAINE FOREMAN	Tallapoosa County	CHAPMAN HEALTHCARE CENTER	MEDICAL RECORDS/OSHA	X	X	X
Ken Cowart	Alexander City	Alexander City Rescue Squad	President	X	X	X

Nancy Bice	Tallapoosa County	Home health agency serving 8 counties	Intake Coordinator Ivy Creek Home Health of Lake Martin	X	X	X
Brandon Pitchford	Tallapoosa County	Union Volunteer Fire & Rescue	Fire Chief	X	X	X
Al Jones	Alexander City	City of Alexander City	Community Development Director	X	X	X
Danny Lloyd	Tallapoosa County	Eagle Creek VFD	Secretary	X	X	X
Jerry Turner	Alexander City	Police City of Alexander City	Chief of Police Alexander City	X	X	X
Ed Collari	Alexander City	Alexander City Chamber of Commerce	President & CEO - Alexander City Chamber of Commerce	X	X	X
Jeff Brewer	Alexander City	Alexander City Fire Department	Training Officer	X	X	X
John Hammock	Tallassee	City of Tallassee	Mayor	X	X	X
Jason Moran	Tallapoosa County	EMA Office	Tallapoosa EMA Director	X	X	X
Frank Lucas	Jackson's Gap	Town of Jackson's Gap	Mayor		X	
David Logan	Barbour County	EMA Barbour	EMA Director		X	
Travis McGrady	Talladega County	EMA Talladega	EMA Director		X	
Kirk Smith	Bibb County	EMA Bibb	EMA Director		X	

1.2 Public and Other Stakeholder Involvement

The presence of community engagement is an important element to consider during the planning process because it allows the public/residences to have input in potential projects specifically at the local level. According to APA, public engagement is "the key to building an inclusive community," because it gives everyone access to participate in the planning process. Working with the people who live in Chambers, Chilton, and Tallapoosa counties gives the community an active role in planning, creates a partnership between the public and planners.

Due to the COVID-19 pandemic zero meetings were held in order to comply with social distancing laws in places at the time. The public was invited and encouraged to participate in the planning process by partaking in surveys and reviewing the draft plans. Digital copy of the plan was uploaded on the Lee Russell Council of Governments and EMA county websites, city and county websites as well as links to the plan were posted on socials media pages. These initiatives were done prior to the plan approval and adoption of the plan. A copy of the final plan approved by FEMA will be placed on the LRCOG website as well as hard copies at the local EMA offices, city and county offices (as determined), school boards, and water authorities will also receive a hard copy. The Lee-Russell Council of Governments consulted with other regional planning offices in the state in order to receive feedback on Phase Three-A of the Hazard Mitigation Plan. Due to the nature of a regional plan, it was impossible to reach out to neighboring jurisdictions because the regional plan covers all the jurisdictions in the closest eleven counties. Therefore, the planning staff decides to contact the planning directors following regional planning offices in order to meet FEMA's requirements on having the plan reviewed by an outside entity: Barbour County, Shelby County, Bibb County, and Talladega County.

Extensive public outreach was conducted with surveys to garner input on hazard assessment in the region in order could obtain helpful information about the residences' knowledge, needs, and concerns. The survey consisted of multiple choice and short answer questions that focused on understanding the residences' knowledge, needs, and concerns regarding hazard events and hazards preparation. For this project, we chose to use a non-probability sampling method because we do not know the probability of everyone has been chosen or not chosen to participate in the survey. This type of survey method is focused on qualitative research rather than quantitative research, which will allow us to understand people's feelings towards hazards.

The target population for our survey was those individuals who live or work in Chambers, Chilton, and Tallapoosa counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys. Interactive surveys were sent to or posted on the following locations: The Lee-Russell Council of Governments website; Each EMA office's Facebook, Twitter, and Websites; County and City websites, local newspapers and social media pages; for a detailed list of all the places and groups who received the survey please refer to Section 7.3 in the Appendix. Due to the outbreak of COVID-19 the staff was unable to attend any community events to receive citizen input, nor could staff work with the RSVP program to go into senior centers.

The following results from the public outreach survey were broken down by county.

A total of 86 responses to the survey were recorded, and all survey was complete. Of the 86 responses, 27 responses were from Tallapoosa County residents. Of those participants, 11%, 3 persons, responded that they felt not prepared for a natural hazard, while 62%, 17 persons said they did feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than an option on this question. 70%, 19 persons, expressed having access to safe rooms would help them feel more prepared, 66%, 18 persons, felt that access to a readiness kit would make them feel more prepared, and 11%, 3 persons said community classes on natural hazards would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Tallapoosa County. The top four sources that participants found the most effective way to get information were as followed: 100% chose cell phones (27 persons), 74 % outdoor weather alert radio (20 persons), 74% chose TV Coverage (20 persons), and 51% said Facebook posts (14 persons). 14%, 4 persons, did not know if they lived in a floodplain.

Of the 86 responses, 59 responses were from Chambers County residents. Of those participants, 55%, 33 persons, responded that they felt prepared for a natural hazard, while 6%, 4 persons said they did not feel prepared for a natural hazard event. The next question focused on how to help residents feel more prepared for natural hazard events, the respondents could select more than one option on this question. 54%, 32 persons, expressed having access to a readiness kit would help them feel more prepared, 35%, 21 persons, felt that access to community shelters would make them feel more prepared, and 49%, 29 persons said access to safe rooms would help them feel more prepared. We asked participants what sources they found more effective to obtain information from when a natural hazard is approaching Chambers County. The top four sources that participants found the most effective way to get information were as followed: 89%, 53 persons, expressed having cell phone alerts would help them feel more prepared, 47%, 28 persons, felt that access to TV coverage would make them feel more prepared, and 57%, 34 persons said access to a radio coverage would help them feel more prepared. 6%, 4 persons, did not know if they lived in a floodplain.

Chilton County had 0 response despite numerous efforts to engage the public. Please review the notes in section 7.1 of appendix.

The feedback received from the surveys mainly focused on what the people of Chambers, Chilton, and Tallapoosa County felt about concerns regarding the level of threat and access to safe places during natural hazard events. The feedback received from these comments and the survey results were used to help write narrative sections of the plan as well as used to support the mitigation action strategies.

The Lee-Russell Council of Governments and the local EMA directors involved multiple stakeholders in the formation of this plan as identified in Table 1.2. These stakeholders were informed of the process, plan update, and information. Comments were solicited from the stakeholders identified.

1.3 Integration with Existing Plans

Existing plans were consulted upon drafting the Phase III-A Regional Hazard Mitigation Plan to gauge understanding of the region's capacity for hazard mitigation. Plans reviewed include:

Alabama State Hazard Mitigation Plan (2018 Update):
The State Hazard Mitigation Plan was consulted to assist with the consistency of information within the regional plan, including items within the Risk Assessment and local capabilities.

Chambers, Chilton, and Tallapoosa County Hazard Plans:
Chambers, Chilton, and Tallapoosa counties both have previously developed and approved local hazard mitigation plans. These plans were reviewed for consistency of information within the regional plan.

Local Comprehensive/Master Plans:
Chambers, Chilton, and Tallapoosa counties were reviewed for consistency with information in the regional hazard mitigation plan.

- City of Lafayette Master Plan
- City of Lafayette Rebuild Alabama Transportation Plan
- City of Lanett Zoning Ordinance
- City of Lanett Comprehensive Plan
- City Valley 2019 Comprehensive Plan
- City of Valley Zoning Ordinance
- Town Cusseta Zoning Regulations
- Town of Five Points Zoning Regulations
- Town of Waverly Zoning Regulations
- Tallapoosa County
- City of Alexander City Zoning Ordinance
- City of Dadeville Zoning Ordinance
- City of Dadeville Comprehensive Plan
- City of Tallassee Zoning Ordinance
- City of Tallassee 2040 Comprehensive Plan
- Town of Camp Hill Zoning Ordinance
- Town of Camp Hill Comprehensive Plan
- Town of Daviston Zoning Regulations
- Town of Jackson's Gap Zoning Ordinance
- Town of Jackson's Gap Comprehensive Plan
- Town of New Site Zoning Regulations

Comprehensive Economic Development Strategy 2010 Update:
The RPCGB 2017 CED's was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for Chilton County. The EARPDC 2017 CED's was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for Chambers, and Tallapoosa counties.

Emergency Operations Plans:
Chambers, Chilton, and Tallapoosa counties all have an Emergency Operation Plan (EOP) that is utilized in an emergency. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. These plans complement the hazard mitigation plan but do not necessarily cover the same material.

Alabama Drought Management Plan (2018)
The Alabama Drought Management Plan was studied to provide background information about drought impacts on the planning area.

Section 2- Regional Profile

Section Contents

2.1 Background
2.2 Demographics
2.3 Business and Industry
2.4 Infrastructure
2.5 Land Use and Development Trends
2.6 NFIP Compliance

2.1 Background

The planning area is defined by Alabama Emergency Management Agency (AEMA) as Division D, which is one of seven emergency management divisions within the state. AEMA Division D is located in eastern Alabama (Figure 2.1). AEMA Division D is comprised of the following twelve counties: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell, Tallapoosa, and the jurisdictions in those counties. This version of the multi-jurisdictional hazard mitigation plan covers three of the twelve AEMA Division D counties and the jurisdictions in Chambers, Chilton, Coosa, Macon, Lowndes, and Tallapoosa counties. Due to expirations dates of plans Phase III was divide into A and B. Phase III-A will cover Chambers, Chilton, and Tallapoosa. Phase III-B will cover Coosa, Lowndes, and Macon. Phase I counties are currently covered by the Phase I of Division D, and Phase II is in the process of being approved. When all of the phases are approved by FEMA all of the plans will be updated. Information for Chambers, Chilton, and Tallapoosa counties are the only counties included in Phase III-A. Please refer to Figure 1 to see where in Alabama Division D is located and the phases.

Chambers, Chilton, and Tallapoosa counties are located in Central, and East Central Alabama. Chambers County occupies 625 mi^2 of the 50,744 mi^2 of Alabama, Chilton occupies 603 mi^2, and Tallapoosa County occupies 766 mi^2 of Alabama. Table 2.1 presents the land area of each county and that of its municipalities.

Chambers, Chilton, and Tallapoosa counties are located south of Clay, Shelby, Talladega, and Randolph counties. Bibb and Perry counties are west, and the state Georgia is to the east of Chambers, Chilton, and Tallapoosa counties. Figure 2 shows an overview of details for Chambers, Chilton, and Tallapoosa counties.

This part of the Alabama is home to 4 major rivers, Alabama, Coosa, Chattahoochee, and Tallapoosa. These rivers are not free flowing due to the Southern Company's dams along the rivers. The Alabama, Coosa, and Tallapoosa rivers cut through the region, which provide two river basins for the region, Alabama-Coosa River Basin and the Coosa-Tallapoosa River Basin. Lake Martin and Jordan Lake have a large presence in Tallapoosa County because of the recreation amenity it offers the area. The Chattahoochee River flows along the eastern boarder of Chambers County and creates the boarder to Georgia.

Chambers, and Tallapoosa counties are an apart of the Piedmont Plain. According to Dr. Gamble the Piedmont Region is home to the some of the oldest soils in the Western Hemisphere, which are well-drained and fertile. Chilton County is a part of the Coastal Plan, largely characterized by hilly topography with gentle to steep slopes. According to Charles C. Mitchell, Donn Rodekohr, and Shane Harris from the Alabama Cooperative Extension System, the Alabama "The soils found in Chilton County comprise largely of sandy and loamy upland soils, alluvial terraces and poorly drained floodplains of the Alabama, Coosa, and Tallapoosa rivers."

Figure 1: AEMA Division D Plan Phases

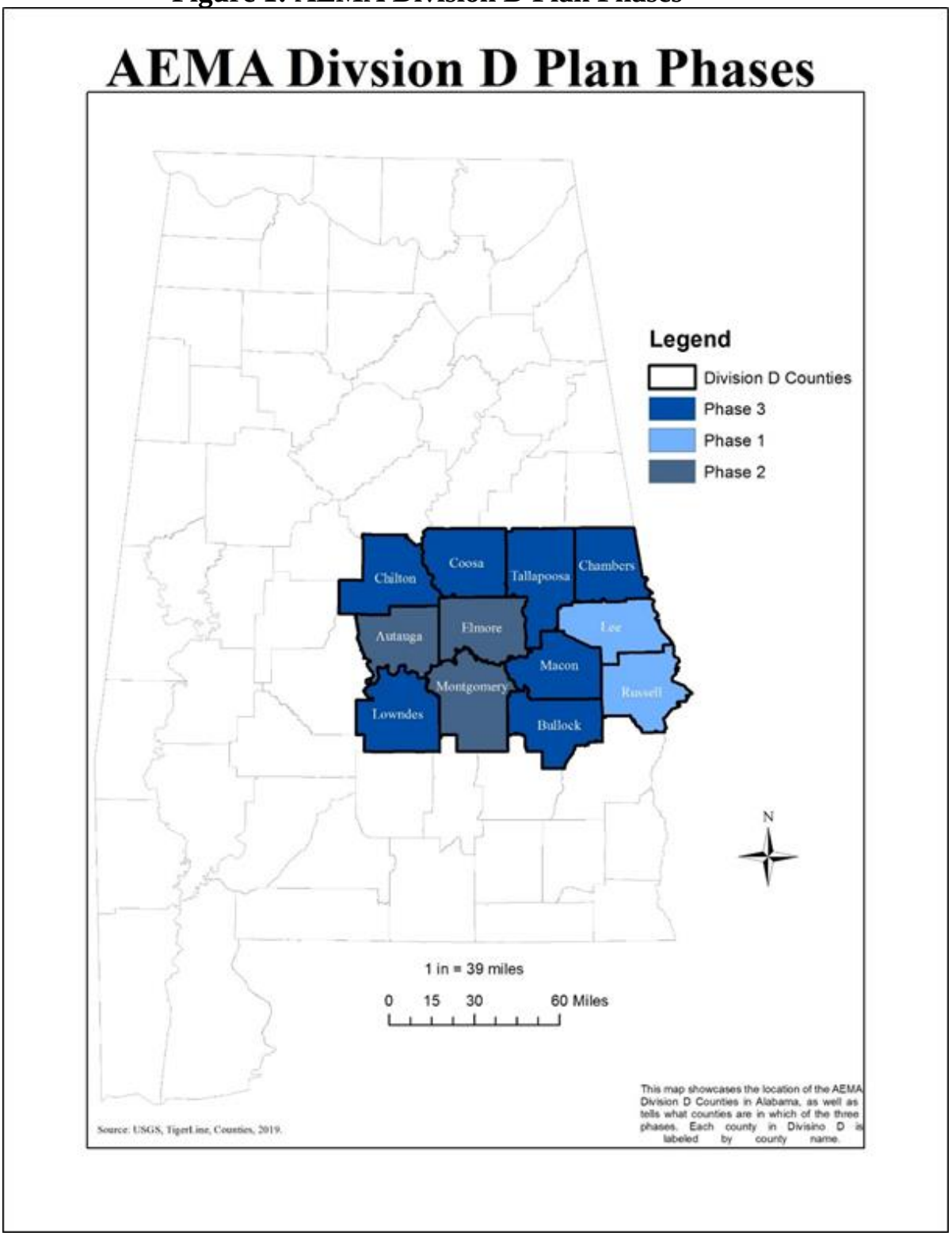


Figure 2: Overview Phase III

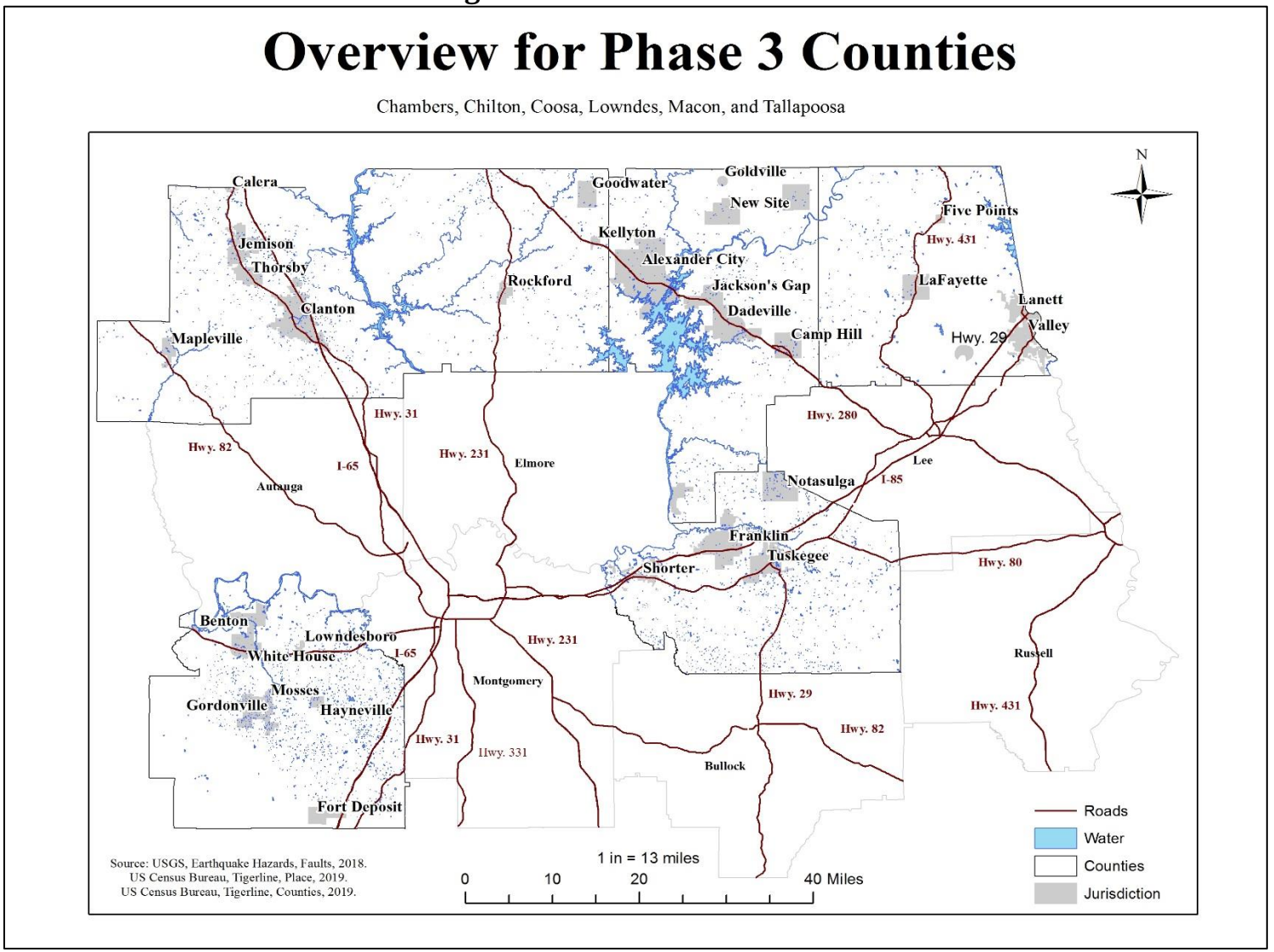


Table 2.1 Total Area by County

Jurisdiction	Total Area
Chambers (entire)	**625 mi²**
City of Lafayette	9 mi²
City of Lanett	6 mi²
City of Valley	13 mi²
Town of Cusseta	3 mi²
Town of Five Points	1 mi²
Town of Waverly	3 mi²
Town of Fredonia	12 mi²
Unincorporated County	590 mi²
Chilton County (entire)	**603 mi²**
Clanton	23 mi²
Jemison	12 mi²
Maplesville	3 mi²
Thorsby	6 mi²
Unincorporated County	656 mi²
Tallapoosa County (entire)	**766**
City of Alexander City	42 mi²
Cite of Dadeville	16 mi²
City of Tallassee	6 mi²
Town of Camp Hall	9 mi²
Town of Daviston	9 mi²
Town of Jackson's Gap	9 mi²
Town of New Site	12 mi²
Unincorporated County	662 mi²

Source: *USGS, Tiger Line, Places, Total Area, 2019*

2.2 Demographics

According to the 2010 Census, the combined population of these counties was 130,704, and the estimate population was 118,392 according to the 2018 ACS. The following table provides the 2010 population according to the US Census Bureau as well as the 2018 American Community Survey estimates for each jurisdiction. As evidenced in Table 2.2, counties experienced a decrease in population from 2010 to 2018.

Table 2.2: Jurisdiction Population

Jurisdiction	2010	2018	% Change
Chambers (entire)	34,579	33,826	-2%
City of Lafayette	3,037	2,945	-3%
City of Lanett	6,722	6,318	-6%
City of Valley	9,527	9,305	-2%
Town of Cusseta	57	112	96%
Town of Five Points	186	258	39%
Town of Waverly	194	154	-21%
Town of Fredonia	208	220	6%
Unincorporated County	14,856	14,734	-1%
Chilton County (entire)	43,121	43,930	2%
Clanton	8,688	8,984	3.4%
Jemison	2,603	2,650	1.8%
Maplesville	708	686	-3.1%
Thorsby	1,999	2,110	5.6%
Unincorporated County	46,499	47,468	2%
Tallapoosa County (entire)	41,534	40,636	-2%
City of Alexander City	14,879	14,621	-2%
Cite of Dadeville	3,217	3,115	-3%
City of Tallassee	4,683	5,013	7%
Town of Camp Hall	964	1,101	14%
Town of Daviston	274	186	-32%
Town of Jackson's Gap	841	779	-7%
Town of New Site	897	791	-12%
Unincorporated County	15,737	14,997	-5%

Source: United States Census Bureau (2010 Census and 2018 Population Estimates)

Persons who lived in Chambers, Chilton, and Tallapoosa Counties were majority white, according to the ACS 2013 to 2018 5-year estimates. The racial characteristics from the ACS 2013 to 2018 5-year estimate by county are presented below in Table 2.3.

Table 2.3: Racial and Ethnic Demographics by County

Jurisdiction	White	African American	Hispanic or Latino	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other race
Chambers (entire)	18,872	13,319	768	97	405	-	347
City of Lafayette	916	1,861	-	16	30	-	-
City of Lanett	2,248	3,780	165	-	-	-	125
City of Valley	4,970	3,697	348	15	216	-	59
Town of Cusseta	111	-	-	-	1	-	-
Town of Five Points	103	154	-	-	-	-	1
Town of Waverly	132	22	-	-	-	-	-
Town of Fredonia	164	56	0	0	0	0	0
Unincorporated County	10,392	3,805	255	66	158	-	162
Chilton County (entire)	35,205	4,112	3,416	39	190	-	80
Clanton	6,140	1,907	246	-	182	-	-
Jemison	1,940	571	92	-	-	-	-
Maplesville	545	190	5	-	-	-	-
Thorsby	1,630	110	176	8	8	-	-
Unincorporated County	24,950	1,334	2,897	31	-	-	80
Tallapoosa County (entire)	28,649	11,293	954	278	269	-	400
City of Alexander City	8,694	4,827	795	49	135	-	121
Cite of Dadeville	1,523	1,491	61	40	-	-	-
Town of Camp Hall	75	1,011	12	-	-	-	3
Town of Daviston	173	11	-	-	-	-	2
Town of Jackson's Gap	684	79	-	9	3	-	4
Town of New Site	705	74	5	-	-	-	7

Source: United States Census Bureau (ACS 2014- 2018 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, there are 65,435 total housing units in the region. Chilton County has the most occupied housing units in the region, but its Tallapoosa County has the oldest housing stock. Older housing can make people more vulnerable to hazard if the house is dilapidated. Housing information estimates, including

more vulnerable housing such as mobile homes and aging housing, are presented by county in Table 2.4 below:

Table 2.4: Housing Conditions by County

Jurisdiction	Total Housing	Occupied Units	Manufactured Homes	Houses 30+ Years
Chambers (entire)	16,981	13,516	2,378	12,418
City of Lafayette	1254	1022	108	2949
City of Lanett	3431	2674	63	991
City of Valley	4496	3623	272	3199
Town of Cusseta	64	50	29	48
Town of Five Points	98	77	38	68
Town of Waverly	97	78	3	69
Town of Fredonia	118	87	39	77
Unincorporated County	7,541	5,992	1,865	5,094
Chilton County (entire)	19,586	16,751	6,332	10,506
Clanton	3,843	3,291	125	2,528
Jemison	903	862	243	482
Maplesville	286	260	89	158
Thorsby	848	736	127	496
Unincorporated County	13,706	11,602	5,748	6,842
Tallapoosa County (entire)	22,310	16,448	4,029	13,980
City of Alexander City	6844	6081	348	5303
Cite of Dadeville	1250	2224	215	1008
City of Tallassee	1077	1926	130	1675
Town of Camp Hill	590	411	120	440
Town of Daviston	101	80	26	62
Town of Jackson's Gap	358	283	148	213
Town of New Site	83	327	73	280
Unincorporated County	11,993	5,102	2,966	4,989

Source: U.S. Census Bureau (2014-2018 ACS 5-Year Estimates, Table DP04)

All persons living in manufactured homes, as well as older housing, are vulnerable to natural disasters due to the building materials and standards are not the same as homes built on a slab. The cities such as the City of Alexander City, the City of Valley, and the City of Jemison have the largest number of manufactured homes, which is dangerous because these people should not stay in their homes in the event of natural disasters like a tornado, or severe thunderstorm with high winds. For more details on housing characters please refer to the Table 2.5.

Based on the U.S. Census Bureau's 2014-2018 ACS 5-Year Population Estimate, Tallapoosa County, the City of Alexander City, and the City of Valley have the largest number of households in these three counties. The U.S. Census Bureau defines a "household" to include all people who

occupy one unit of residence, such as an apartment, single room, mobile home, or a house. Table 2.5 represents the median household income for Chambers, Chilton, and Tallapoosa counties:

Table 2.5: Household Median Income by County

Median Household Income by County	
County	**Income**
Chambers	$ 39,872
Chilton	$ 45,182
Tallapoosa	$43,361

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Tallapoosa County had the largest percent of person who lived below the poverty line (20%) compared to Chambers and Chilton counties. The U.S. Census Bureau determines poverty based on the poverty threshold. If the total income is greater than the poverty threshold, then the family or person is not considered in below the poverty line. The U.S. Census Bureau uses the following two equations to determine poverty status: *Income / Threshold =X or Income – Threshold =X*. Table 2.6 displays the total number of an individual below the poverty line and the percent below the poverty line.

Table 2.6: Individuals below the Poverty Line by County

*Individuals Below the Poverty Line *2019*			
Jurisdiction	**Number of Individuals**	**Total Population**	**Percent of Total Population**
Chambers (entire)	**5,531**	**33,826**	**16%**
City of Lafayette	535	2,945	18%
City of Lanett	1,405	6,318	22%
City of Valley	1,419	9,305	15%
Town of Cusseta	26	112	23%
Town of Five Points	18	258	7%
Town of Waverly	10	154	6%
Town of Fredonia	39	220	17%
Unincorporated County	2,118	14,734	14%
Chilton County (entire)	**8,034**	**43,930**	**18%**
Clanton	1,959	8,984	22%
Jemison	435	2,650	16%
Maplesville	179	686	26%
Thorsby	323	2,110	15%
Unincorporated County	5,139	29,500	17%
Tallapoosa County (entire)	**8,131**	**40,636**	**20%**
City of Alexander City	3,666	14,621	25%
Cite of Dadeville	840	3,115	27%
City of Tallassee	1,167	5,013	23%
Town of Camp Hall	483	1,101	17%
Town of Daviston	9	186	5%
Town of Jackson's Gap	144	779	18%
Town of New Site	90	791	11%
Unincorporated County	1,549	14,997	10%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate there are 28,582 persons in Tallapoosa County29,793 persons in Chilton County, and 23,564 in Chambers County that are 25 years or older. Of these people who are 25 years or older living in Chambers County, 57% of these persons do not have more than a high school education. This trend is similar for Chilton, and Tallapoosa counties. Unfortunately, this data is only available at the county level. The lack of education stresses the need for education about natural hazard vulnerability. Table 2.7 shows the total number and rate for highest education attained (high school graduate or less) of person 25 and older.

Table 2.7: Highest Education Attained (High school Graduate or Less) by County

County	Individuals (25+) with High School Graduate or Less	% Individuals (25+) with High School Graduate or Less
Chambers	13,443	57%
Chilton	18,427	62%
Tallapoosa	14,983	53%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Based on the U.S. Census Bureau's 2010 Census there were 11,095 persons 75 years or older lived in the counties of interest, with the highest concentration living in Tallapoosa County. The 2014-2018 ACS 5-Year Population Estimate reported 12,087 persons 75 years or older lived in the region. From 2010 to 2018 in Tallapoosa County there was a 1.5% increase in the population of 75 years or older, a 1% increase in Chambers County, and 1.2% increase in Chilton County. The large increase in the persons 75 years or older can be attributed to the large Baby Boomer population reaching 75 years old, which can be seen in Table 2.8. The population under 19 years old is also vulnerable during natural disasters because these persons may not know how to react during an event. It is important to learn about how to prepare for hazards in school. Tables 2.9 shows the population of persons under 19 years old.

Table 2.8: People 75 years or older in 2010 and 2018

County	2010	2018
Chambers	2,628	2,634
Chilton	2,329	2,791
Tallapoosa	3,074	3,239

(Source: U.S. Census Bureau (2010 Census and 2018 ACS Population Estimates)

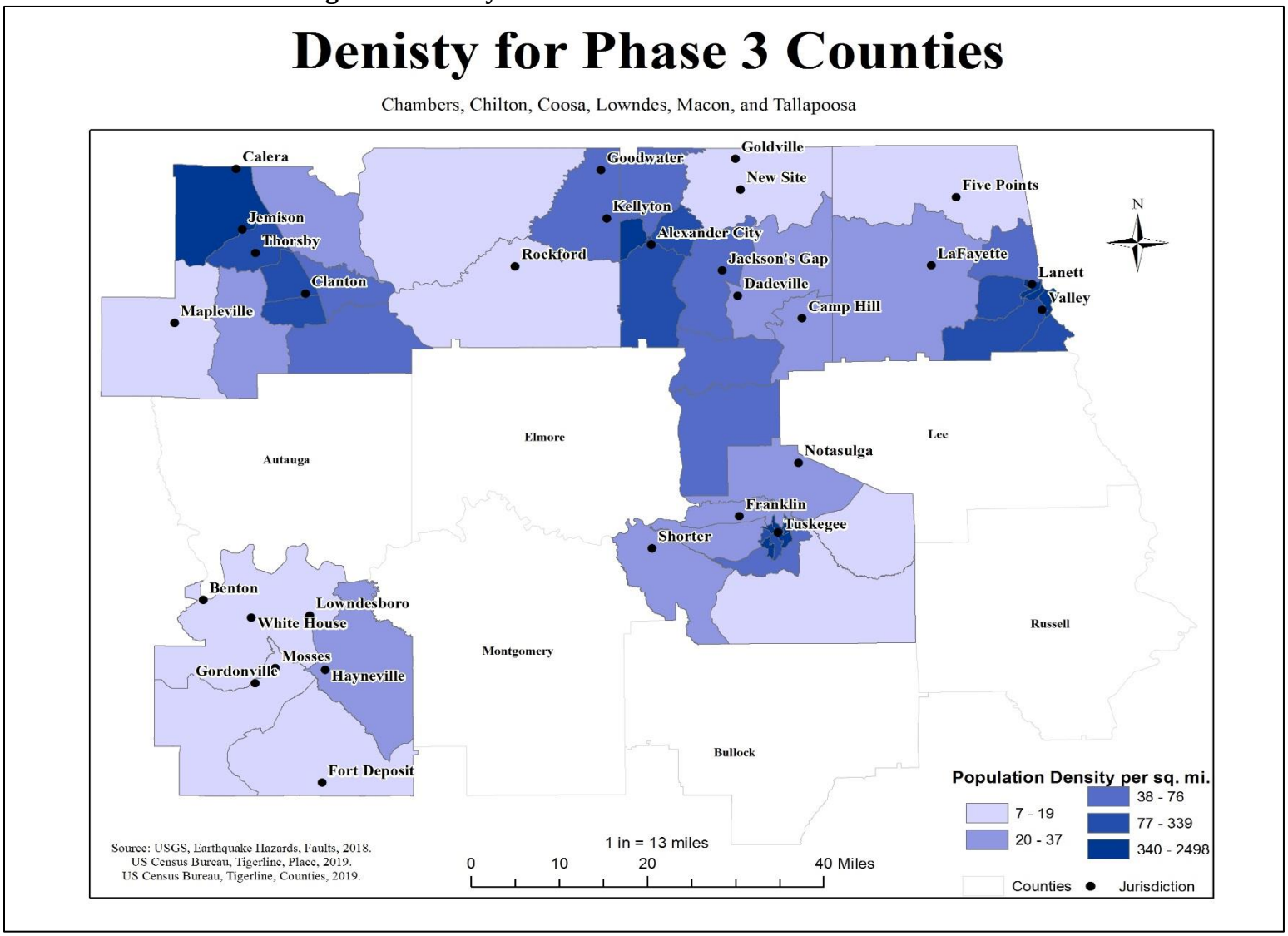
Table 2.9: People 18 years and Under & 75 years or Older in 2018

County	19 and Under	75+ Year
Chambers	7737	2634
Chilton	11562	2791
Tallapoosa	9790	3239

Source: U.S. Census Bureau (2018 ACS Population Estimates)

Figure 3 shows where the pockets of density are located in Chambers, Chilton, and Tallapoosa counties. The jurisdictions in Chilton County have the most density in the area. The next eastern portion of Tallapoosa County and southeast corner of Chambers County also have pockets of density, but the remainder of the counties are rural.

Figure 3: Density for Phase 3 Counties



2.3 Business and Industry

These counties support a wide variety of industrial and commercial stakeholders such as: automotive, aviation, medical, governmental, and other manufacturing and high-tech industry. The region is home to a wide variety of industries, which Table 2.10 shows the largest employers in Chambers, Chilton, and Tallapoosa counties.

Table 2.10: Major Employers (Over 200 employees)

Major Employers by County (400+ Employees)			
Employer	**County**	**Product/Service**	**Number of Employees**
Russell Corporation	Tallapoosa/ Coosa Counties	Manufacturing	3,000
Adient - Clanton	Chilton	Manufacturing: Vehicle assembly plant supplier	750
Prime Healthcare	Tallapoosa/ Coosa Counties	Healthcare	685
Russell Medical Center	Tallapoosa County	Healthcare	606
AJIN USA	Chambers County	Metal Stamping	600
Chambers County School System	Chambers County	Education Provider	470
Tallapoosa County Board of Education	Tallapoosa County	Education	469
EAMC–Lanier	Chambers County	Occupational Health & Wellness	455
Alex City School System	Tallapoosa County	Education	404
WestRock	Chambers County	Off-set Printing Packages	400
Avondale Mills, Inc.	Tallapoosa County	Manufacturing	360
Wal Mart Supercenter	Tallapoosa County	Retail	340
Russell Lands	Tallapoosa County	Real Estate/ Development	333
Wal-Mart Super Center	Chambers County	Retail	304
Robinson Group	Tallapoosa County	Manufacturing	289
City of Alex City	Tallapoosa County	Government	288
Wellborn Forest Products	Tallapoosa County	Manufacturing	265
AmTech	Tallapoosa County	Manufacturing	250
Knauf Insulation	Chambers County	Insulation	250
Knauf Insulation	Chambers County	Insulation	250
Kumi Manufacturing Alabama	Chilton	Manufacturing: Vehicle assembly plant supplier, resin and rubber products	230
SL Alabama	Tallapoosa County	Manufacturing Lighting	230
Wooshin USA	Chambers County	E-coat & Plating	200

Bill Nichols State Veterans Home	Tallapoosa County	Healthcare	192
Georgia Pacific	Chilton	Manufacturing, LVL laminated veneer lumber	180
The Merchant's Company	Chilton	Wholesale distribution, food products, merchandising	180
Hatley Health Care	Chilton	Health care services, nursing homes	175
Daedong Hi-lex of America	Chambers County	Door Panels	158
West Fraser	Chilton	Natural resources, wood production	155
Aliant Bank	Tallapoosa County	Financial	151
Stella Jones	Chilton	Manufacturing, wood products railroad ties	150
Tallapoosa County	Tallapoosa County	Government	150
Norbord Alabama, Inc.	Chambers County	Wood-Based Panels	150
Leehan America Inc.	Chambers County	Air Filters	145
8 O-Flex Automotive	Chilton	Manufacturing, metals, electroplating polishing anodizing	136
Lake Martin Community Hospital	Tallapoosa County	Healthcare	130
Lanett City Schools	Chambers County	Education Provider	121
Saehaesung Alabama Inc.	Chambers County	Metal Stamping	110
Wayne Industries (EBSCO)	Chilton	Manufacturing, electric signs and displays	105
Price Ceiling Inc.	Chilton	Construction, contractor, dry wall, construction	100
Letica Corporation	Chambers County	Plastic Pails	91
Alabama DOT - 4th Division	Tallapoosa/ Coosa Counties	Government	

Source: Economic Development Partnership of Alabama, Local Economic Development Contact

The individual industries are susceptible to the same natural hazards as the remainder of the region, i.e., high wind events, tornadoes, flooding, etc. The economic impact of losing any industry is directly related to the size/type of business and the duration/severity of the loss.

2.4 Infrastructure

2.4.1 Transportation

Division D is bisected by Interstate 85, which connects Atlanta, Georgia, to Montgomery, Alabama, and Interstate 65, which connects Mobile, Alabama, to North Alabama. I-85 and I-65 are the main transportation corridor between the Port of Mobile, Midwestern states, and the East coast. U.S. Highway 231, U.S. Highway 431, U.S. Highway 80, U.S. Highway 82, and U.S. Highway 31 also crisscross through the portion of Alabama. These routes are major thought the South east. The region is in the middle of Alabama, and conveniently located near Birmingham and Atlanta. Montgomery regional airport is the only comical airport in the region, but it also

serves as a military airport. Rail lines serving the region include Alabama Southern Railroad, Autauga Northern Railroad, Meridian & Bigbee Railroad, Norfolk Southern and CSX Transportation.

2.4.2 Utilities

Electrical services are provided by Alabama Power Company, Pioneer Electrical Cooperative, Inc, Dixie Electric Cooperative, City of Lanett, City of LaFayette, Tallapoosa River Electric Cooperative, Tallapoosa Power, Alexander City, and Central Alabama Cooperative. Natural gas is provided by City of Lanett, Spire, ANGA, Southeast Gas, Alagasco**,** and the City of Lanett, East and Alabama Gas District. Water and sewer service is provided by a mixture of municipal and county utility authorities. Most populated areas have public water service; however, most unincorporated areas rely on septic systems for sewer disposal.

2.5 Land Use and Development Trends

Chambers, Chilton and Tallapoosa counties are semi/-rural predominantly composed of evergreen forest, lakes/rivers, deciduous forest, pasture, and urban areas. Alexander City, Clanton, Lanett, and Valley have the largest developed footprint of the region, which can be seen in red in Figure 4. Overall, these counties are home to rural small towns, which their footprint does not show up on the map.

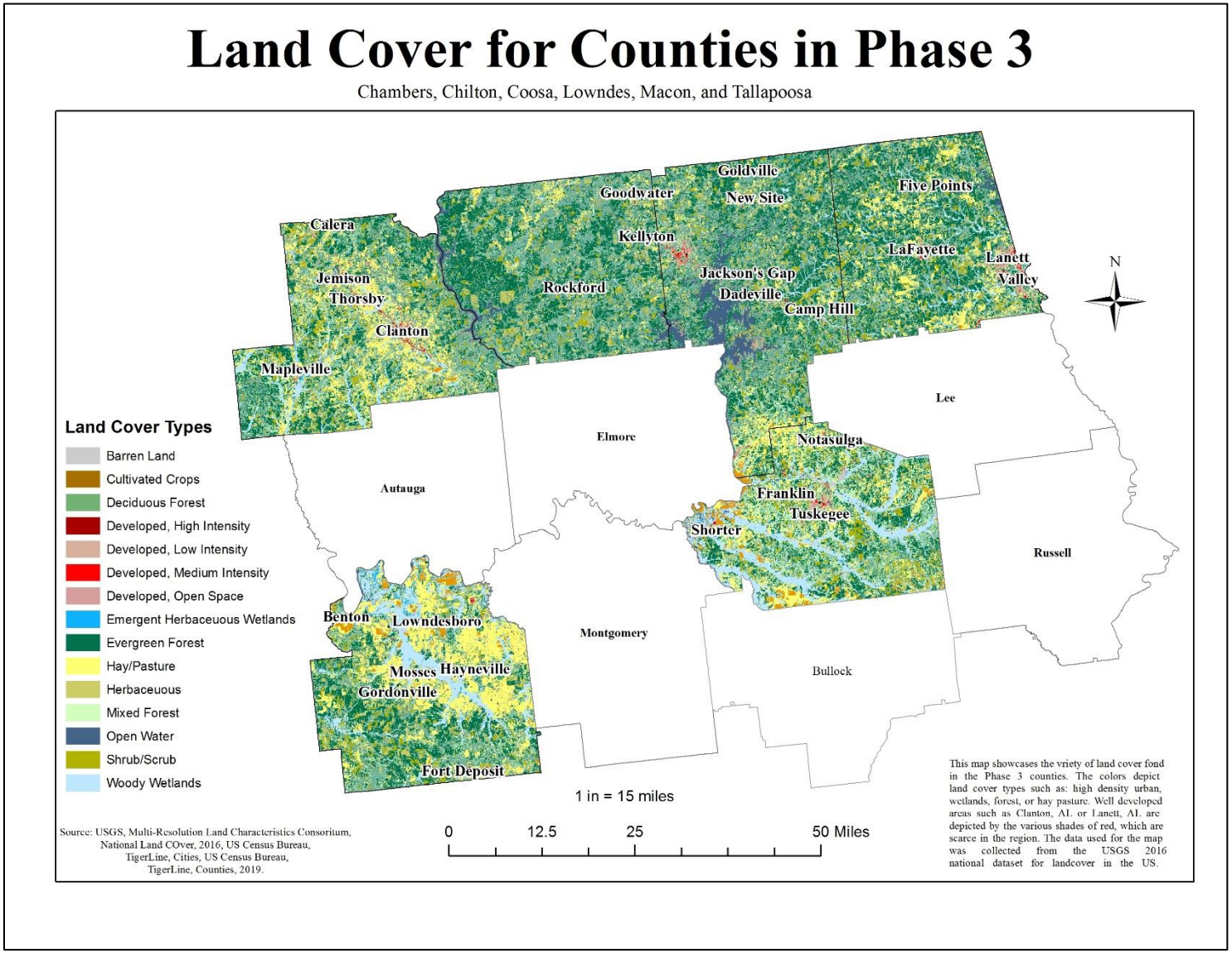
The following data comes from the 2010 and 2018 ACS Population Estimates. According to Table 2.2 Chambers, and Tallapoosa counties had a population decrease as at a county level. Most of the towns in theses counties also had a decrease in population. Chilton County had growth from 2010 to 2018 which is attributed to Clanton, Thorsby, and the unincorporated county. Much of this growth takes places along the interstate 65.

As the population in these areas continues to grow the so does the vulnerability of natural hazards. An increase in population increases the vulnerability a population has towards natural hazards as well as the opportunity to damage or destroy the newly built urban environment associated with growth. A rapid decline in population can also increase vulnerably for natural hazards due to the lack of available resources for recovery.

Every jurisdiction (Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site) should work towards building in compatible areas that are not susceptible hazards such as flooding and other location-specific hazards in their long-range development plans in order to make communities more resilient to hazards.

The following places' vulnerability has not changed because the population in these areas have decreased since 2010: (Chambers County, City of LaFayette, City of Lanett, City Valley, Town of Waverly, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site.)

Figure 4: Land Cover



2.6 NFIP Compliance

The table below summarizes NFIP participation and policy statistics for each jurisdiction in the planning area as of December 31, 2019. More site-specific information is provided in the Risk Assessment section. Jurisdictions that are non-participating in the NFIP Program have participated in the hazard mitigation planning process. Table 2.10 shows the National Flood Insurance Program Status for each jurisdiction in Chambers, Chilton, and Tallapoosa.

Table 2.10 National Flood Insurance Program (NFIP) Status

Jurisdiction	County	Participation Status	Initial FBHM Identified	Initial FIRM Identified	Current Effective Map Date
Chambers (entire)	**Chambers (entire)**	**Chambers**	**Yes**	**3/31/1978**	**9/15/1983**
City of Lafayette	City of Lafayette	Chambers	Yes	12/6/1974	9/18/1985
City of Lanett	City of Lanett	Chambers	Yes	5/3/1974	7/4/1988
City of Valley	City of Valley	Chambers	Yes	2/18/2011	2/18/2011
Town of Cusseta	Town of Cusseta	Chambers	**No**	-	-
Town of Five Points	Town of Five Points	Chambers	Yes	11/15/1974	2/18/2011
Town of Waverly	Town of Waverly	Chambers	**No**	-	-
Chilton County (entire)	**Chilton County (entire)**	**Chilton**	**Yes**	**7/28/1978**	**8/15/1984**
Clanton	Clanton	Chilton	Yes	6/28/1974	5/1/1984
Jemison	Jemison	Chilton	Yes	3/16/2009	3/16/2009
Maplesville	Maplesville	Chilton	Yes	9/13/1974	2/1/1984
Thorsby	Thorsby	Chilton	Yes	3/16/2009	3/16/2009
Tallapoosa County (entire)	**Tallapoosa County (entire)**	**Tallapoosa**	**Yes**	**3/31/1978**	**9/15/1983**
City of Alexander City	City of Alexander City	Tallapoosa	Yes	11/8/1974	9/27/1985
Cite of Dadeville	Cite of Dadeville	Tallapoosa	Yes	9/29/1978	7/18/2011
City of Tallassee	City of Tallassee	Tallapoosa	Yes	9/15/1984	7/18/2011
Town of Camp Hall	Town of Camp Hall	Tallapoosa	Yes	12/27/1984	9/18/1985
Town of Daviston	Town of Daviston	Tallapoosa	Yes	10/6/1978	7/18/2011
Town of Jackson's Gap	Town of Jackson's Gap	Tallapoosa	Yes	6/17/1991	9/11/2007
Town of New Site	Town of New Site	Tallapoosa	Yes	10/27/1978	7/18/2011

Source: FEMA, the National Flood Insurance Program Community Status Book, 2019

Table 2.11 shows the number of NFIP policies in each jurisdiction for Chambers, Chilton, and Tallapoosa.

Table 2.11: National Flood Insurance Program Policy Numbers

Jurisdiction	Number of NFIP Policies
Chambers (entire)	45
City of Lafayette	0
City of Lanett	21
City of Valley	11
Town of Cusseta	0
Town of Five Points	0
Town of Waverly	0
Unincorporated County	13
Chilton County (entire)	32
Clanton	18
Jemison	1
Maplesville	0
Thorsby	0
Unincorporated County	13
Tallapoosa County (entire)	91
City of Alexander City	18
Cite of Dadeville	1
City of Tallassee	2
Town of Camp Hall	0
Town of Daviston	0
Town of Jackson's Gap	1
Town of New Site	0
Unincorporated County	69

Source: FEMA, National Flood Insurance Program Policy Numbers, 2020

Section 3- Hazard Risk Assessment

3.1 Risk Assessment
3.2 Natural Hazards Identification and Description
3.3 Dams
3.4 Droughts
3.5 Earthquakes
3.6 Extreme Heat
3.7 Hail
3.8 High Winds/ Thunderstorms
3.9 Landslides
3.10 Lightning
3.11 Sinkholes
3.12 Tropical Depression/ Tropical Storm/ Hurricane
3.13 Tornado
3.14 Wildfire
3.15 Winter Storm

3.1 Risk Assessment

Chambers, Chilton, and Tallapoosa counties are affected by a wide range of natural and human-caused hazards that negatively impact life and property. Current FEMA regulations are under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is allowed, but not required for plan approval. The Regional Hazard Mitigation Plan concentrates on natural hazards but does include a summarized assessment of potential human-caused hazards.

The AEMA Division D Core Team identified the hazard based on the vulnerability of the AEMA Division D to natural hazards. Chambers County EMA, Chilton County EMA, EMA, Tallapoosa County EMA, Lee Russell Council of Governments, Regional Planning Commission of Greater Birmingham, South Central Alabama Development Commission, local governments, and stakeholders developed a risk assessment for Chambers, Chilton, and Tallapoosa counties, which details the risk Chambers, Chilton, and Tallapoosa counties have towards each hazard. The following components are included for each hazard:

- Hazard Description
- Probability of Future Hazards
- Previous Occurrences
- Impact of Hazards by Jurisdiction
- Probability of Future Occurrence by Jurisdiction
- Vulnerability Overview
- Vulnerability Synthesis and Overall Risk

3.2 Natural Hazard Identification

AEMA Division D is affected by multiple hazards that are addressed below. These hazards were identified and evaluated through a process that included studying historical events, previous local mitigation plans, the susceptibility of the location to hazards, and input from local stakeholders. Each hazard addressed in the risk assessment will include a general description of the hazards and its extent of effects on the region. Phase III-A of the Regional Hazard Mitigation Plan will include only Chambers, Chilton, and Tallapoosa counties. The remaining counties, Autauga, Elmore, Montgomery Lee, Russell, were completed in Phase I and Phase II. Lowndes and Macon will be submitted in February in Phase III-B.

Due to the geographical location of Chambers, Chilton, and Tallapoosa counties each county is vulnerable to many hazards that could potentially disrupt life and damage property year-round. The following hazard types do not have any applicability to the region, and will not be mentioned any further: Avalanche, coastal erosion, tsunami, and volcano. Table 3.1 below displays the hazards that can impact Chambers, Chilton, and Tallapoosa counties information sources, and how the hazard associates to the region.

Table 3.1: Potential Hazards and Data Sources

Hazard	Risk	Source	Correlation with Region
Dam Failure	Yes	USACE National Inventory of Dams	Population downstream from dams; flooding concerns; no State regulation of dam safety
Hazard	Risk	Source	Correlation with Region
Drought	Yes	United States Drought Monitor	Historic Incidents with damage
Earthquakes	Yes	USGS Earthquake Hazard Program	Proximity to Southeast US seismic zones
Extreme Temperatures	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Flooding	Yes	FEMA; NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents/identified flood hazard areas
Hail	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
High Winds/Thunderstorms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Landslides	Yes	Geological Survey of Alabama USGS Landslides Hazard Program Alabama State HMP	Historic Incidents
Lightning	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Sinkholes and Land Subsidence	Yes	Geological Survey of Alabama	Historic Incidents
Tropical Storms/Tropical Depressions/Hurricanes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Tornadoes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Wildfire	Yes	Alabama Forestry Commission Wildfire Assessment Maps	Historic Incidents
Winter Storms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents

Effects from tornadoes, high winds and flooding are regarded as the most significant natural hazards affecting the county areas.

In Chambers, Chilton, and Tallapoosa counties has been included in Federal Disaster 22 since 1975, which can be seen in Table 3.2. The declared disasters have been primarily related to two major types of impacts: flooding (through both tropical and non-tropical events) and severe storms to include hurricanes and tornadoes. There has also been a declaration for a drought incident and a winter storm incident.

Table 3.2: Chambers, Chilton, and Tallapoosa counties region, federally declared disasters.

Declaration Date	Disaster Number	Type of Incident	Counties Declared
1975	488	Severe Storms, Flooding	Chambers
1977	3045	Drought	Chilton, Chambers, Tallapoosa
1979	3074	Flooding	Chilton
	578	Storms, Wind, Flooding	Chilton, Chambers, Tallapoosa
1990	856	Severe Storms, Tornadoes, Flooding	Chilton
	861	Severe Storms, Tornadoes, Flooding	Chilton, Chambers, Tallapoosa
1993	3096	Snowfall, Winter Storm	Chilton, Chambers, Tallapoosa
1995	1070	Hurricane Opal	Chilton, Chambers, Tallapoosa
2003	1466	Severe Storms, Tornado, Flooding	Chambers, Tallapoosa
2004	1549	Hurricane Ivan	Chilton, Chambers, Tallapoosa
2005	1593	Hurricane Dennis	Chilton, Chambers, Tallapoosa
2005	3237	Hurricane Katrina Evacuation	Chilton, Chambers, Tallapoosa
2008	3292	Hurricane Gustav	Chilton, Chambers, Tallapoosa
2009	1870	Severe Storms, Flooding	Chilton
2011	3319	Severe Storms, Tornadoes, Wind	Chilton, Chambers, Tallapoosa
2011	1971	Severe Storms, Tornadoes, Winds, Flooding	Chilton, Chambers, Tallapoosa

2012	4052	Severe Storms, Tornadoes, Winds, Flooding	Chilton
2016	4251	Severe Storms, Tornadoes, Winds, Flooding	Chambers
2017	3389	Hurricane Irma	Chilton, Chambers, Tallapoosa
2017	3394	Hurricane Nate	Chilton
2020	4554	Severe Storms, Winds, Tornadoes	Chilton, Tallapoosa
2020	4546	Severe Storms and Flooding	Chambers

Source: Federal Emergency Management Agency (December 2020)

Under a federally declared disaster, the State of Alabama and affected local jurisdictions are eligible to apply for federal reimbursement for debris removal, emergency services, and critical facility repair/replacement. Funding is also made available for hazard mitigation grants that allow for the implementation of mitigation projects that are listed in this plan.

Each hazard profile includes a summary of the following:

- **Background:** Provides general definitions and brief descriptions of the hazard, its characteristics, and potential effects.

- **Extent:** Provides information on the potential strength or magnitudes of the hazard.

- **Previous Occurrences:** Provides information on the history of previous hazard events in the planning area, including their impacts.

- **Impact:** Provides information on the geographic areas within the Chambers, Chilton, and Tallapoosa counties that are susceptible to hazard occurrences. Locations affected are described regionally unless a specific jurisdiction has different risks, which is further explained.

- **Probability of Future Events:** Describes the likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low or Very Low as described below:

  High: Probable major damage in a 1-10 Year Period
  Medium: Probable major damage in a 10-50 Year Period
  Low: Probable major damage in a 100 Year Period
  Very Low: No probable major damage in a 100 Year Period.

Figure 5: FEMA Disaster Declaration as of June 1st, 2011

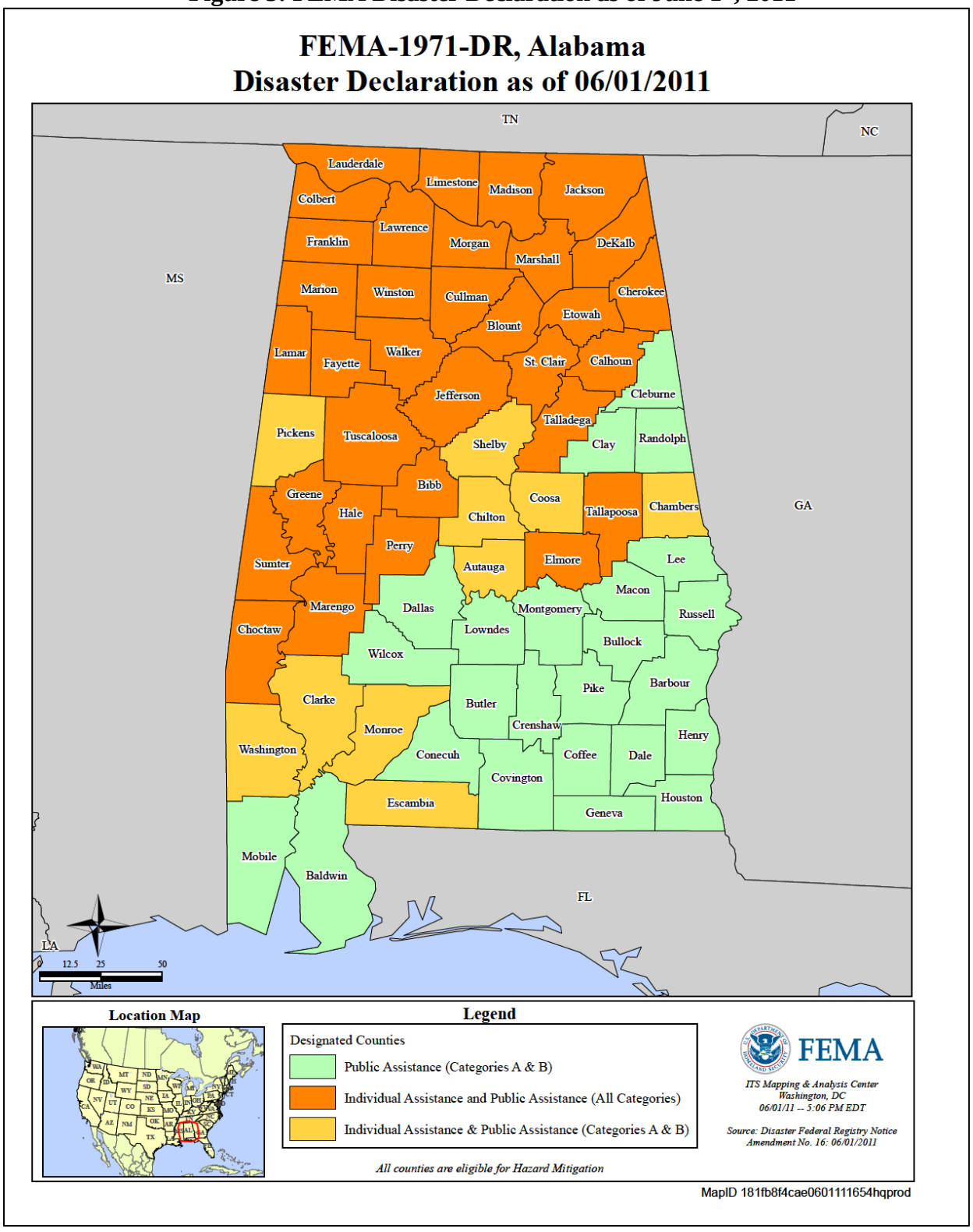


Figure 6: FEMA Disaster Declaration as of January 1st, 2016 for Alabama

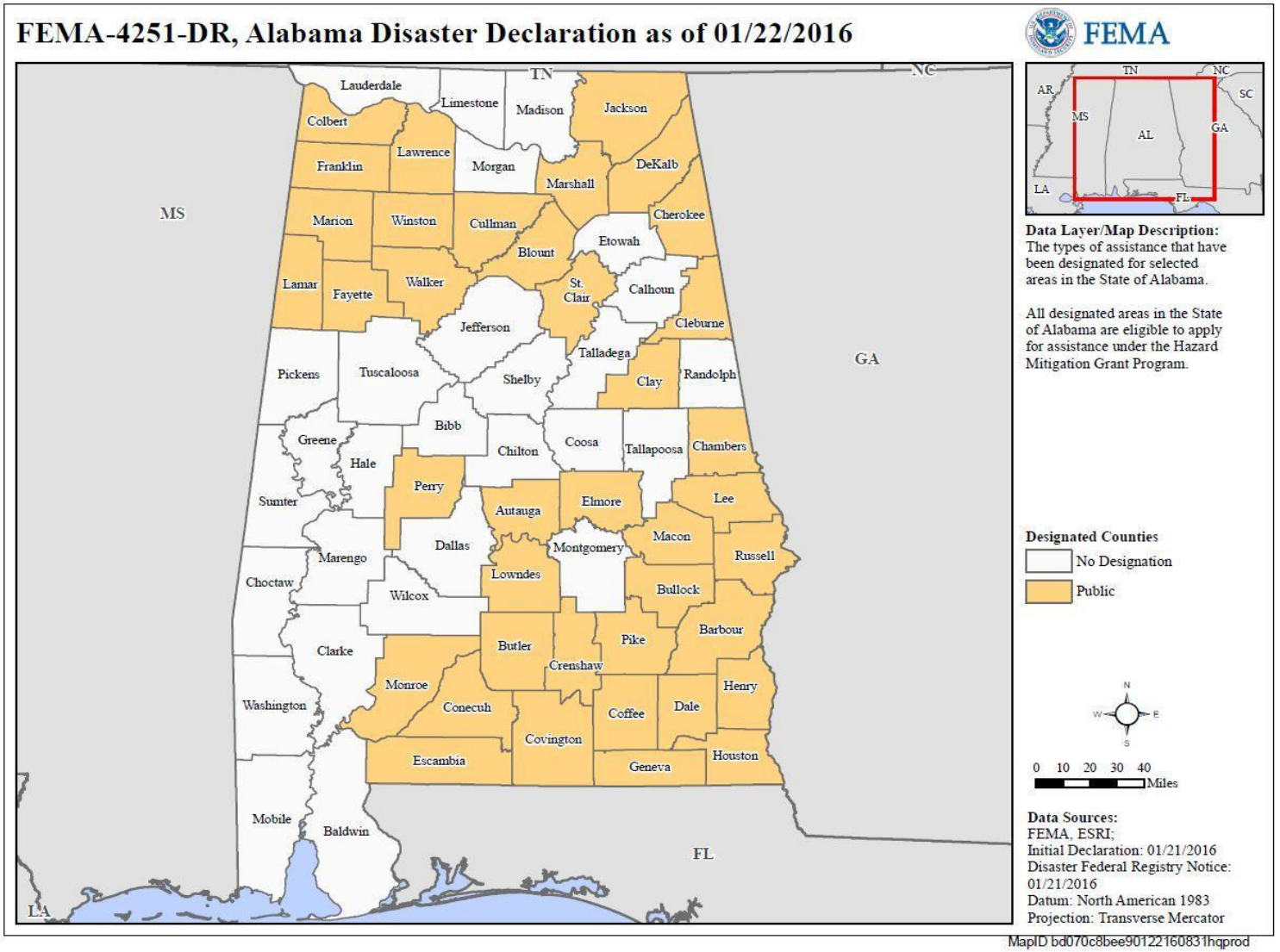
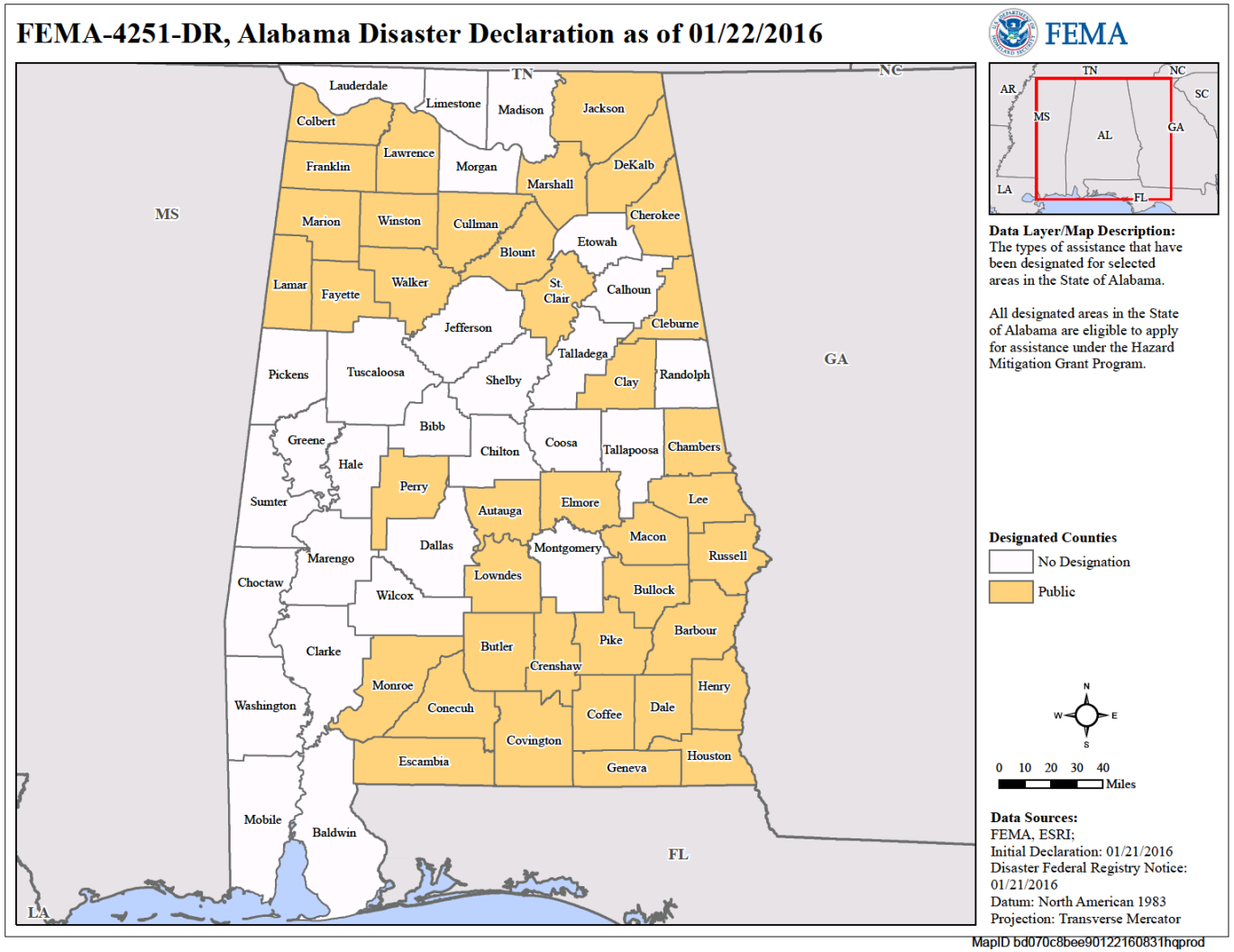


Figure 7: FEMA Disaster Declaration as of March 3rd, 2019 for Alabama



3.3 Dams

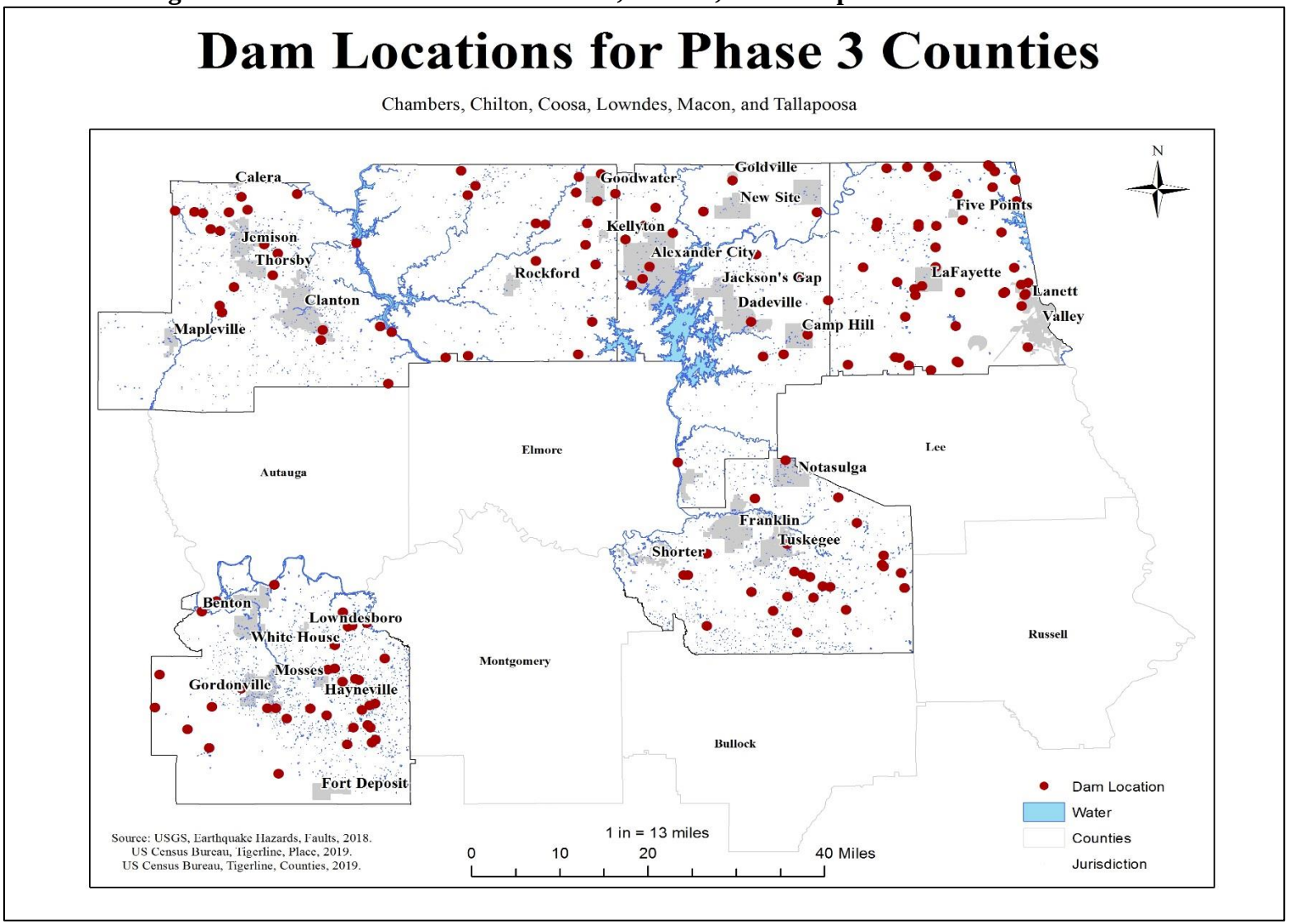
3.3.1 Description

Dams are a vital part of communities today because these assets provide drinking water, recreation, flood control, power generation, or water for agriculture and livestock. When a dam or levee failures arise, the areas located downstream are subject to flooding due to the large volumes of water released suddenly. These events happen with little warning are may cause extensive property damages and casualties. Dam safety is a hazard that the State of Alabama works on continuously for the last two decades as the infrastructure ages, especially small privately-owned dams and/or poorly maintained. Alabama currently does not have a state law to regulate existing private dams or new construction of private dams that do not require federal licenses or inspections. There are approximately 1,700 privately owned dams in Alabama that are on bodies of water over 50 acre-feet or dams higher than 25 feet. Efforts to pass legislation regarding the regulation of these 1,700 dams have not been successful.

According to the National Inventory of Dams, there are 106 dams in these counties. Please refer to Tables 3.4 to 3.7 provide a list of all dams. All of these dams are owned by a public utility, local government, or state government. Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, Unincorporated Chilton, Chambers, and Tallapoosa counties. Chambers, Chilton, and Tallapoosa counties do not have a reported history of dam failures. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk. Please refer to Figure 8 to see the locations of all dams in Chambers, Chilton, Tallapoosa counties, or refer to Table 7.4.8 in section 7 of the Appendix for the exact location of dams in these counties.

If one of the larger dams such as Robert F. Henry Lock and Dam, Lay Dam, Mitchell Dam as well as West Point Dam everyone downstream would be at risk due to a large amount of water these dams hold.

Figure 8: Locations of Dams in Chambers, Chilton, and Tallapoosa Counties



3.3.2 Extent by Jurisdiction

"Hazard potential" is the classification used to indicate probability for damages, human losses, or property damage, which could arise to the region if a dam failure occurred. The Federal Guidelines for Dam Safety present three classifications of dams, please refer to Table 3.3, which is below to see the classifications. Tables 3.3 to 3.6 show the hazard level for all dams found in Chamber, Chilton, and Tallapoosa counties, please refer to the Appendix to see the more details on Dams in section 7.4.

Table 3.3: Dam Hazard Classifications

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None Expected	Low; Generally Limited o Owner
Significant	None Expected	Yes
High	Probable; One or More Expected	Yes

Source: Federal; Guidelines for Dam Safety (published April 2004)

Dams located in Chamber, Chilton, and Tallapoosa counties are valuable assets for the communities in the region because these dams provide communities with benefits including water for drinking and agricultural purposes, recreation, flood control, and power generation. Despite the importance of the dams, if a dam failure was to occur large problems can arise downstream. The water that is stored behind the dam's wall has a large amount of energy stored, which can cause casualties and property damage should a dam fail and release its capacity uncontrolled. In Chambers County, two dams' hazard potential are classified as high, LaFayette City Lake, Riverside No. 1, and Riverside No. 2. In Chilton County, four dams 'hazard potential are classified as high, Lay Dam, Mitchell Dam, Gilbert Lake Dam, and Clanton Lake. There are several high-risk dams located in each of the counties for Phase III of the Hazard Mitigation plan. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All of these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams are the most susceptible, which is the most common type of dam found in Chamber, Chilton, and Tallapoosa counties. Concrete structures with spillways and controls would be less susceptible. The larger dams like Lay Dam and Mitchell Dam on the Coosa River are operated by Alabama Power and are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

The majority of the dams Chamber, Chilton, and Tallapoosa counties area are considered to be earth dams, as reported by the National Inventory of Dams, which is constructed of earth material such as gravel, soil, rock, and silt. The largest dams are classified as gravity dams and are all located on the Coosa-Chilton county line. These dams are built out of concrete in order to hold back water. The dam list from the National Inventory of Dams is outdated, due to the lack of regulatory authority in Alabama. Private dams may be missing from this list if local authorities are unaware of the features. Localized studies conducted by the Office of Water Resources (OWR) demonstrate that data collected from the National Inventory of Dams might be inaccurate due to locational errors and the misrepresentation of the potential hazards of dams. Future updates to the Division D Hazard Mitigation Plan will incorporate information regarding the classification of potential dam hazards.

Table 3.4: Chambers County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Purpose	Hazard Potential	Year Completed
CHAMBERS COUNTY PUBLIC LAKE	CHAMBERS	S	44	3800	Recreation	Low	1962
HIGH PINE CREEK W/S DAM SITE 11	CHAMBERS	Utilities	27	871	Recreation	Low	1962
HIGH PINE CREEK W/S DAM SITE 12	CHAMBERS	Utilities	23	329	Recreation	Low	1962
ROBINSON	CHAMBERS	Utilities	30	400	Recreation	Significant	1954
LAFAYETTE CITY LAKE	CHAMBERS	Locality	20	888	Recreation	High	1955
FLINT HILL	CHAMBERS	Utilities	24	330	Recreation	Low	1952
JEFF BEARD	CHAMBERS	Utilities	21	220	Recreation	Low	1968
STEPHENS MILL	CHAMBERS	Utilities	15	240	Power Generation	Significant	1952
HINKLE	CHAMBERS	Utilities	23	170	Recreation	Low	1954
KILPATRICK	CHAMBERS	Utilities	22	100	Recreation	Low	1948
ALLENS	CHAMBERS	Utilities	15	70	Recreation	Low	1970
LANIER	CHAMBERS	Utilities	25	130	Recreation	Low	1952
EDGE	CHAMBERS	Utilities	22	65	Recreation	Low	1971
SIMMONS	CHAMBERS	Utilities	30	170	Recreation	Low	1951
W C HINES	CHAMBERS	Utilities	21	100	Recreation	Low	1944
J H HINES	CHAMBERS	Utilities	22	110	Recreation	Low	1946
THOMPSON	CHAMBERS	Utilities	25	130	Recreation	Low	1950
ROBINSON	CHAMBERS	Utilities	17	85	Recreation	Low	1952
ROYSTON	CHAMBERS	Utilities	22	80	Recreation	Low	1972
WELCH	CHAMBERS	Utilities	28	185	Recreation	Low	1972
SLAUGHTER	CHAMBERS	Utilities	20	130	Recreation	Low	1971
SHARPE NO 1	CHAMBERS	Utilities	27	175	Recreation	Low	1952
SHARPE NO 2	CHAMBERS	Utilities	14	70	Recreation	Low	1952
DAWSON DAY	CHAMBERS	Utilities	21	65	Recreation	Low	1958
WHEELER	CHAMBERS	Utilities	25	100	Recreation	Low	1946
DARDEN	CHAMBERS	Utilities	20	70	Recreation	Low	1972

CLAY FLOYD	CHAMBERS	Utilities	18	70	Recreation	Low	1954
NOLEN	CHAMBERS	Utilities	29	90	Recreation	Significant	1954
STRICKLANDS LAKE DAM	CHAMBERS	Utilities	25	80	Recreation	Low	1946
PHILLIPS	CHAMBERS	Utilities	31	130	Recreation	Low	1958
SMITH	CHAMBERS	Utilities	28	95	Recreation	Low	1953
TIMMONS	CHAMBERS	Utilities	19	70	Recreation	Low	1953
KENDRICK-HOLMES	CHAMBERS	Utilities	17	110	Recreation	Significant	1974
SLAY	CHAMBERS	Utilities	23	85	Recreation	Low	1965
SPENCER	CHAMBERS	Utilities	25	85	Recreation	Low	1953
BAKER	CHAMBERS	Utilities	24	110	Recreation	Low	1956
CUNNINGHAM	CHAMBERS	Utilities	24	80	Recreation	Low	1957
HUDSON	CHAMBERS	Utilities	28	115	Recreation	Low	1950
LANGLEY	CHAMBERS	Utilities	26	56	Recreation	Significant	1950
BROWN	CHAMBERS	Utilities	20	65	Recreation	Low	1964
TAUNTON	CHAMBERS	Utilities	20	90	Recreation	Low	1950
MONTGOMERY	CHAMBERS	Utilities	11	50	Recreation	Low	1950
BROWNE	CHAMBERS	Utilities	24	60	Recreation	Low	1950
EDGAR	CHAMBERS	Utilities	21	95	Recreation	Low	1951
WHITE	CHAMBERS	Utilities	18	60	Recreation	Low	1950
DEMPSEY	CHAMBERS	Utilities	22	135	Recreation	Low	1977
RIVERSIDE NO. 1	CHAMBERS	Utilities	13	50	Recreation	High	1973
RIVERSIDE NO. 2	CHAMBERS	Utilities	17	50	Recreation	High	1973

Source: *FEMA, National Inventory of Dams, Chambers County, Alabama, 2019*

Table 3.5: Chilton County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Purpose	Hazard Potential	Year Completed
LIVINGSTON LAKE DAM	CHILTON	Utilities	40	118	Recreation	Significant	1963
LAKE FOUNTAIN HEAD DAM	CHILTON	Utilities	18	96	Recreation	Significant	1960
JIM OLIVER	CHILTON	Utilities	20	188	Recreation	Low	1969
SHECHI LAKE	CHILTON	Utilities	41	152	Recreation	Significant	1965
DEMARGO LAKE DAM	CHILTON	Utilities	35	256	Recreation	Significant	1965
BRANTLEY LAKE DAM	CHILTON	Utilities	0	0	Recreation	Significant	
C C GILBERT	CHILTON	Utilities	18	45	Recreation	Significant	1968
GILBERT LAKE DAM	CHILTON	Utilities	25	69	Recreation	High	1968
SHELTON BARKLEY LAKE DAM	CHILTON	Utilities	0	0	Recreation	Significant	
LIGHTFOOT DAM	CHILTON	Utilities	23	62	Recreation	Significant	1970
SHECHI LAKE DAM NUMBER TWO	CHILTON	Utilities	30	86	Recreation	Significant	1965
T J STEWART LAKE	CHILTON	Utilities	14	321	Recreation	Significant	1960
CALFEE LAKE DAM	CHILTON	Utilities	22	76	Recreation	Significant	1975
LUBY GORE DAM	CHILTON	Utilities	0	0	Recreation	Significant	
GULF STATES COLUMBIANA SW DAM	CHILTON	Utilities	0	0	Recreation	Significant	

J H OLIVER LAKE DAM	CHILTON	Utilities	25	92	Recreation	Low	1979
BRANTLEY DAM #2	CHILTON	Utilities	20	126	Recreation	Low	1976
FISHER DAM	CHILTON	Utilities	15	83	Recreation	Low	1974
HARRIS SAUNDERS DAM	CHILTON	Utilities	41	138	Recreation	Low	1974
LEE BROWN DAM	CHILTON	Utilities	20	120	Recreation	Significant	1978
CLANTON LAKE	CHILTON	Utilities	25	60.2	Recreation	High	
LAY	CHILTON, COOSA	Utilities	130	262800	Power Generation	High	1914
MITCHELL	CHILTON, COOSA	Utilities	106	172000	Power Generation	High	1923

Source: FEMA, National Inventory of Dams, Chilton County, Alabama, 2019

Table 3.6: Tallapoosa County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Purpose	Hazard Potential	Year Completed
RUSSELL MILLS	TALLAPOOSA	Utilities	27	1,300.00	Recreation	Low	1920
WALLS	TALLAPOOSA	Utilities	19	145.00	Recreation	Significant	1933
MILLER	TALLAPOOSA	Utilities	12	94.00	Fishing	Low	1943
PATTERSON	TALLAPOOSA	Utilities	28	140.00	Recreation	Low	1960
MONAGHAN	TALLAPOOSA	Utilities	24	264.00	Recreation	Low	1960
SCHRYER	TALLAPOOSA	Utilities	18	144.00	Recreation	Low	1966
DADEVILLE LUMBER CO DAM NO 2	TALLAPOOSA	Utilities	24	108.00	Recreation	Low	1970
SARGENT	TALLAPOOSA	Utilities	15	120.00	Recreation	Low	1979
CAMP HILL Recreation SERVOIR	TALLAPOOSA	Locality	21	85.00	Stock	Significant	1963
BRADSHAW	TALLAPOOSA	Utilities	18	70.00	Recreation	Low	1950
FARINGTON	TALLAPOOSA	Utilities	18	55.00	Recreation	Low	1950
SWINDALL	TALLAPOOSA	Utilities	31	80.00	Recreation	Low	1950
ALEX. CITY STATE JR. COLLEGE	TALLAPOOSA	Utilities	28	22.00	Recreation	Significant	1966
COBBS, ALLEN & HALL	TALLAPOOSA	Utilities	28	110.00	Recreation	Low	1950
NOLEN	TALLAPOOSA	Utilities	24	200.00	Recreation	Low	1950
OSBORNE	TALLAPOOSA	Utilities	15	75.00	Recreation	Low	1950
BAILEY	TALLAPOOSA	Utilities	22	80.00	Recreation	Low	1948
WHATLEY	TALLAPOOSA	Utilities	30	80.00	Recreation	Low	1969

Source: FEMA, National Inventory of Dams, Tallapoosa County, Alabama, 2019

3.3.3 Previous Occurrences and Impact

According to the EMA directors and the stakeholders zero reports of a dam failure have been reported in these counties, but this might not include failures for small private dams.

Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, unincorporated Chilton, unincorporated Chambers, and unincorporated Tallapoosa counties. There have not been any reports or a history of dam failures in these counties. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk.

A dam failure near/in areas of higher density in places such as Town of Lanett, Town of Valley, City of Clanton, City of Alex City, City of Dadeville, and Wetumpka is concerning due to the potential loss of life, injury, and damage to property downstream that could result. All persons living in a manufactured home near a high-risk dam are vulnerable in their homes if the dams fail in the jurisdictions that follow: Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, unincorporated Chilton, unincorporated Chambers, and unincorporated Tallapoosa counties. If Robert F. Henry Lock and Dam, Lay Dam, Mitchell Dam as well as West Point Dam failed, infrastructure and everyone downstream would be at risk due to a large amount of water these dams hold. This is particularly concerning for all persons in retirement communities, all persons in assisted living facilities, disabled, staff and patients at medical facilities, staff and students at schools, elderly, and those persons in poverty living near the Alabama, Tallapoosa or Coosa rivers in places like Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, unincorporated Chilton, unincorporated Chambers, and unincorporated Tallapoosa counties. These specific groups would have difficulty evacuating quickly in an emergency event such as a dam failure.

In a jurisdiction such as the Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, unincorporated Chilton, unincorporated Chambers, and unincorporated Tallapoosa counties the following types of assets would be vulnerable if a nearby high-risk dam was to fail manufactured homes, structures, bridges, power lines, livestock /animals, crops, trees/timber, roads, buildings (made of wood, vinyl, or metal).

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time, we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any of the following jurisdiction: Alexander City, City of Dadeville, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, Unincorporated Chilton, Chambers, and Tallapoosa counties. This information will be provided in the next Hazard Mitigation Plan in five years.

3.3.4 Probability of Future Occurrences

Since zero dam failures have been recorded, it is not possible to calculate risk losses from dam failure based on the historical record. Dated and incomplete information pertaining to dam classification in Alabama makes it difficult to predict what dams are susceptible in the planning region. It is unlike that that a dam failure will occur in the region and will be considered to have a low probability. Table 3.7 shows the probability of future occurrences.

Table 3.7: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Dam Failure	**Chambers (entire)**	0	13	0
Dam Failure	City of Lafayette	0	13	0
Dam Failure	City of Lanett	0	13	0
Dam Failure	City of Valley	0	13	0
Dam Failure	Town of Cusseta	0	13	0
Dam Failure	Town of Five Points	0	13	0
Dam Failure	Town of Waverly	0	13	0
Dam Failure	Town of Fredonia	0	13	0
Dam Failure	Unincorporated County	0	13	0
Dam Failure	**Chilton County (entire)**	0	13	0
Dam Failure	Clanton	0	13	0
Dam Failure	Jemison	0	13	0
Dam Failure	Maplesville	0	13	0
Dam Failure	Thorsby	0	13	0
Dam Failure	Unincorporated County	0	13	0
Dam Failure	**Tallapoosa County (entire)**	0	13	0
Dam Failure	City of Alexander City	0	13	0
Dam Failure	Cite of Dadeville	0	13	0
Dam Failure	City of Tallassee	0	13	0
Dam Failure	Town of Camp Hall	0	13	0
Dam Failure	Town of Daviston	0	13	0
Dam Failure	Town of Jackson's Gap	0	13	0
Dam Failure	Town of New Site	0	13	0
Dam Failure	Unincorporated County	0	13	0

Source: NOAA, National Weather Service Strom Events Database, 2020,

3.4 Drought

3.4.1 Description

Drought occurs when there is below-average precipitation over an extended period of time, gradually affecting hydrological, agricultural, and social concerns. Occurrences of drought are typically classified as follows:

Table 3.8: Drought Classifications

Drought Type	Description/Definition
Meteorological Drought	Defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales
Hydrologic Drought	Related to the effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Defined principally in terms of soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic Drought	Associates the supply and demand of economic goods or services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of a weather-related supply shortfall. This type of drought may also be called a water management drought.

Source: FEMA's Multi-Hazard Identification and Risk Assessment, published January 1997. Also cited in the State of Alabama Hazard Mitigation Plan, 2018.

The long-term dangers of drought can have a serious economic impact on a community. Agricultural production can be damaged or destroyed by the loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these resources. Water supply that is drawn from groundwater sources could also be negatively impacted by prolonged drought. Drought can also be a contributing factor to wildfires in the forested areas of the region.

3.4.2 Extent by Jurisdiction

For the extent of drought, the United States Drought Monitor classifies drought in five levels of severity, based on multiple indicators including soil moisture, streamflow levels, precipitation levels, and local observations. These classifications are listed in the Table 3.9:

Table 3.9: United States Drought Monitor Classification

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops, or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested.
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies.

Source: US Drought Monitor Classifications

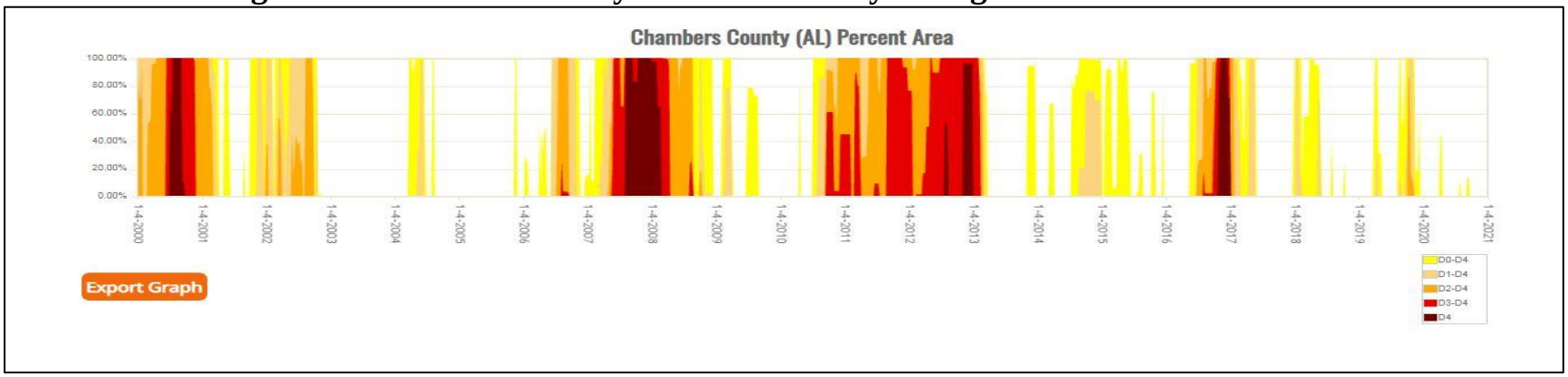
Table 3.10 describes the extent of drought in Chambers, Chilton, and Tallapoosa counties. Extent is used to define how severe or how intense drought can be, which provides a foundation for implementing mitigation strategies to reduce damages from a drought. The extent of the potential for damages across Chambers, Chilton, and Tallapoosa counties are equal.

Table 3.10: United States Drought Monitor Classification

Hazard	Extent (All Jurisdictions)
Drought	A D4: Exceptional Drought corresponds to an area experiencing exceptional and widespread crop and pasture losses, fire risk, and water shortages that result in water emergencies.

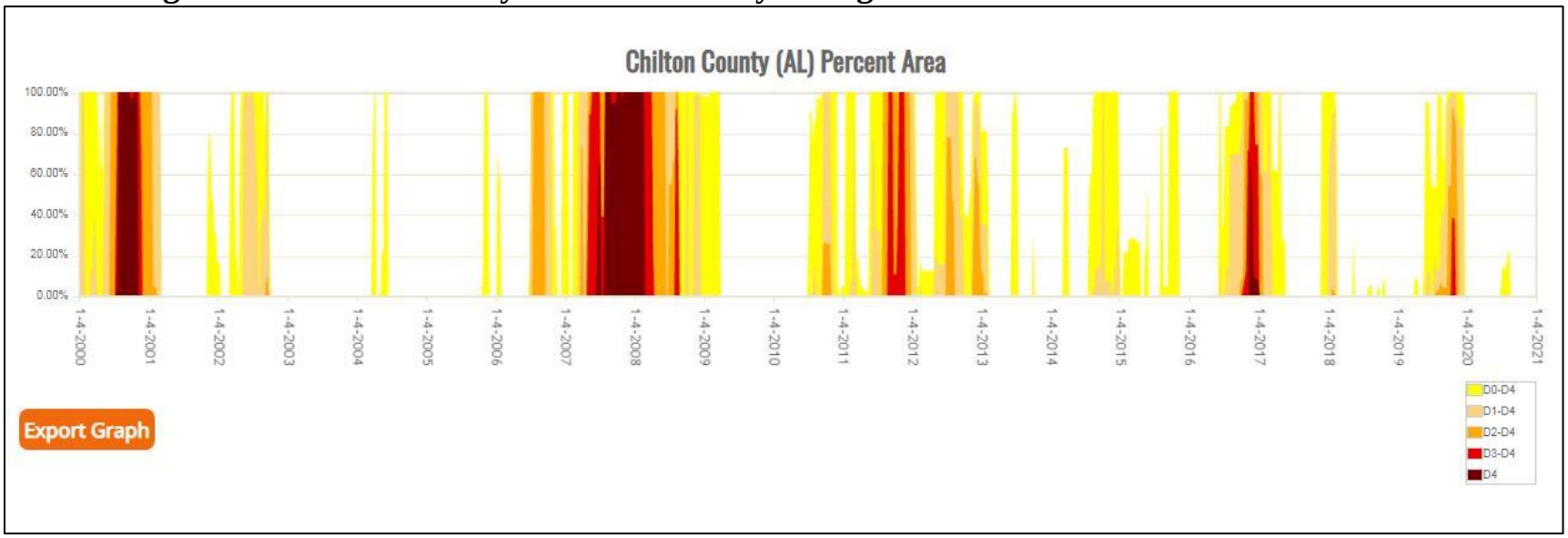
Figures 9 to 11 below show the percent of the area in Chambers, Chilton, and Tallapoosa counties that have suffered from droughts, as well as how bad the drought was in the county. Figures 12 and 15 demonstrates how severe droughts can be Chambers, Chilton, and Tallapoosa counties when there is a state or region wide drought.

Figure 9: Chambers County Area Affected by Droughts



Source: the United States Drought Monitor, 2020

Figure 10: Chilton County Area Affected by Droughts



Source: the United States Drought Monitor, 2020

Figure 11: Tallapoosa County Area Affected by Droughts

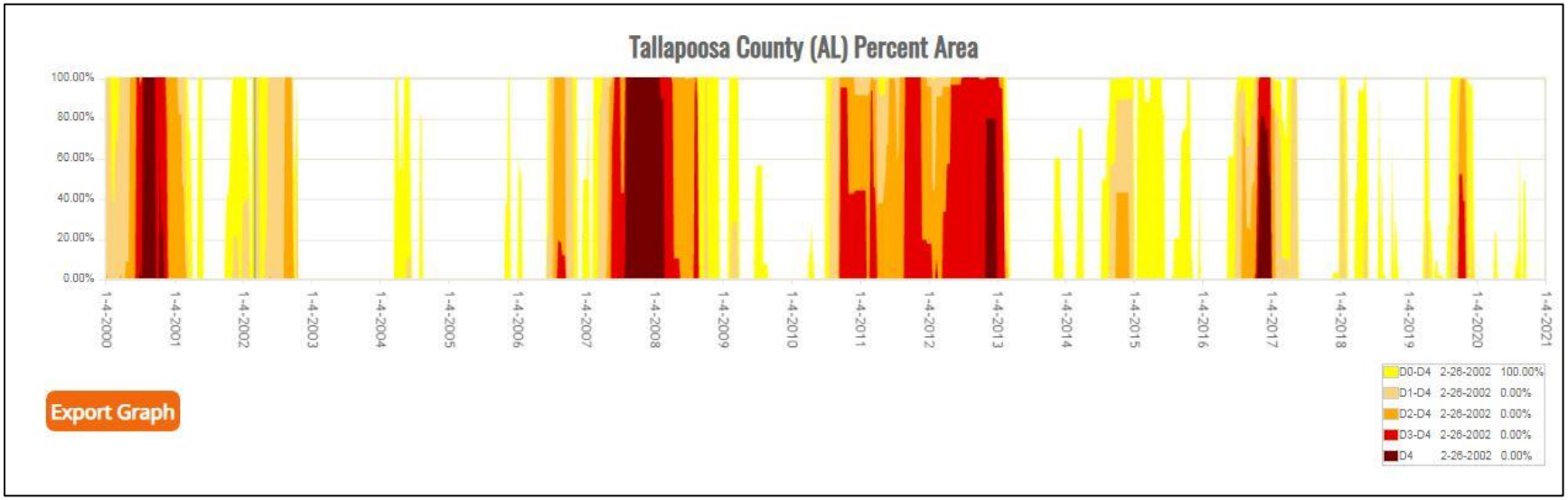
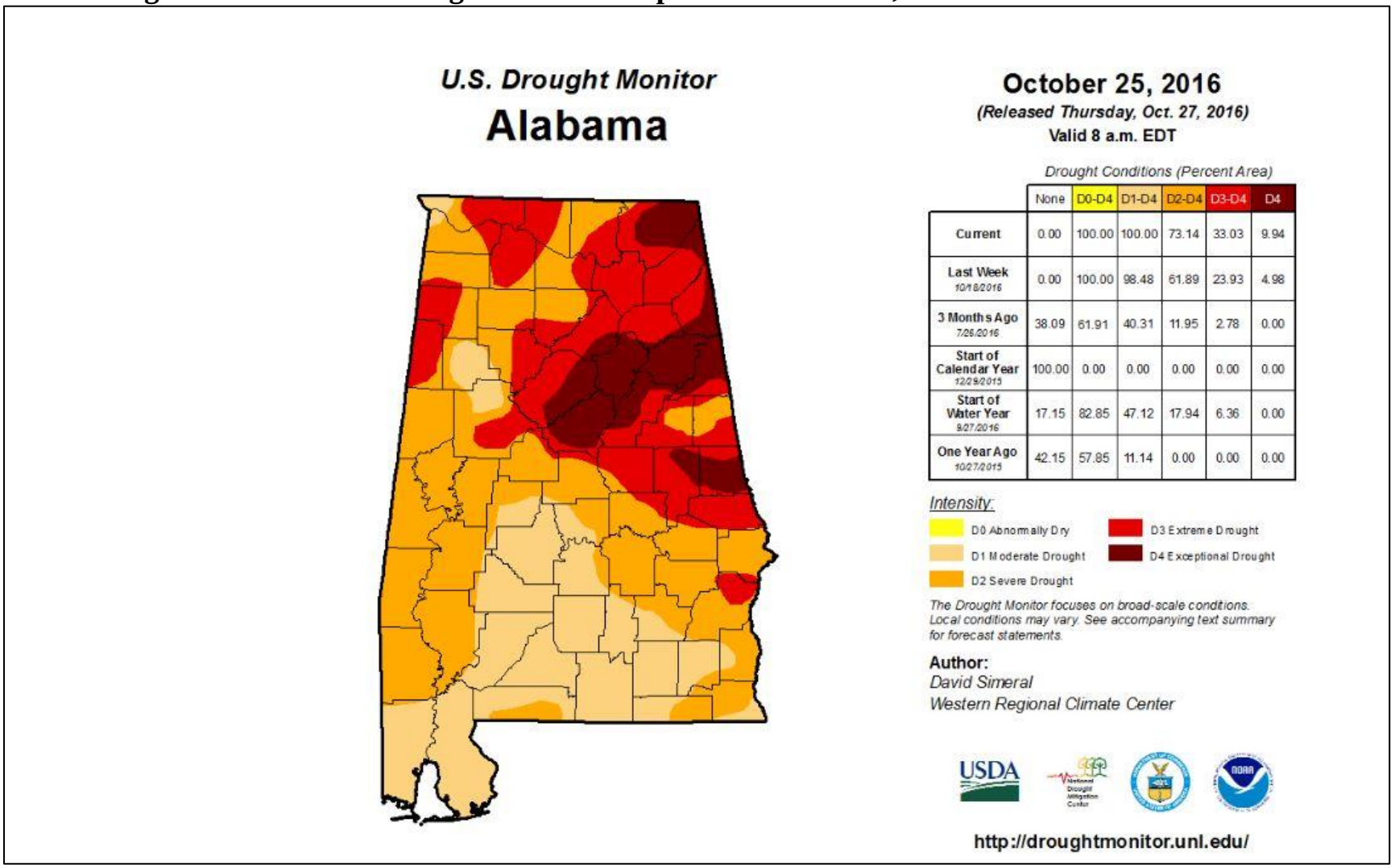
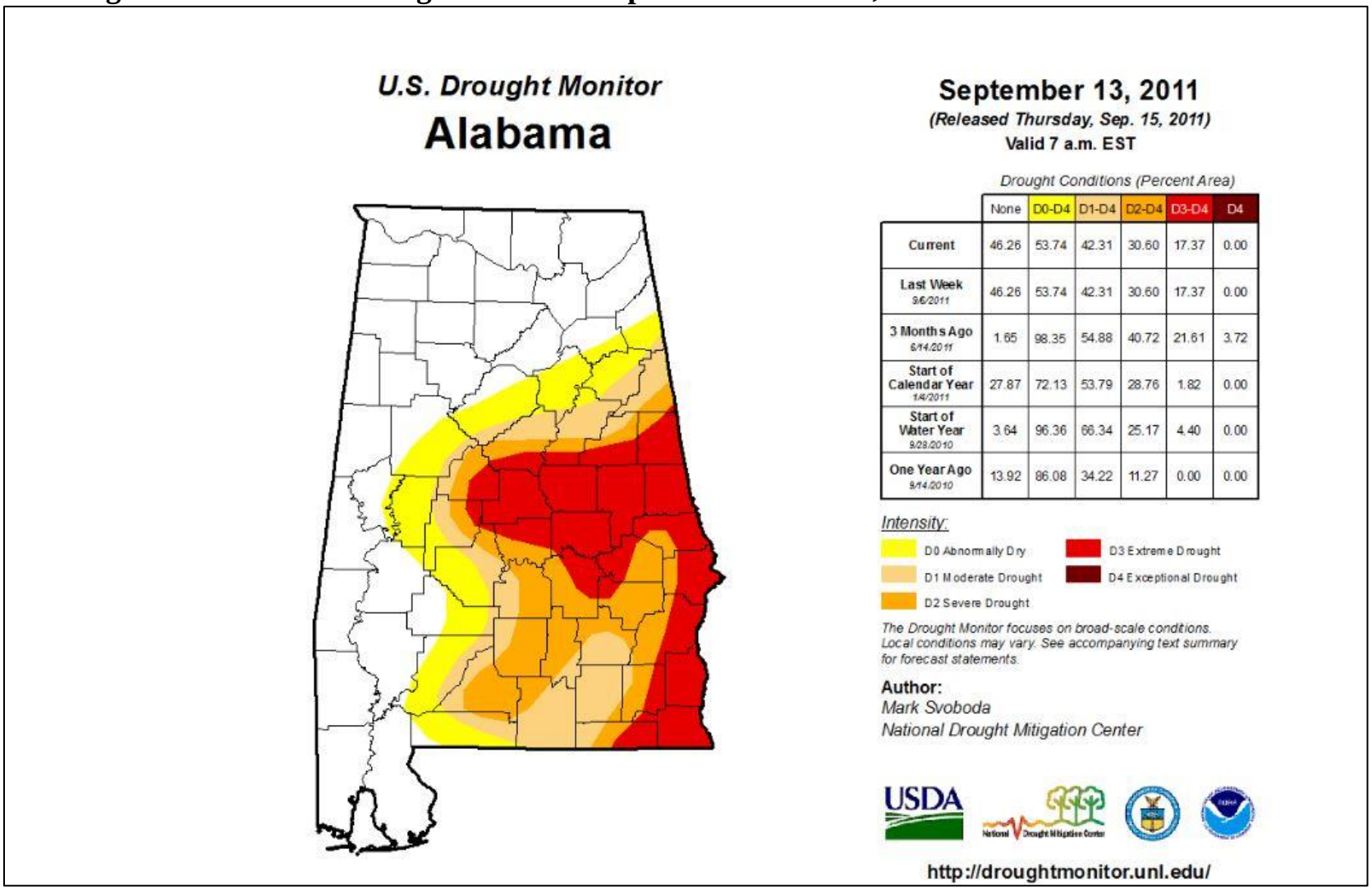


Figure 12: Alabama Drought Monitor Map as of October 4th, 2016



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2016

Figure 13: Alabama Drought Monitor Map as of October 1st, 2019



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

3.4.3 Previous Occurrences and Impact

Since 2006 Chambers County experienced 63 months, Chilton County experienced 41 months, and Tallapoosa County 64 months with droughts. Federal disaster declaration was made due to droughts that occurred in Chambers, Chilton, and Tallapoosa counties in the years of 1990, 1977, 1993, 1995, 2004, 2005, 2008, 2011, and 2017.

In 2007 to 2008, Chambers, Chilton, and Tallapoosa counties experienced a severe to extreme drought D2 to D4, which is considered an Exceptional Drought event. Along with the rest of Alabama, experienced a severe drought that lasted from May to June of 2008. In June of 2007, NOAA reported, "Hydrologic and agricultural impacts were widely felt. Crops became highly stressed due to the lack of rainfall, with losses by the end of the month ranging from 50 to nearly 100 percent in some Central Alabama counties. Stream flows on area, rivers and waterways remained near record low levels, and most reservoir levels were well below normal." In August NOAA reported, "Severe (D2) to Exceptional (D4) drought conditions continued across all of Central Alabama...more than 3/4 of the corn crop was still considered to be in poor or very poor condition, as well as about half of the cotton and soybean crop, along with livestock and hay production. Major rivers and reservoirs continued to run much below normal…Area water utility companies continued to enforce fines and surcharges for excessive water usage, and water restriction plans remained in effect." The Drought worsened into August "Around 80 percent of the corn and soybean crop, 70 percent of the cotton crop, and 40 percent of the peanut crop, about 60 percent of the livestock, and 75 percent of pasture lands, was in poor or very poor condition. Due to Major River and Major rivers and reservoirs levels navigation on major rivers became significantly impacted, and many boat landings on major lakes became unusable due to extremely low lake levels." By December NOAA reported "roughly three-quarters of Central Alabama remained in Exceptional Drought (D4), with the remainder in Moderate (D1) to Extreme (D3) Drought. This severe drought had a large negative impact on the Coosa River, and Tallapoosa River as well as caused a water shortage in municipalities and water restrictions. Hurricane Fay, in October of 2008, brought widespread rainfall to the region, which helped improve the drought conditions."

Starting in September of 2010, the Chambers, Chilton, and Tallapoosa counties experienced and sustained extreme exceptional drought conditions that lasted until February 2013. Chambers and Tallapoosa counties experienced a worst drought, D4, then Chilton during this time. Water restrictions were necessary across the jurisdictions. The United States Department of Agriculture declared all of Chambers, Chilton, and Tallapoosa counties a natural drought disaster area in both 2012 and 2013 for crop disaster losses.

The USDA issued a Secretarial Drought Designation for Chambers, Chilton, and Tallapoosa counties in 2012, 2013, 2014, 2016, 2017, 2018 and 2019, which made emergency loans available to producers suffering losses. In 2016, the Chambers, Chilton, and Tallapoosa counties experienced a D1 to a D4 level of severe to extreme drought. According to NOAA, "sites across east-central Alabama were 10-15 inches below normal by October 2016." This drought would continue until January of 2017 when heavy rainfall ended the drought.

According to NOAA, a drought is "is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people." Droughts become dangerous when it impacts economic prosperity, agricultural productivity, and human health and welfare. "Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region," according to NOAA. Chambers, Chilton, and Tallapoosa counties are susceptible to long periods without any perception which results in drought conditions. When an extreme drought arises water shortages will impact the local jurisdictions, which can lead to water rationing for communities. Unfortunately, droughts are not easily predicted, and the impacts felt from a prolonged drought are not readily quantifiable. The moderate drought condition experienced in Chambers, Chilton, and Tallapoosa counties have promoted concern about the areas vulnerable to prolonged and extreme droughts.

3.4.4 Probability of Future Occurrences

The probability that drought conditions will occur annually in Chambers, Chilton, and Tallapoosa counties are between 10%-100% (medium). The potential impacts on the region will range between minor impacts critical due to possible stress on agricultural and forestry interests in some areas of the region. Table 3.11 shows the probability of a drought occurring.

Table 3.11 Drought Probability

Hazard	Jurisdiction	Months of Droughts	2006 to 2019	Frequency Event per Year
Droughts	**Chambers (entire)**	63	13	4.85
Droughts	City of Lafayette	NA*	13	0
Droughts	City of Lanett	NA*	13	0
Droughts	City of Valley	NA*	13	0
Droughts	Town of Cusseta	NA*	13	0
Droughts	Town of Five Points	NA*	13	0
Droughts	Town of Waverly	NA*	13	0
Droughts	Town of Fredonia	NA*	13	0
Droughts	Unincorporated County	NA*	13	0
Droughts	**Chilton County (entire)**	41	13	3.15
Droughts	Clanton	NA*	13	0
Droughts	Jemison	NA*	13	0
Droughts	Maplesville	NA*	13	0
Droughts	Thorsby	NA*	13	0
Droughts	Unincorporated County	NA*	13	0
Droughts	**Tallapoosa County (entire)**	64	13	4.92
Droughts	City of Alexander City	NA*	13	0
Droughts	Cite of Dadeville	NA*	13	0
Droughts	City of Tallassee	NA*	13	0
Droughts	Town of Camp Hall	NA*	13	0
Droughts	Town of Daviston	NA*	13	0
Droughts	Town of Jackson's Gap	NA*	13	0
Droughts	Town of New Site	NA*	13	0
Droughts	Unincorporated County	NA*	13	0

Source: NOAA, National Weather Service Strom Events Database, 2020,
Data is only offered at the county level

3.5 Earthquakes

3.5.1 Description

According to NOAA, an earthquake is "anything that causes seismic waves to radiate throughout the Earth is an earthquake. There are two main types of earthquakes, tectonic and caused by humans." Earthquakes occur along the fault line or when tectonic plates move. Chambers, Chilton, and Tallapoosa counties are susceptible to earthquakes due to proximity to three major seismic zones. The Southern Appalachian Seismic Zone, the New Madrid Seismic Zone, or the South Carolina Seismic Zone. The Southern Appalachian Seismic Zone extends into northern and central Alabama, and the South Carolina Seismic Zone is in South Carolina. These seismic zones typically create infrequent earthquakes of small intensity and moderate earthquakes every few hundred years. The New Madrid Seismic Zone lies within the central Mississippi Valley but has produced some of the strongest earthquakes in North America that were felt in Alabama. The New Madrid Seismic Zone lies north and west of the region Earthquakes in 1811-1812 had limited damage due to the low-density settlements, but it created Reel Foot Lake in Tennessee and Kentucky. Large earthquakes (magnitude 7 or higher) can be created from these seismic zones, but according to the USGS, the probability of a moderate or large earthquake in Chambers, Chilton, and Tallapoosa counties is low. The impact of an earthquake could produce minor damage in these counties such as cracked windows, but there are zero of the seismic zones located in Chambers, Chilton, and Tallapoosa counties. However, fault lines do run through Chambers, Chilton, and Tallapoosa counties, Figure 15 show the locations of these fault lines.

3.5.2 Extent by Jurisdiction

The USGS defines the Mercalli Intensity Scale as a method to "value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. The lower numbers of the intensity scale generally deal with the way the earthquake is felt by people. The higher numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above."

Table 3.12: Earthquake Extent All Jurisdictions

Hazard	Extent (All Jurisdictions)
Earthquakes	A small earthquake 2.4 was recorded in Chilton, Alabama on February 5th, 1982, but damages/injuries were recorded. The epicenter of an earthquake has not originated in in Chambers and Tallapoosa counties. A large earthquake of 7.0 or higher on the Richter Scale from the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, or the South Carolina Seismic Zone could be felt by a few people in Chambers, Chilton, and Tallapoosa counties. Due to the distances from the seismic zones the impact these counties would be feel from an earthquake would be minimal and resulting in no damages or injuries.

Potentially causing serious damage to buildings, structure, and infrastructure as well as injury and loss of life. Figure 14 describes each magnitude and the potential damage each magnitude can create.

Figure 14: Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Modified Mercalli Intensity Scale, 2020.

3.5.3 Previous Occurrences and Impact

While there are no reported instances of earthquakes centered in the Chambers and Tallapoosa counties, which is depicted in Figure 15. Chilton County is the only county Table 3.13 reflects previous earthquakes in Alabama/Southeast which the Geological Survey of Alabama feels may have been felt in this region. If a strong earthquake occurred in the southeast the impact on Chamber and Tallapoosa counties would look like earthquakes from the past.

Table 3.13 Previous Earthquake Events that could be felt in this region.

Epicenter	Date	Magnitude at Epicenter	Mercalli Intensity in the Region	Shaking	Damage	Inj/Dth
Memphis, TN	02/07/1812	>7.0	IV	Light	None	None
Charleston, SC	08/13/1886	7.3	IV	Light	None	None
Irondale, AL	10/18/1916	5.1	III	Weak	None	None
Clanton, AL	02/05/1982	2.4	I	Weak	None	None
Fort Payne, AL	04/29/2003	4.9	III/IV	Weak/Light	None	None

Source: USGS, Earthquake Hazards Program, Muscogee/Harris County, Georgia

The only county in Phase III-A to have a report of an earthquake is Chilton County. The remaining counties Chambers, and Tallapoosa have reported zero instances of earthquakes centered in the county. Figure 15 displays rare instances of tremors/quakes that happened hundreds of miles away that may have been felt in the area. Table 3.13 reflects previous earthquakes in Alabama/Southcentral which the Geological Survey of Alabama feels may have been felt in this region.

Two earthquakes were reported on February 4th, 1886, and on February 13th, 1886 in Sumter and Marengo. While residents felt the tremors from the earthquakes no damages were reported. In August of 1886, a destructive earthquake near Charleston, South Carolina, was felt and caused minimal damage in Alabama's northeast. In 1916 a strong earthquake shook east of Birmingham causing damage near Easonville. The damages reported were as followed: chimneys knocked down, windows were broken, and frame buildings "badly shaken." An earthquake of 2.4 magnitude occurred in Clanton, Alabama, but this event has no reports of damages or injuries. In 2003 an earthquake with a magnitude 4.9 struck Fort Payne, Alabama, which could have been felt by persons and properties in the region. There was no damages or injuries in Chambers, Chilton, or Tallapoosa counties, but the earthquake could have been felt by some individuals living in northern portions of Chambers, Chilton, or Tallapoosa.

Figure 16 shows the locations of all the fault lines for Chambers, Chilton, and Tallapoosa counties. Most fault lines run through north and north east portion of Chilton County, central and southeast portion of Chambers, and central Tallapoosa County.

Figure 15: Earthquake Epicenter as of March 2019

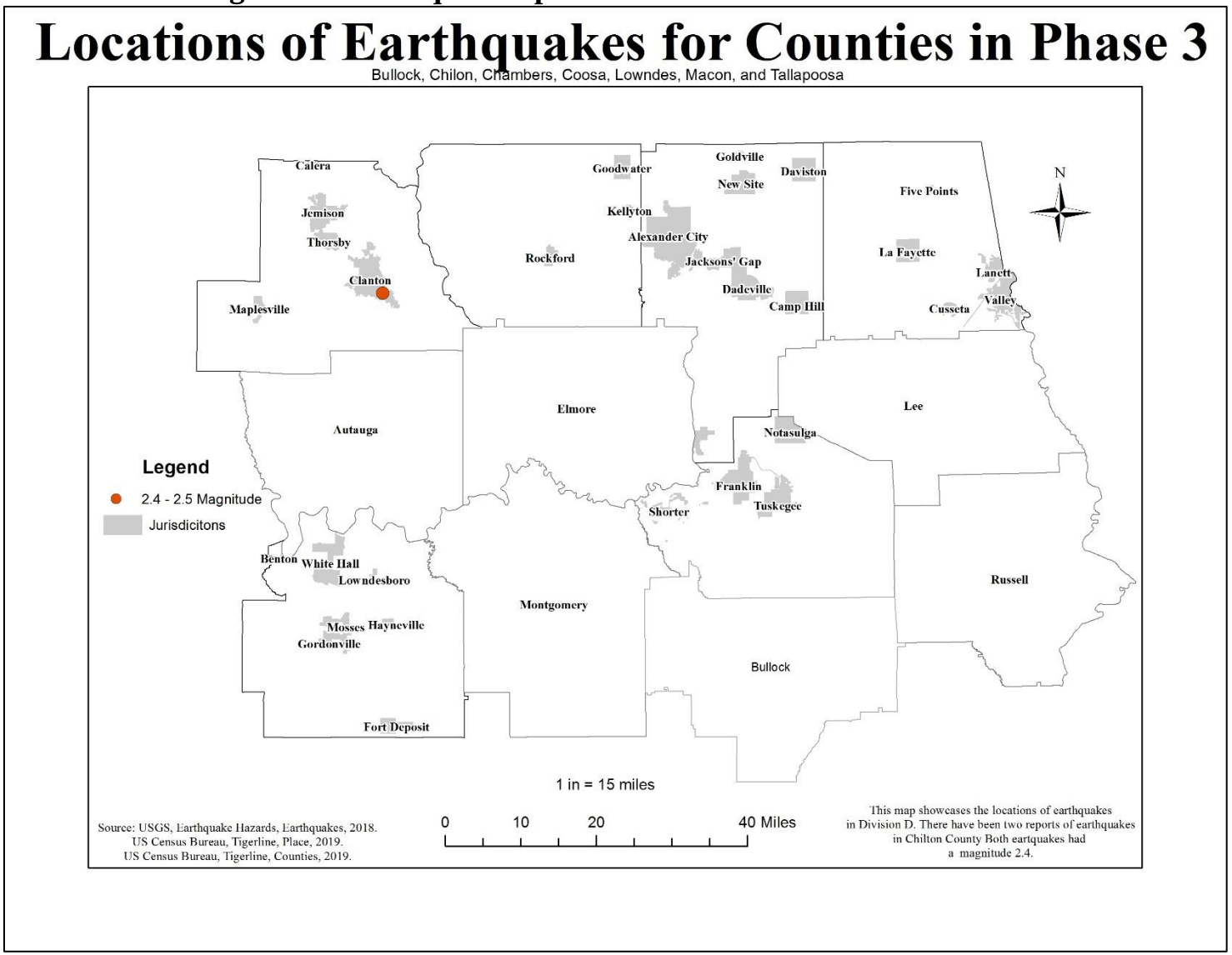
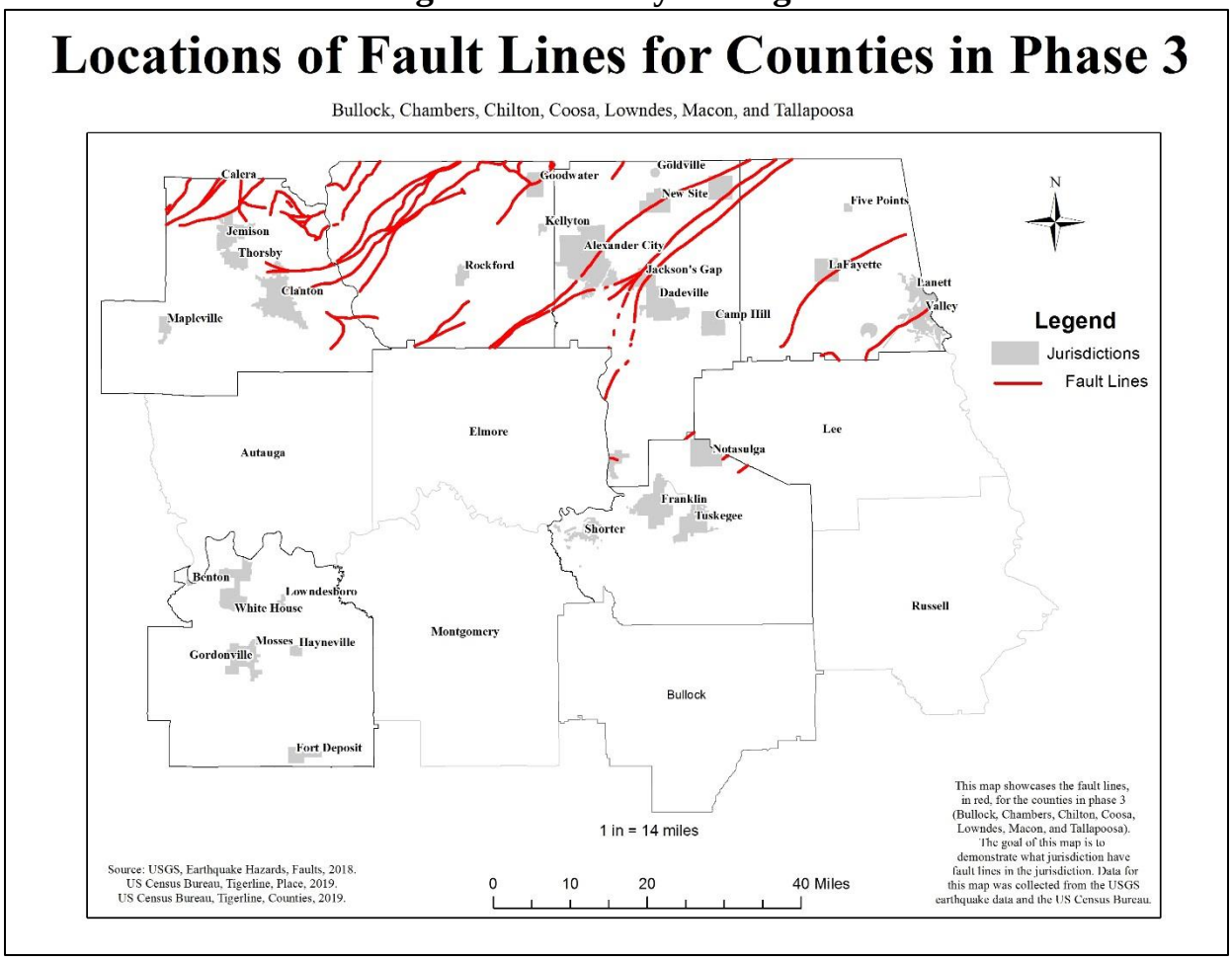


Figure 16: County Geologic Fault Line

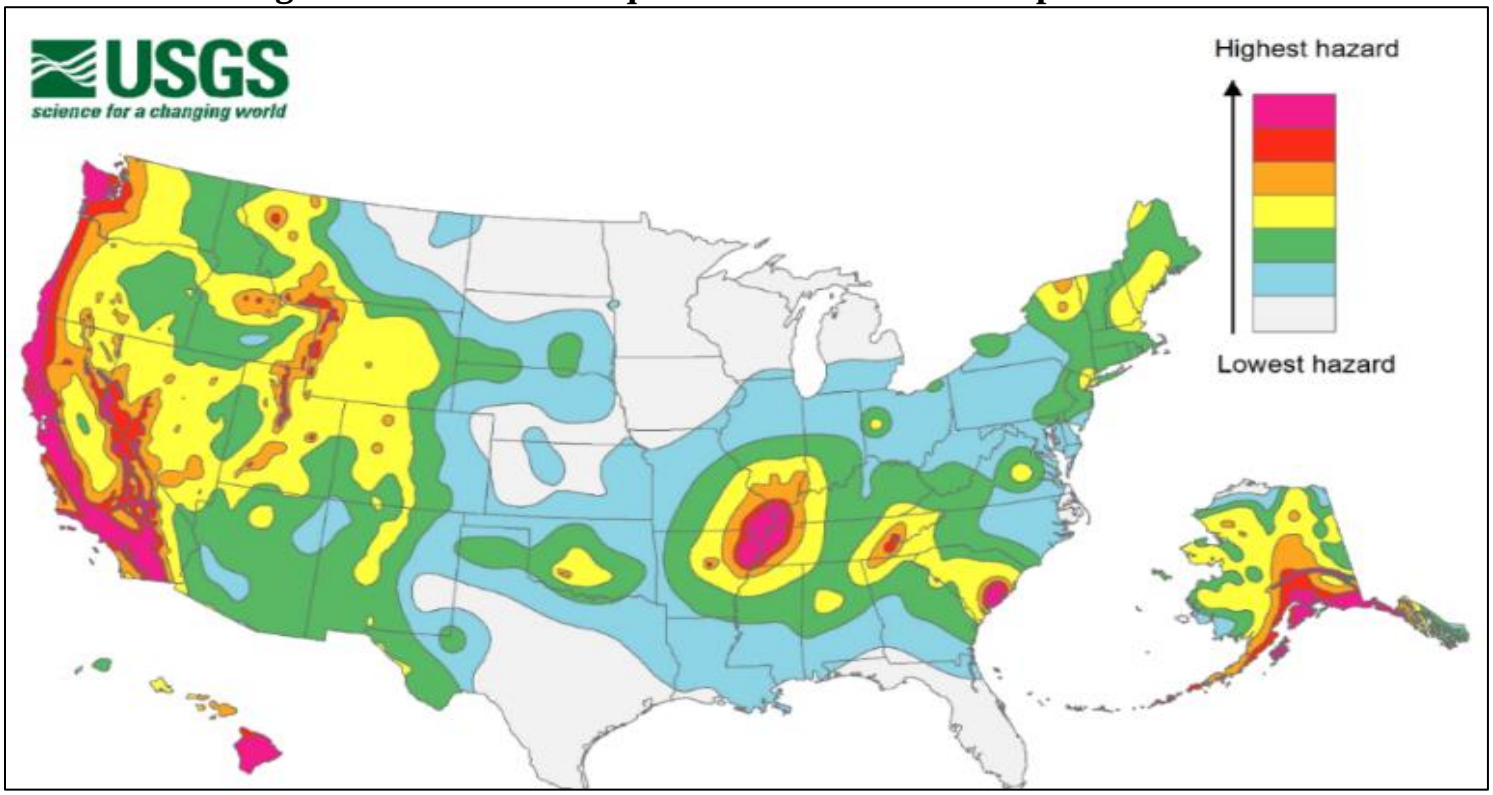


3.5.4 Probability of Future Occurrences

The probability of an earthquake occurring in this region was determined to be very low with less than a 1% annual probability with a very minor impact if one were to occur. Therefore, the probability of an impactful earthquake in the region is very low and will not be profiled any further, which can be seen in Table 3.14.

The United States Geological Survey (USGS) publishes simplified earthquake seismic hazard maps that quickly give earthquake hazard probabilities, which can be seen in Figure 17.

Figure 17: USGS Earthquake Seismic Hazard Map



Source: USGS Earthquake Hazard Probability, 2019

Table 3.14: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Dam Failure	**Chambers (entire)**	0	13	0
Dam Failure	City of Lafayette	0	13	0
Dam Failure	City of Lanett	0	13	0
Dam Failure	City of Valley	0	13	0
Dam Failure	Town of Cusseta	0	13	0
Dam Failure	Town of Five Points	0	13	0
Dam Failure	Town of Waverly	0	13	0
Dam Failure	Town of Fredonia	0	13	0
Dam Failure	Unincorporated County	0	13	0
Dam Failure	**Chilton County (entire)**	0	13	0
Dam Failure	Clanton	0	13	0
Dam Failure	Jemison	0	13	0
Dam Failure	Maplesville	0	13	0
Dam Failure	Thorsby	0	13	0
Dam Failure	Unincorporated County	0	13	0
Dam Failure	**Tallapoosa County (entire)**	0	13	0
Dam Failure	City of Alexander City	0	13	0
Dam Failure	Cite of Dadeville	0	13	0
Dam Failure	City of Tallassee	0	13	0
Dam Failure	Town of Camp Hall	0	13	0
Dam Failure	Town of Daviston	0	13	0
Dam Failure	Town of Jackson's Gap	0	13	0
Dam Failure	Town of New Site	0	13	0
Dam Failure	Unincorporated County	0	13	0

3.6 Extreme Temperatures

3.6.1 Description

Extreme temperature is a hazard that encompasses instances of both extreme heat and extreme cold. Both extremes are profiled in this section.

Extreme Heat

Extreme heat is abnormally high temperatures that disproportionately affect the elderly, very young, and those with health concerns if exposed to the conditions, especially those without effective climate control systems. The State of Alabama Hazard Mitigation Plan, 2018, discusses extreme heat as temperatures above 100 F. Heat stress can be indexed by combining the effects of temperature and humidity, as shown in Table 3.15. The heat index estimates the relationship between dry bulb temperatures (at different humidity) and the skin's resistance to heat and moisture transfer. The higher the temperature or humidity, the higher the apparent temperature. The major human risks associated with extreme heat are:

Heat/Sun Stroke: Considered a medical emergency, heat/sunstroke is often fatal. It occurs when the body's responses to heat stress are insufficient to prevent a substantial rise in the body's core temperature. While no standard diagnosis exists, a medical condition is usually diagnosed when the body's temperature exceeds 105 F due to environmental temperatures. Rapid cooling is necessary to prevent death, with an average fatality rate of 15 percent even with treatment.

Heat Exhaustion: While much less serious than heatstroke, heat exhaustion can cause victims to complain of dizziness, weakness, or fatigue. Body temperatures may be normal or slightly too moderately elevated. The prognosis is usually good with fluid treatment.

Heat Syncope: This refers to a sudden loss of consciousness and is typically associated with people exercising who are not acclimated to warm temperatures. It causes little or no harm to the individual.

Heat Cramps: May occur in people unaccustomed to exercising in the heat and generally ceases to be a problem after acclimatization.

Table 3.15: Heat Index and Disorders

Danger Category	Heat Disorders	Apparent Temperatures (F)
I Caution	Fatigue possible with prolonged exposure and physical activity	89-90
II Extreme Caution	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity	90-105
III Danger	Sunstroke, heat cramps, or heat exhaustion likely, heatstroke possible with prolonged exposure and physical activity.	105-130
IV Extreme Danger	Heatstroke or sunstroke imminent	>130

Source: FEMA, 1997, NWS, 1997, State of Alabama HMP, 2018

In addition to affecting people, severe heat places significant stress on plants and livestock. The effects of severe heat on agricultural products may include reduced yields and loss of crops, State of Alabama HMP, 2018.

Extreme Cold

From the State of Alabama Hazard Mitigation Plan, 2018, extreme cold temperatures also impact Alabama weather, although not as likely. Prolonged exposure to the cold can cause frostbite or

hypothermia and become life-threatening. Frostbite occurs when the extremities become excessively cold, and hypothermia is a serious health condition where a person's body temperature falls below 90 F. Both conditions are influenced by wind conditions. Various wind chill indices have been developed to predict cold temperature's effect on humans. For instance, a temperature of 5 F will have a wind chill of -19F if the wind is blowing 30 mph. Cold weather can also impact crops and livestock. Cold air has the potential to freeze produce, which can damage or kill it.

Older adults are more prone to being impacted by extreme heat and extreme cold events. This is because they do not adjust well as other demographics to drastic changes in temperature, they are more likely to have a medical condition that changes normal body responses to heat and cold, and they are more likely to take prescription medications that impact the body's ability to react to changes in temperatures. Access to climate control, such as air conditioning and heating systems, provides protection from the impacts of extreme heat and cold events and is one way to mitigate against the potential impacts of an extreme temperature event.

3.6.2 Extent by Jurisdiction

Table 3.16: Extreme Temperatures Extent

Hazard	Extent (All Jurisdictions)
Extreme Temperatures	Extreme highs above 100 deg. F increases the risk of injury from exposure and drought risk. Low-temperature extremes around 0 deg. F for several days at a time causing water shortages and injury.

All of Chambers, Chilton, and Tallapoosa counties are susceptible to annual extreme heat due to its central location in Alabama. Although not as common, the planning area could have instances of extreme cold.

3.6.3 Previous Occurrences and Impacts

Typically, daytime high temperatures can reach the upper 90's to low 100's during the summer months. The combination of humid air, the heat index can climb to 105 to 110 degrees across Chambers, Chilton, and Tallapoosa counties. In August of 2007 temperatures reached between 100 to 109 degrees from August 4to August 15, which resulted in 2 deaths, and 26 people required medical treatment, according to NOAA. NOAA did not record any crop damages for this event, but it is possible there were some damages.

Chambers, Chilton, and Tallapoosa counties had zero instances of extreme cold since 2006, nor were any injuries or deaths reported due to extreme cold.

3.6.4 Probability of Future Occurrences

The probability of extreme temperatures in theses counties is rated as a low to medium, but this is primarily for extreme heat. The impact of an extreme heat/cold event is rated as low to critical largely based on duration. The events in the region have been short-lived, according to the NOAA datasets. Table 3.17 shows the future probability of the occurrence of extreme temperature.

Tale 3.17: Future Probability of Extreme Temperatures

Hazard	Jurisdictions	Number Previous Events	2006 - 2019	Frequency Event per Year
Extreme Temperature	**Chambers (entire)**	3	13	.2307
Extreme Temperature	City of Lafayette	NA*	13	0
Extreme Temperature	City of Lanett	NA*	13	0
Extreme Temperature	City of Valley	NA*	13	0
Extreme Temperature	Town of Cusseta	NA*	13	0
Extreme Temperature	Town of Five Points	NA*	13	0
Extreme Temperature	Town of Waverly	NA*	13	0
Extreme Temperature	Town of Fredonia	NA*	13	0
Extreme Temperature	Unincorporated County	NA*	13	0
Extreme Temperature	**Chilton County (entire)**	5	13	.3846
Extreme Temperature	Clanton	NA*	13	0
Extreme Temperature	Jemison	NA*	13	0
Extreme Temperature	Maplesville	NA*	13	0
Extreme Temperature	Thorsby	NA*	13	0
Extreme Temperature	Unincorporated County	NA*	13	0
Extreme Temperature	**Tallapoosa County (entire)**	0	13	0
Extreme Temperature	Cite of Dadeville	0	13	0
Extreme Temperature	City of Tallassee	0	13	0
Extreme Temperature	Town of Camp Hall	0	13	0
Extreme Temperature	Town of Daviston	0	13	0
Extreme Temperature	Town of Jackson's Gap	0	13	0
Extreme Temperature	Town of New Site	0	13	0
Extreme Temperature	Unincorporated County	0	13	0

Source: National Weather Service, Storm Event Database, 2020)
*** (Extreme Temperatures are not recorded in every jurisdiction)*

3.7 Flooding

3.7.1 Description

Flooding is considered one of the most frequent and costly natural hazards that occurs in the United States. Most communities in the United States have experienced flooding, including those in the Chambers, Chilton, and Tallapoosa counties. Flooding normally occurs due to excessive precipitation, but many factors can have an impact on flooding such as drainage basin characteristics, antecedent soil moisture conditions, weather patterns, and land cover. There are two primary types of flooding that affect this planning area: riverine flooding and flash flooding.

Riverine flooding occurs when substantial levels of precipitation ensue over a long period of time, causing rivers and streams to flow outside of their natural channels and negatively affecting surrounding areas. Flash flooding is normally instigated by intense amounts of precipitation over a short time period in a localized area. Chambers, Chilton, and Tallapoosa counties all experience types of flood events. Flash floods are generally more prevalent in the urbanized areas with abundant impervious surfaces and other areas of obstructions to water runoff. The Coosa River, which runs through Chilton counties, is a primary factor in riverine flooding in the counties. The Tallapoosa River flows through Chambers, and Tallapoosa counties riverine flood can occur along the river during heavy rains.

Chambers County City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site have mapped Flood Hazard Areas, with the exception of those jurisdictions that are not located in the flood hazard area. Figures 18 to Figure 37 show the areas of susceptibility to riverine flooding events, and flash flooding. When a large amount of rainfall occurs during a short period or over days, flash flooding therefor can occur anywhere under the right circumstances. Figures show the location of currently mapped special flood hazard areas for the Chambers, Chilton, and Tallapoosa counties, which based on the most recent FEMA National Flood Hazard Layer Available. This map includes areas designated Zone A (one-percent annual chance flood) and Zone AE (one percent annual chance flood with elevation). The data made available by FEMA is not without error, therefore, and some flooding may occur outside of these mapped areas. The following maps show where the floodplain goes in each jurisdiction.

Figure 18: Chambers County

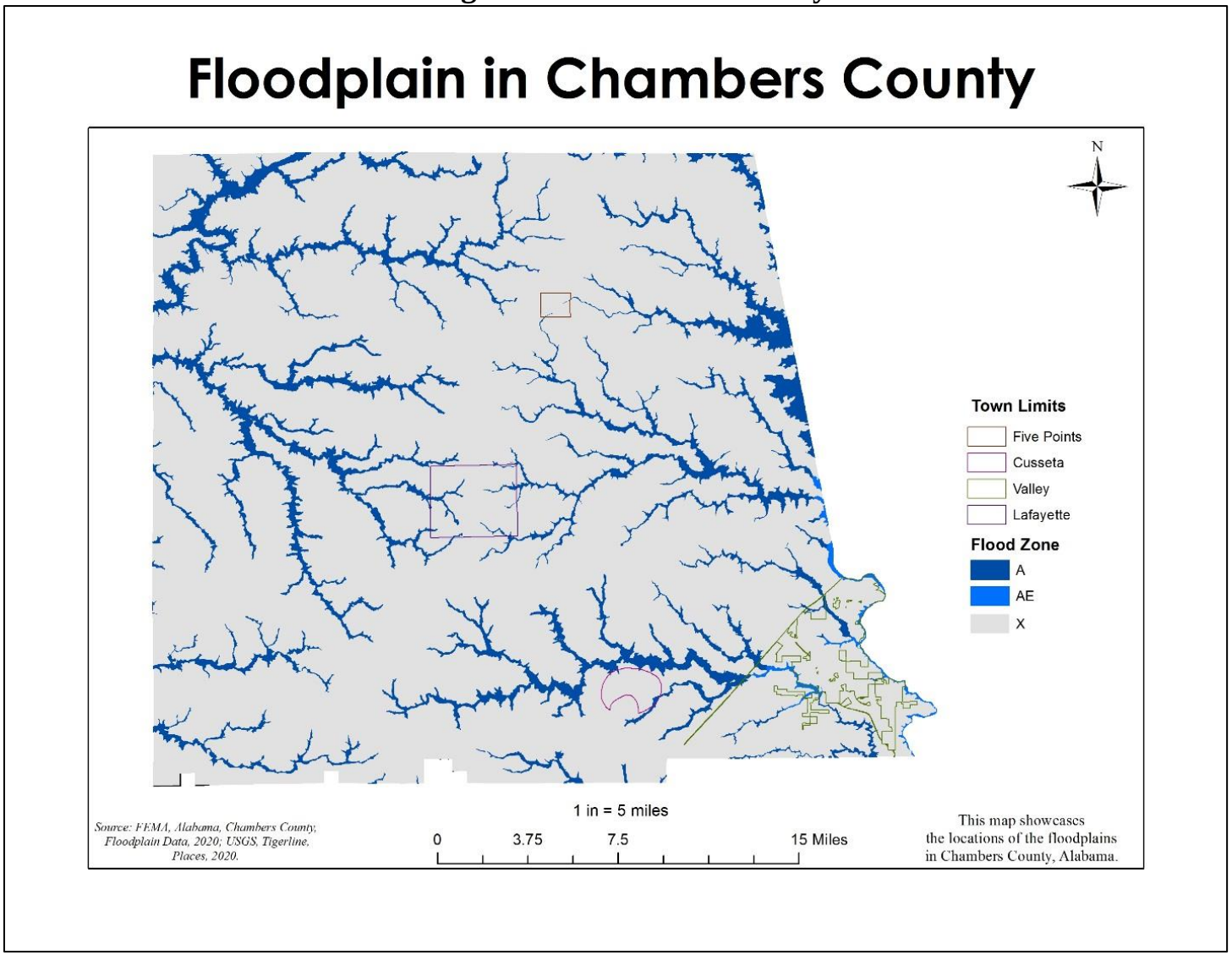


Figure 19: Floodplain Town of Cusseta

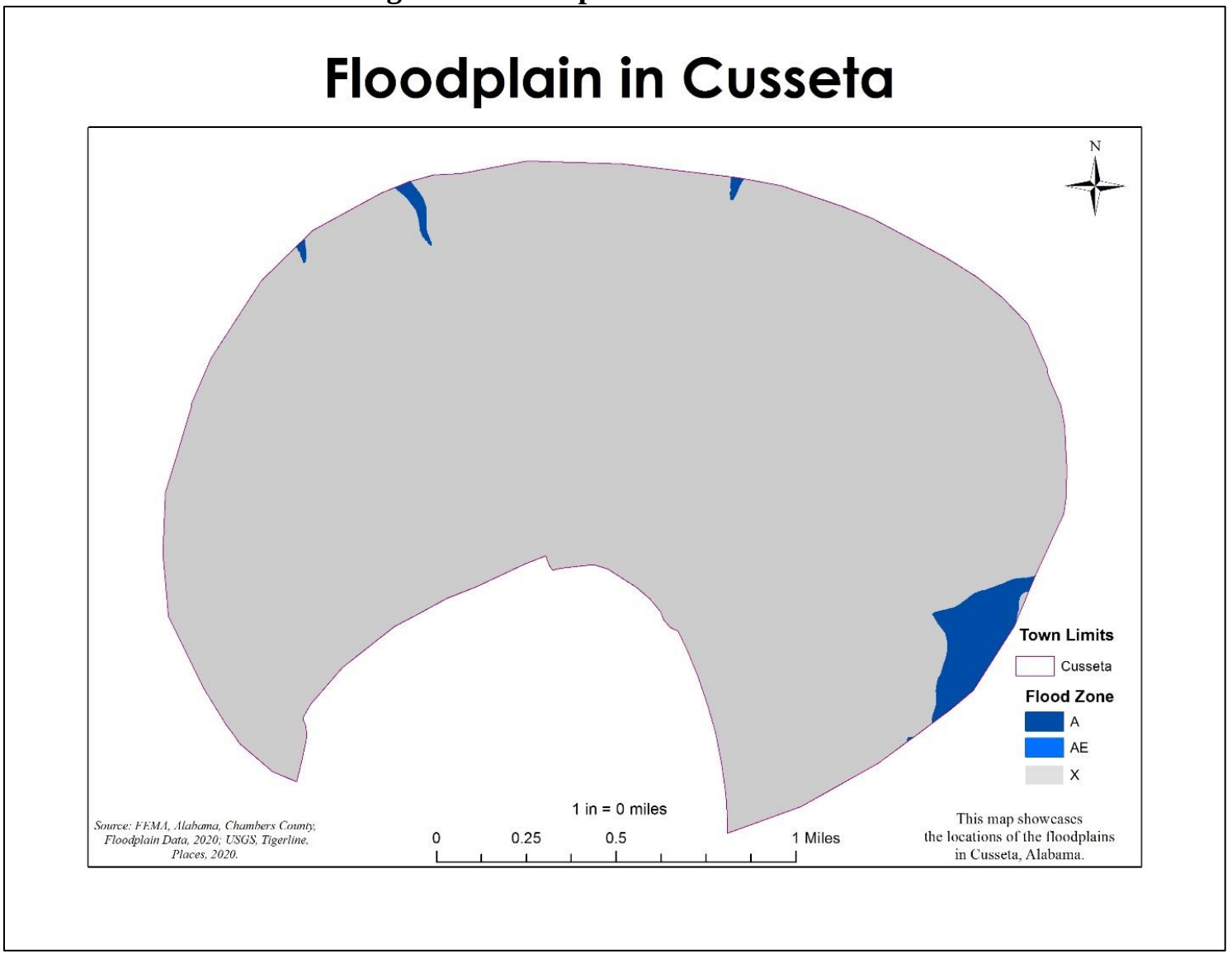


Figure 20: Floodplain Town of Five Points

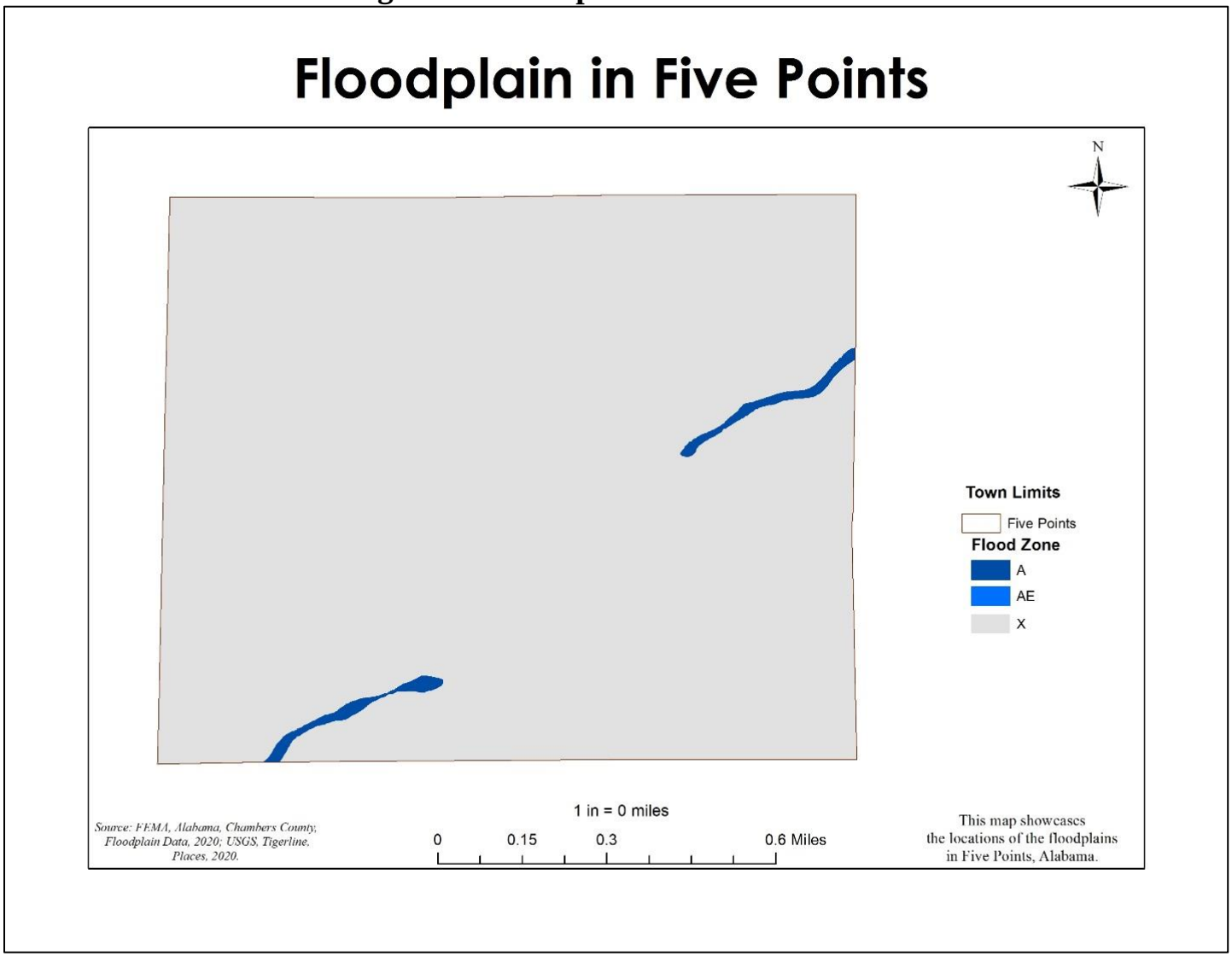


Figure 21: Floodplain of Fredonia

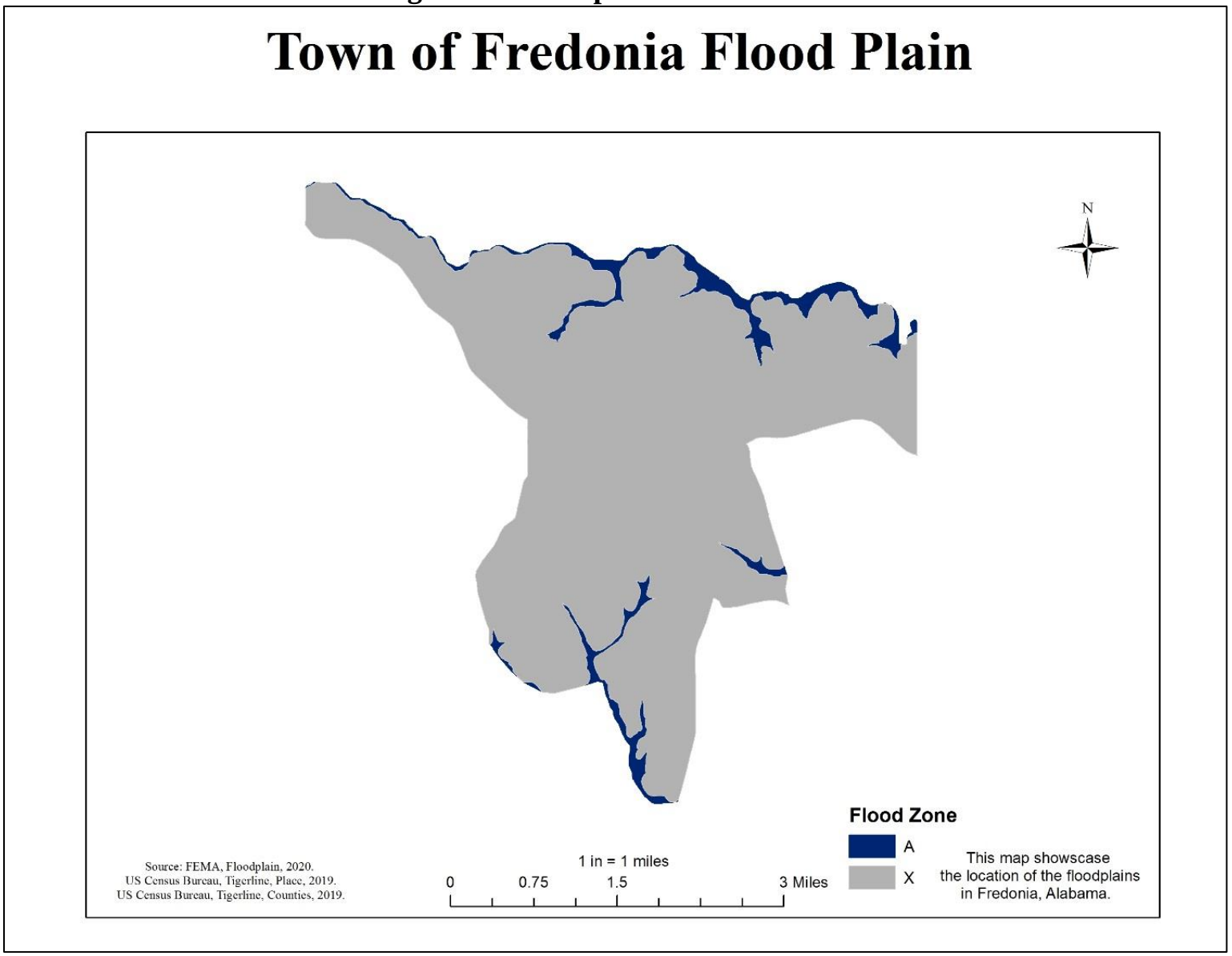


Figure 22: Floodplain of Lafayette

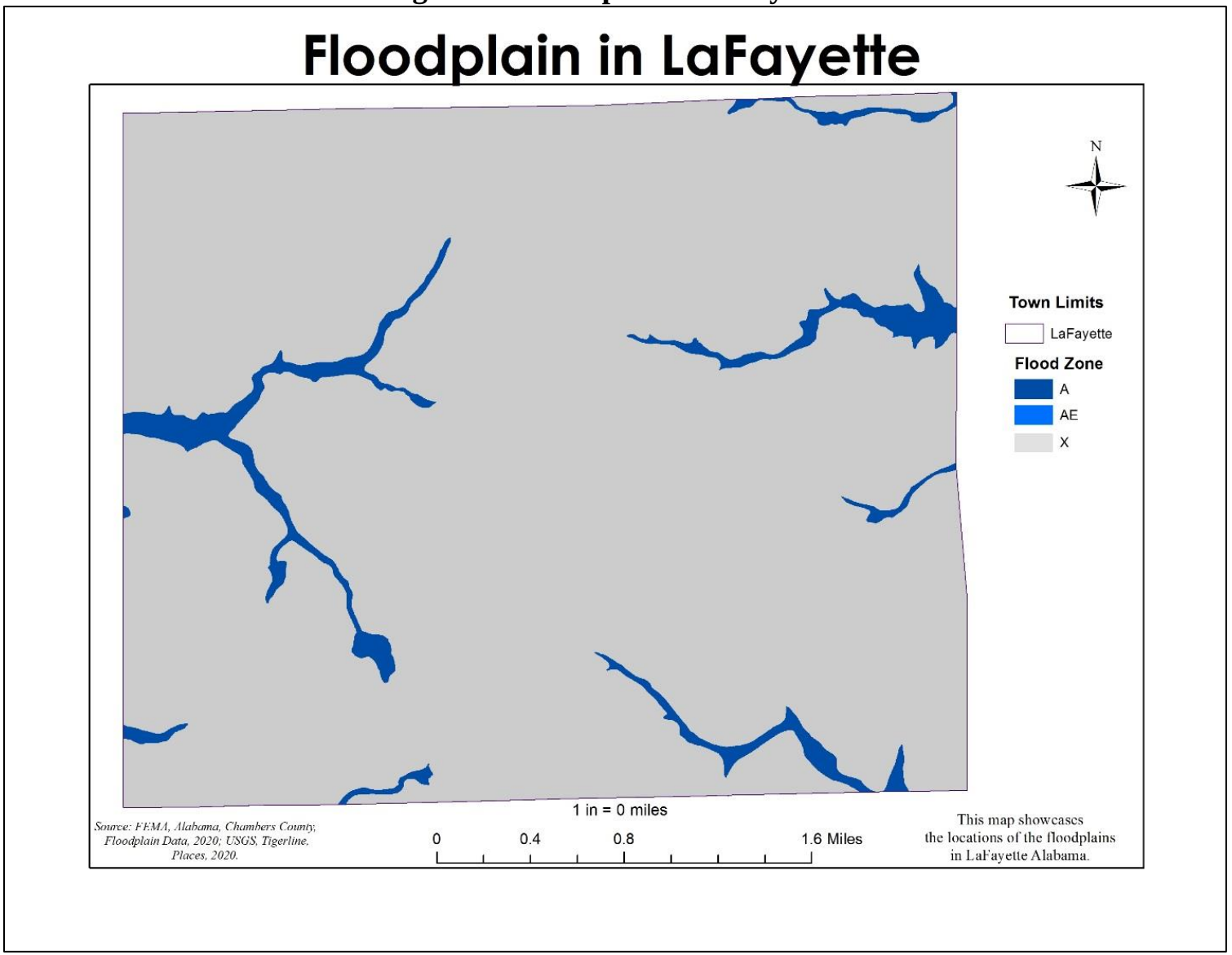


Figure 23: Floodplain City of Lanett

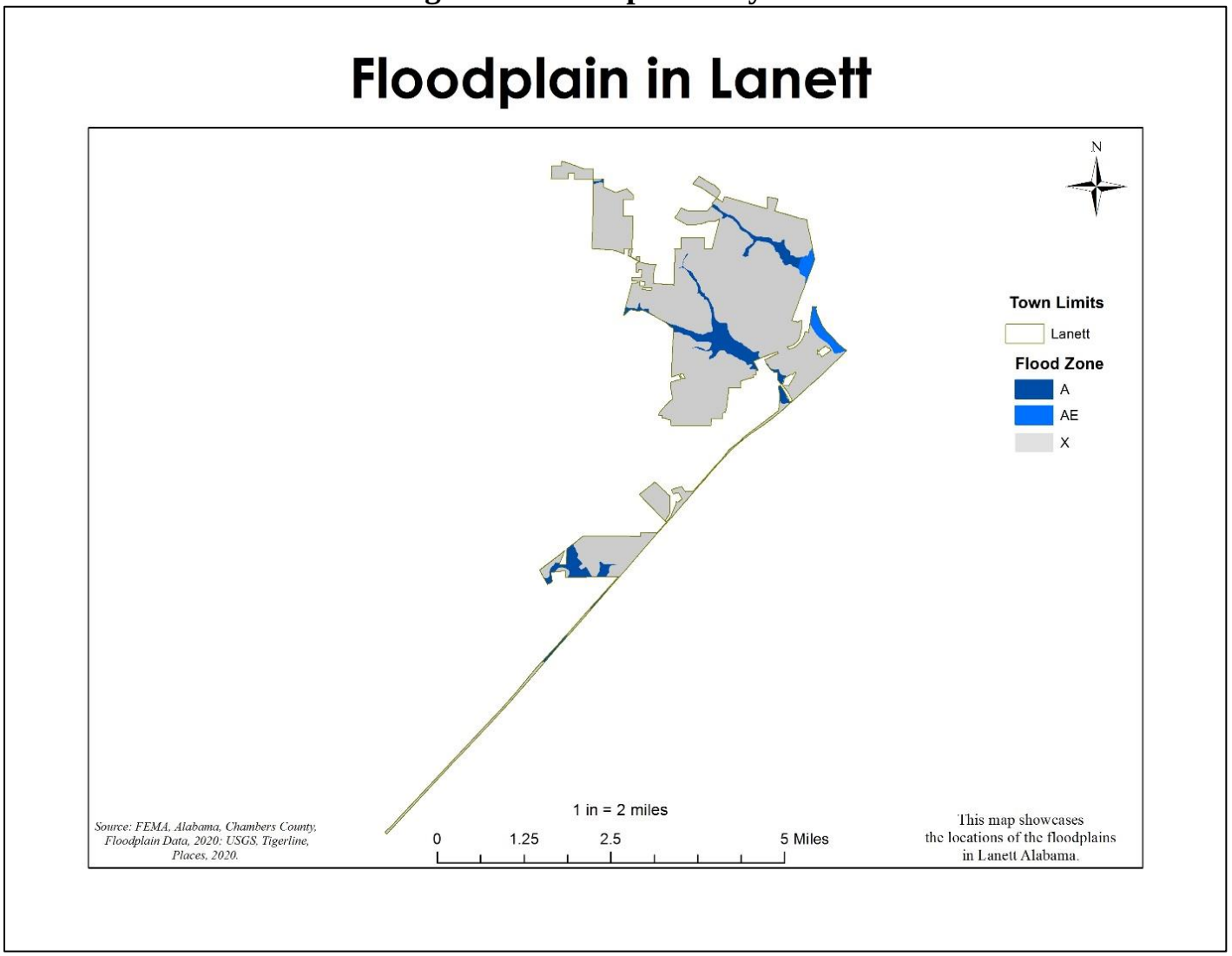


Figure 24: Flood plain Town of Valley

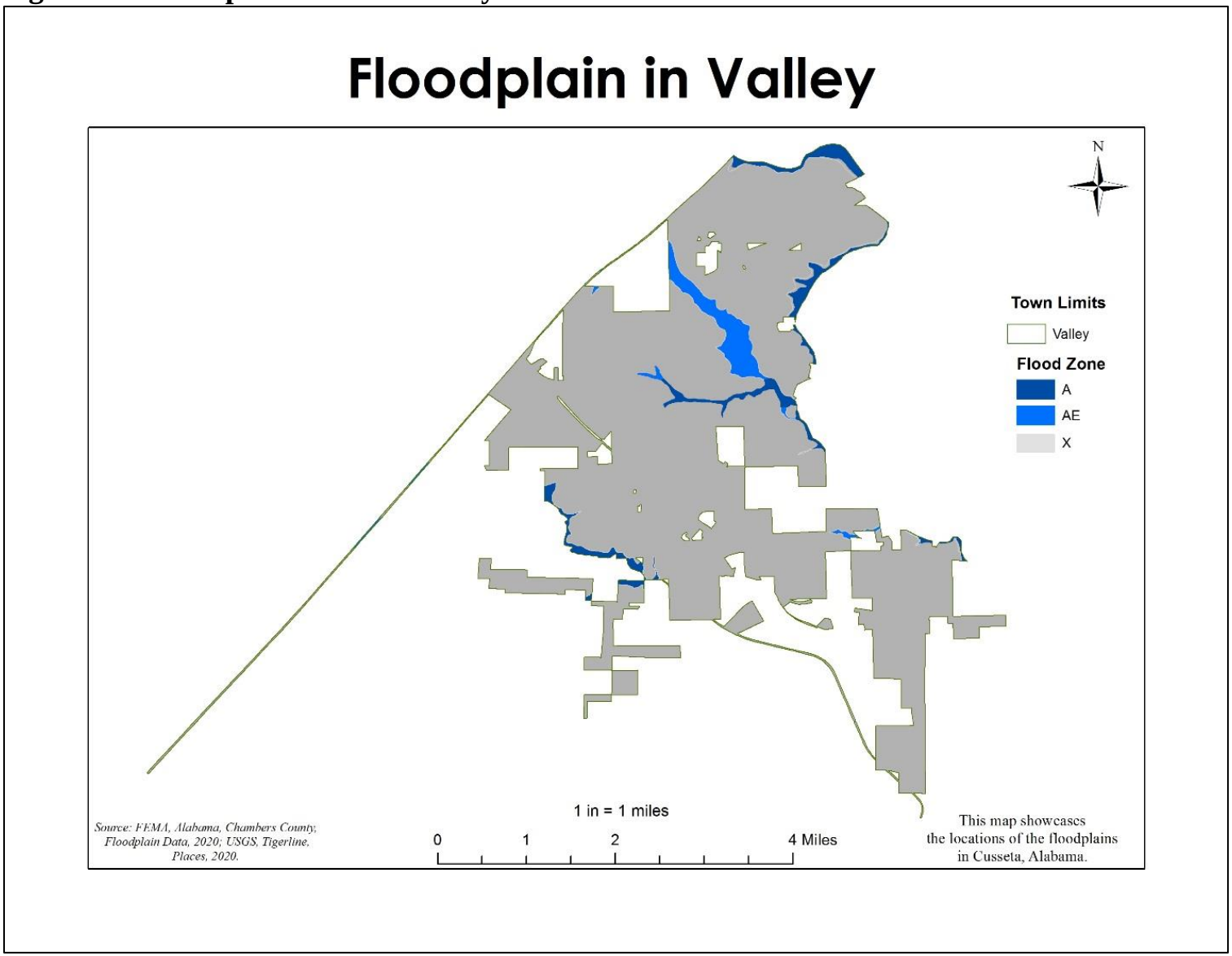


Figure 25: Floodplain of Waverly

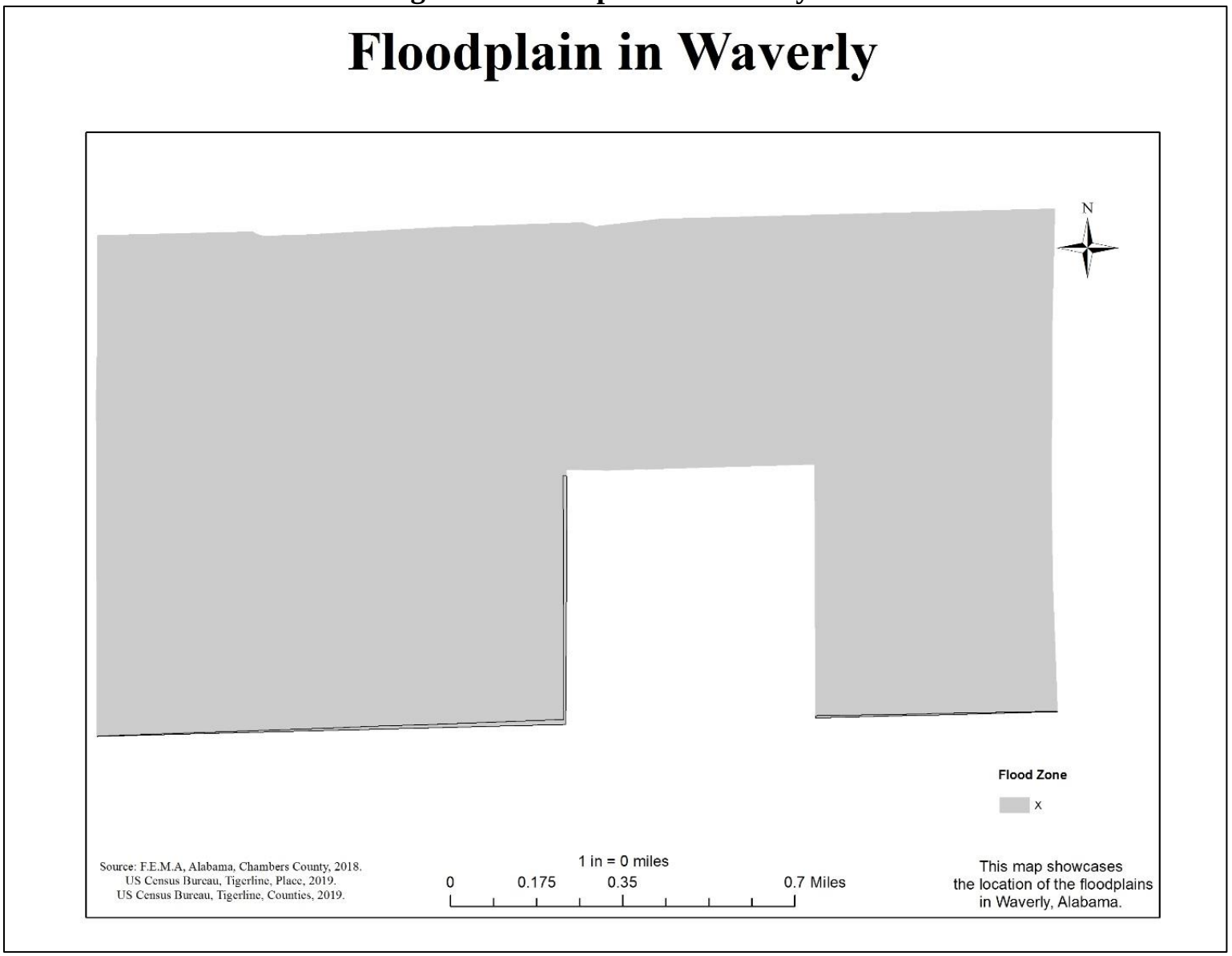


Figure 26: Floodplain of Chilton County

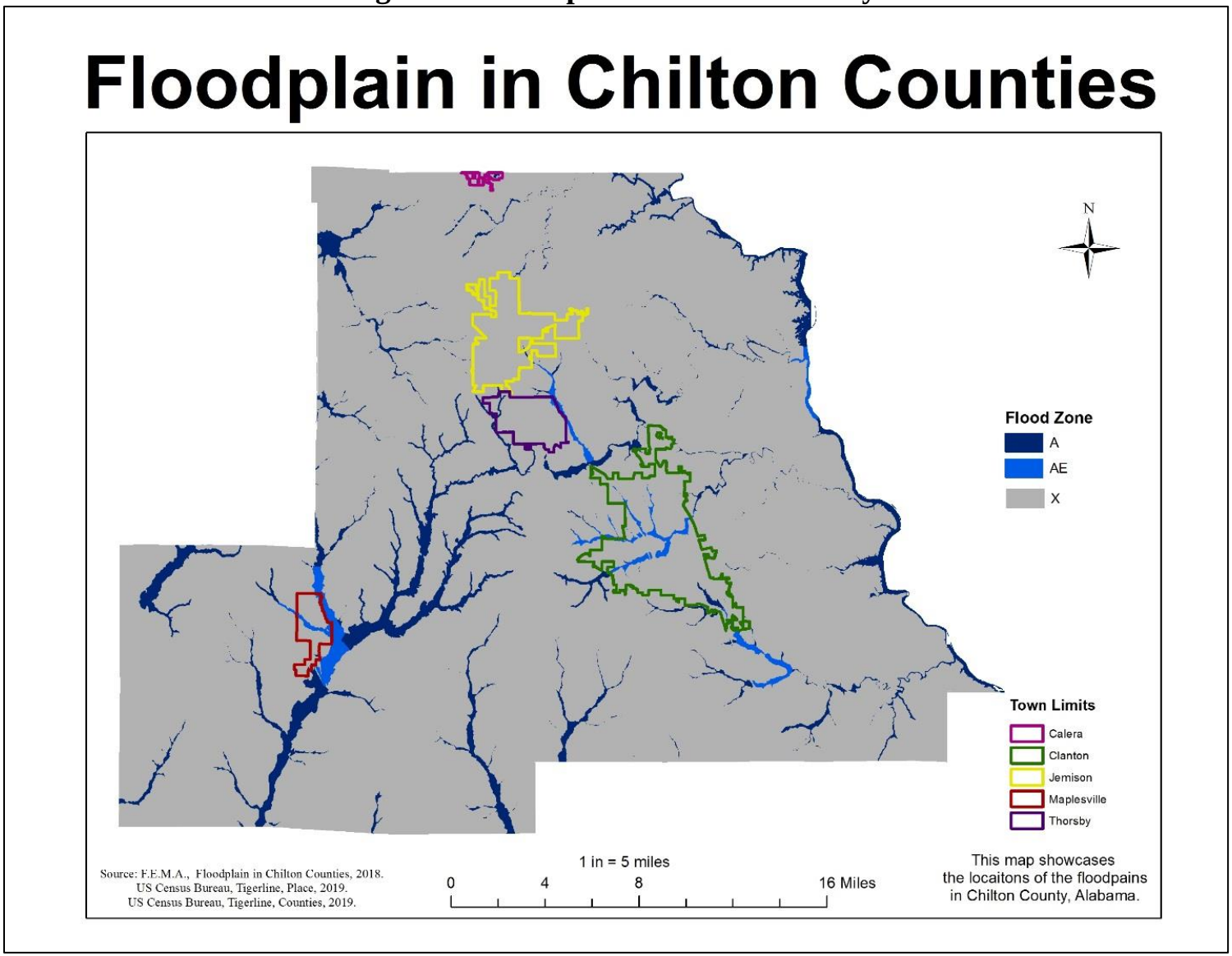


Figure 27: Floodplain of Calera

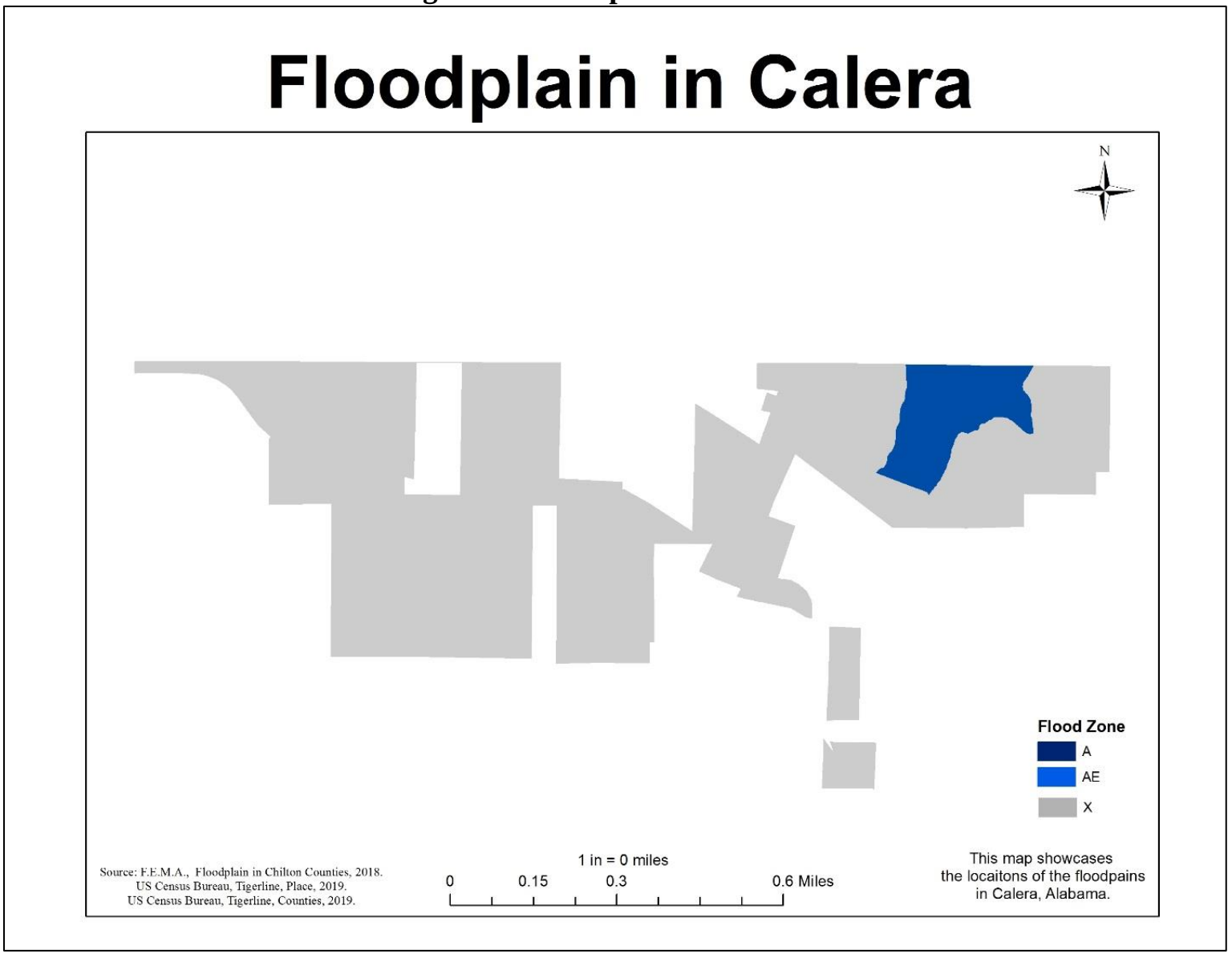


Figure 28: Floodplain of Clanton

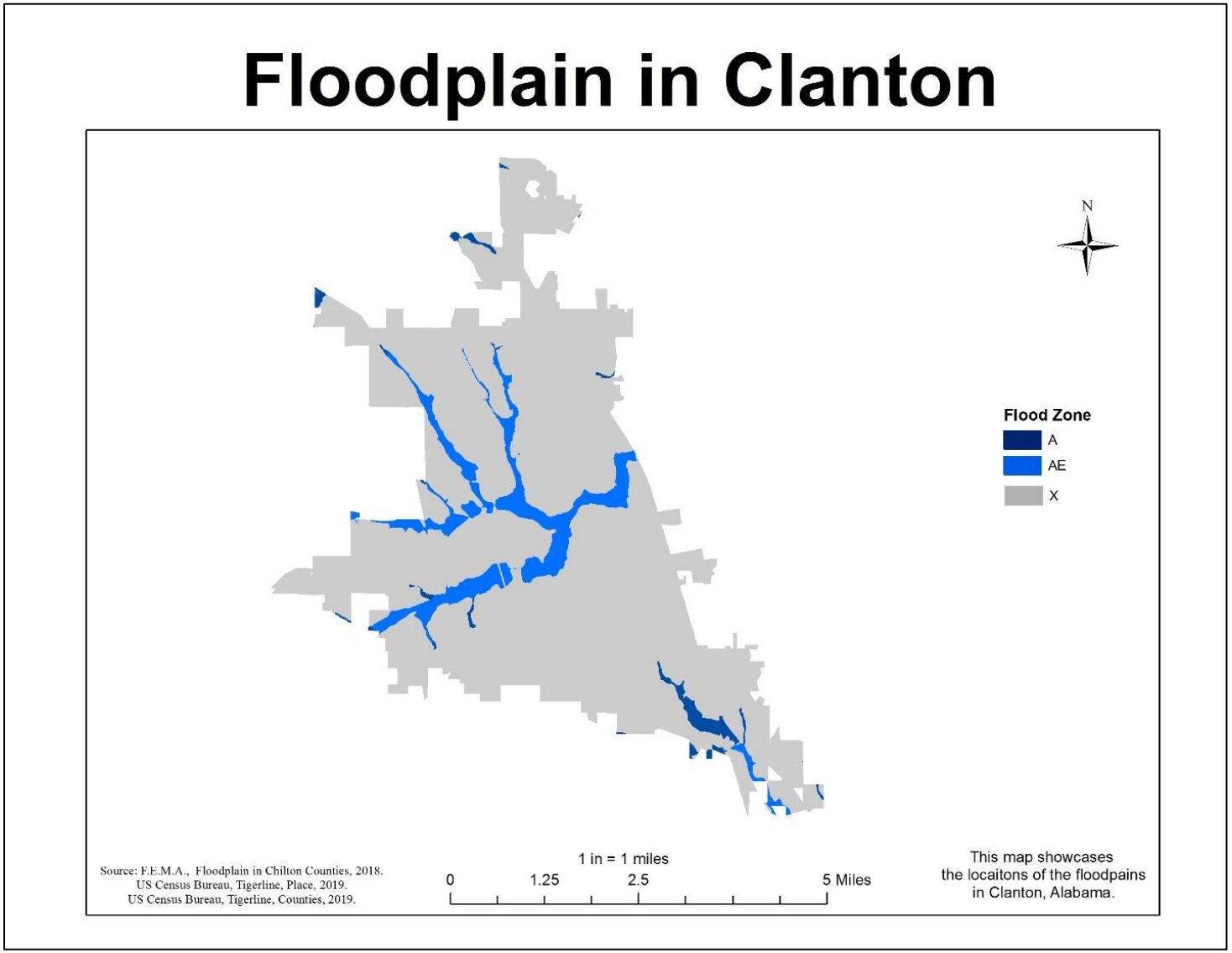


Figure 29: Floodplain of Jemison

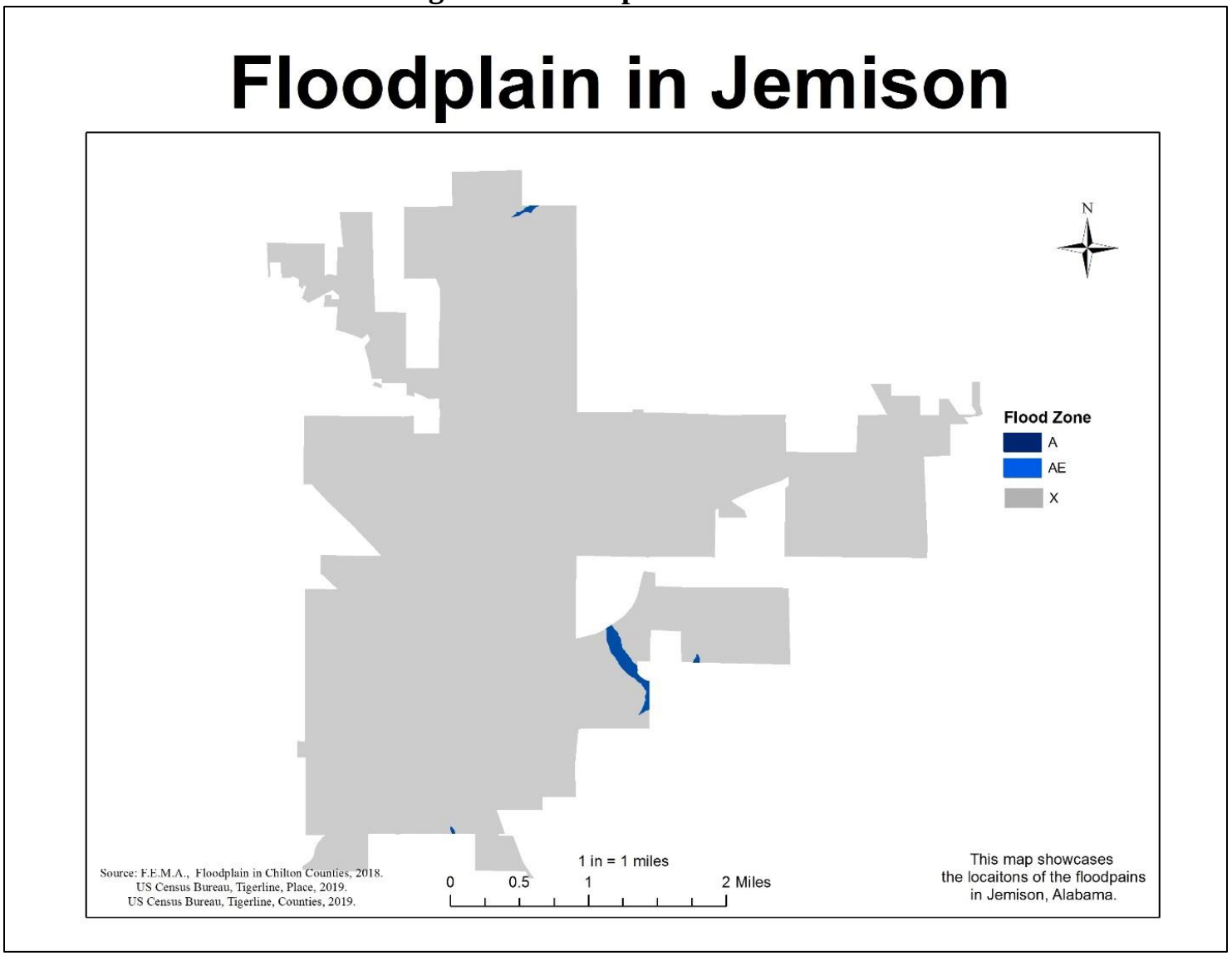


Figure 30: Floodplain of Maplesville

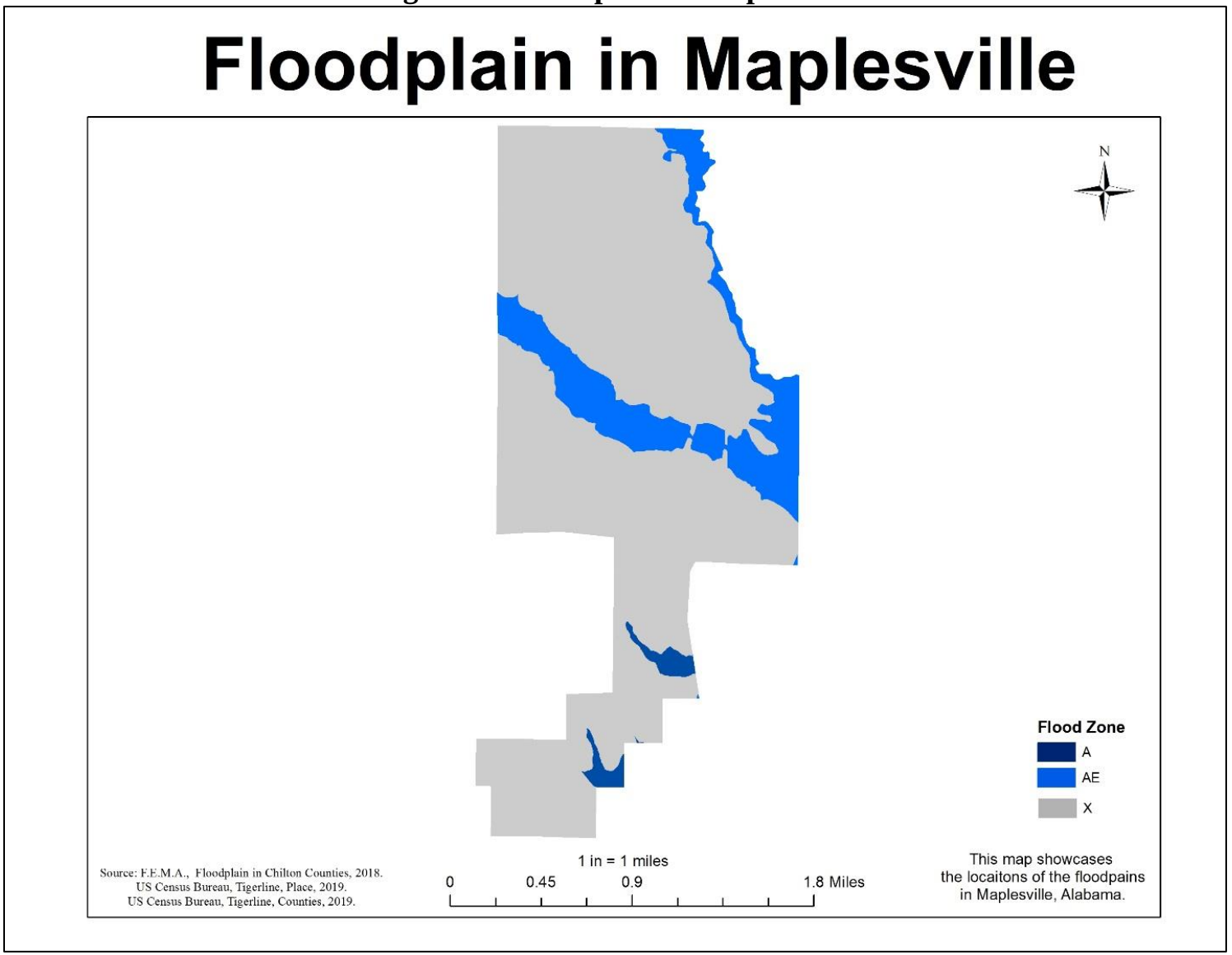


Figure 31: Floodplain of Thorsby

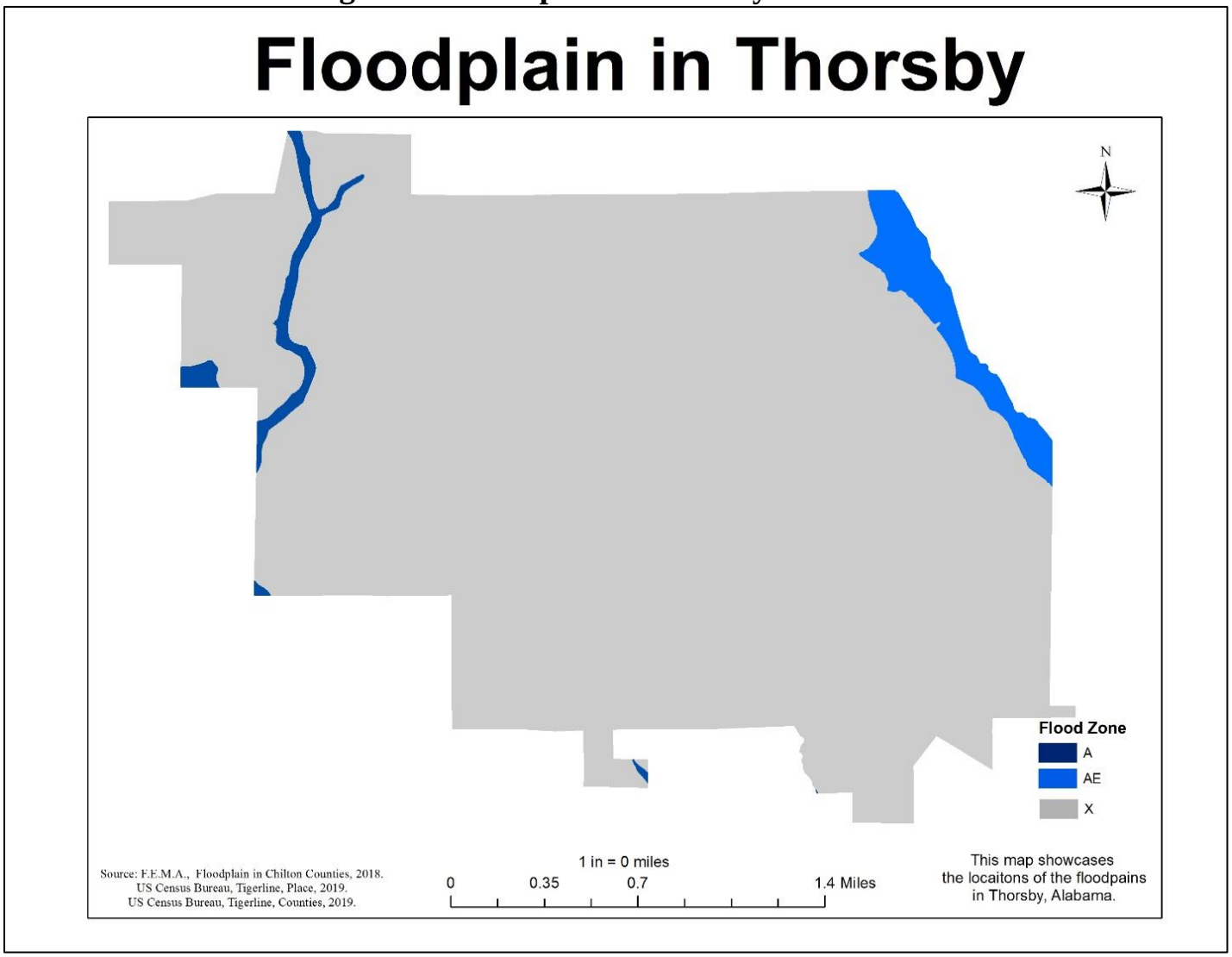


Figure 32: Floodplain of Tallapoosa County

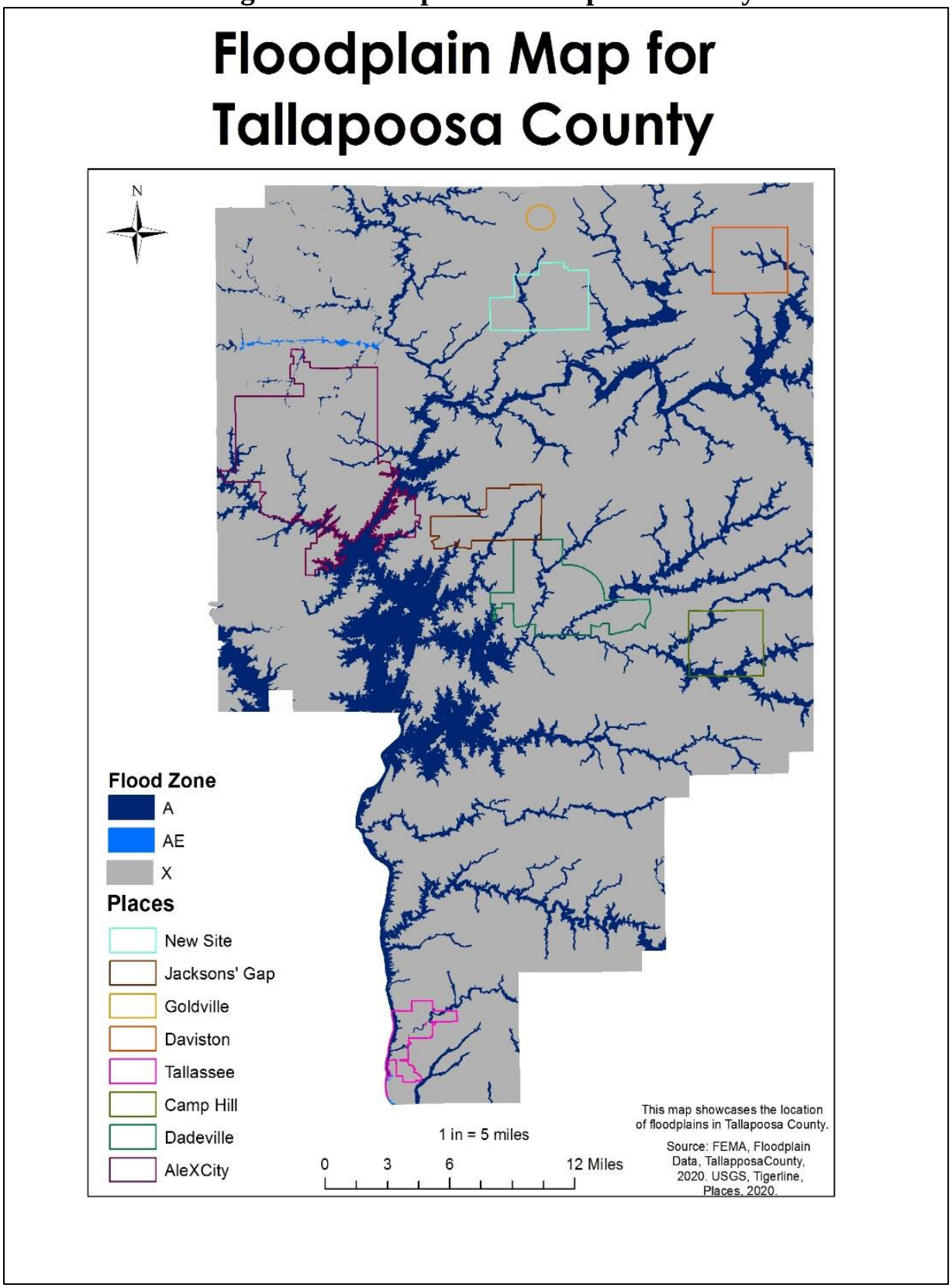


Figure 32: Floodplain of Alexander City

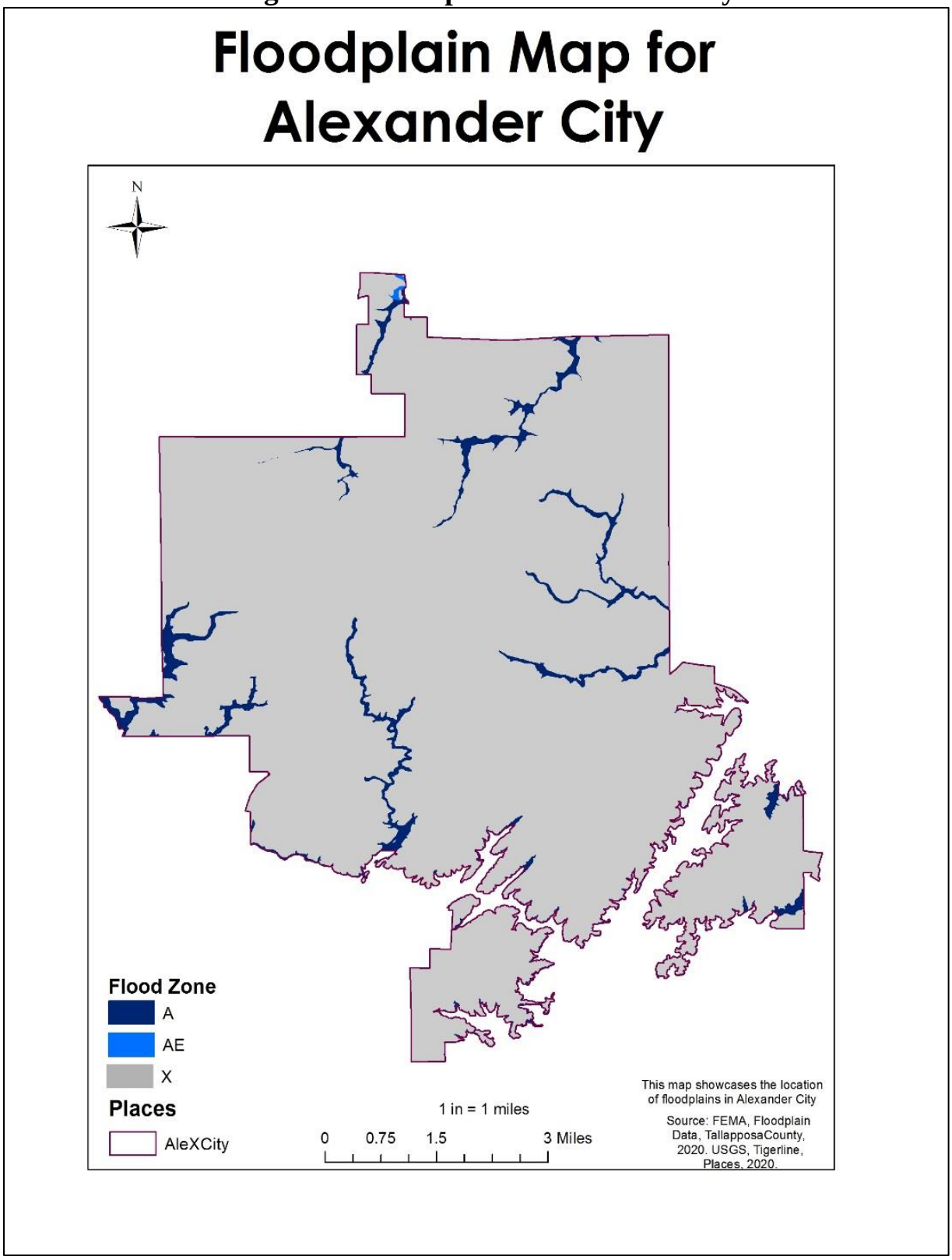


Figure 33: Floodplain of Dadeville

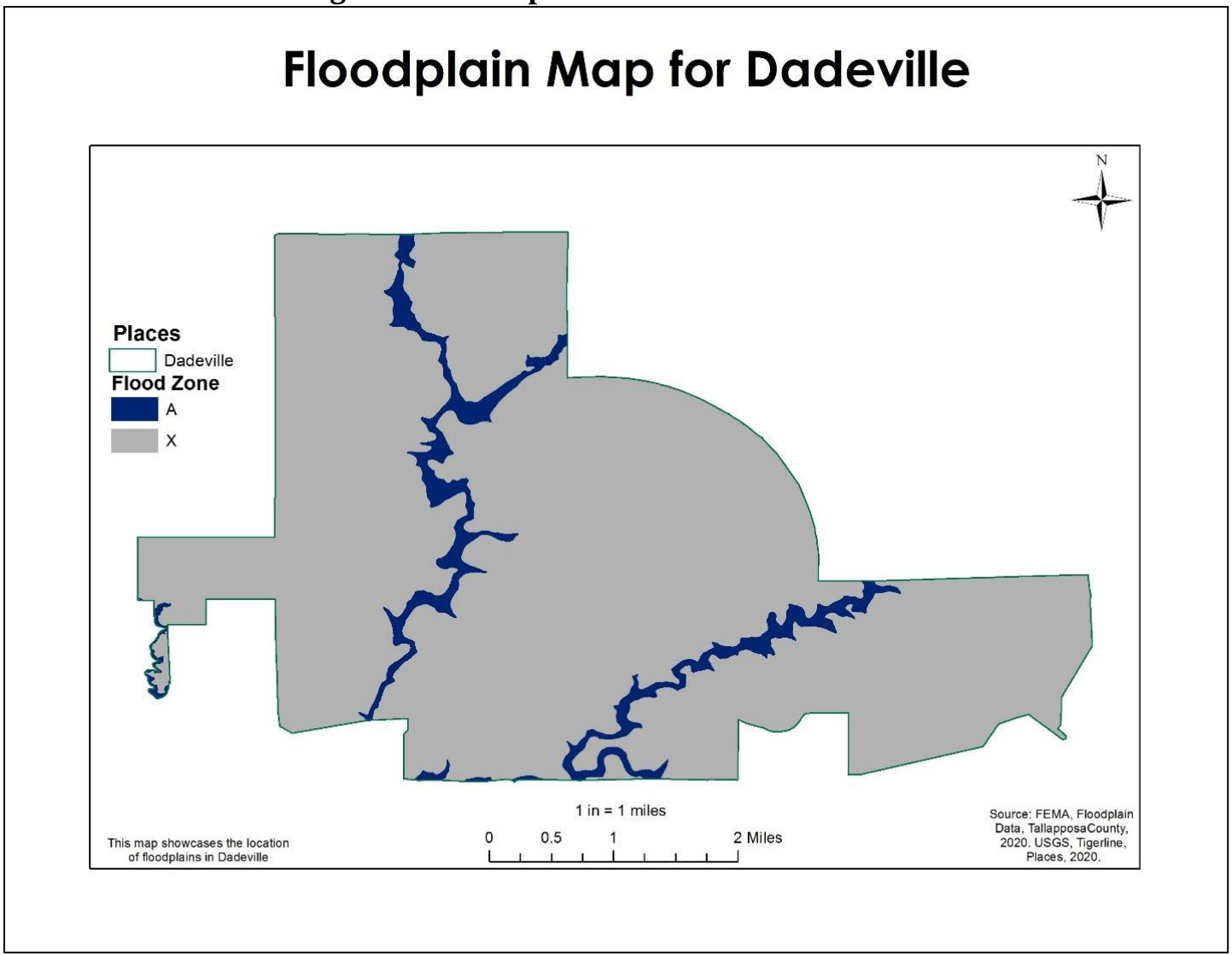


Figure 34: Floodplain of Camp Hill

Floodplain Map for the Town of Camp Hill

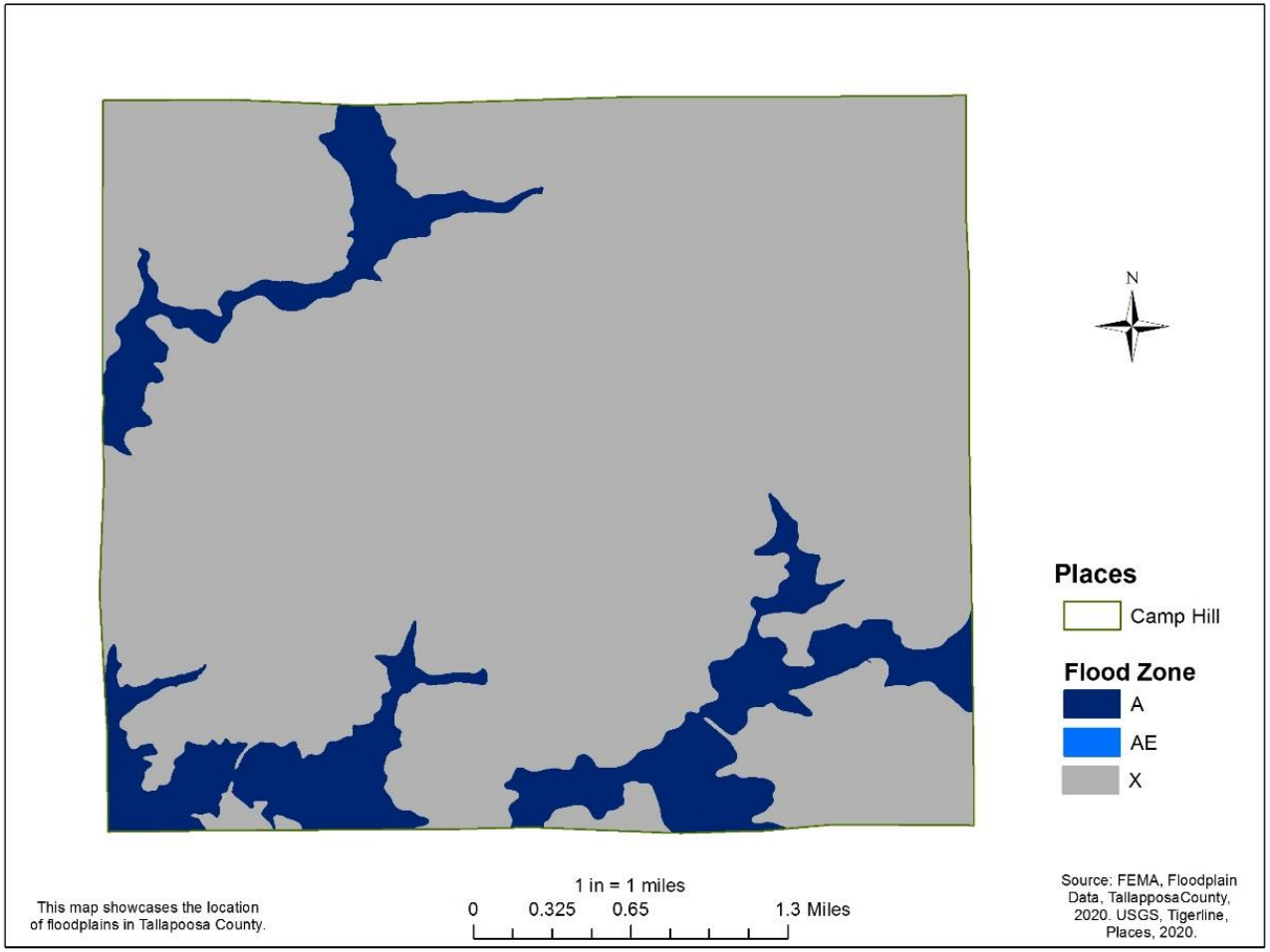


Figure 35: Floodplain of Daviston

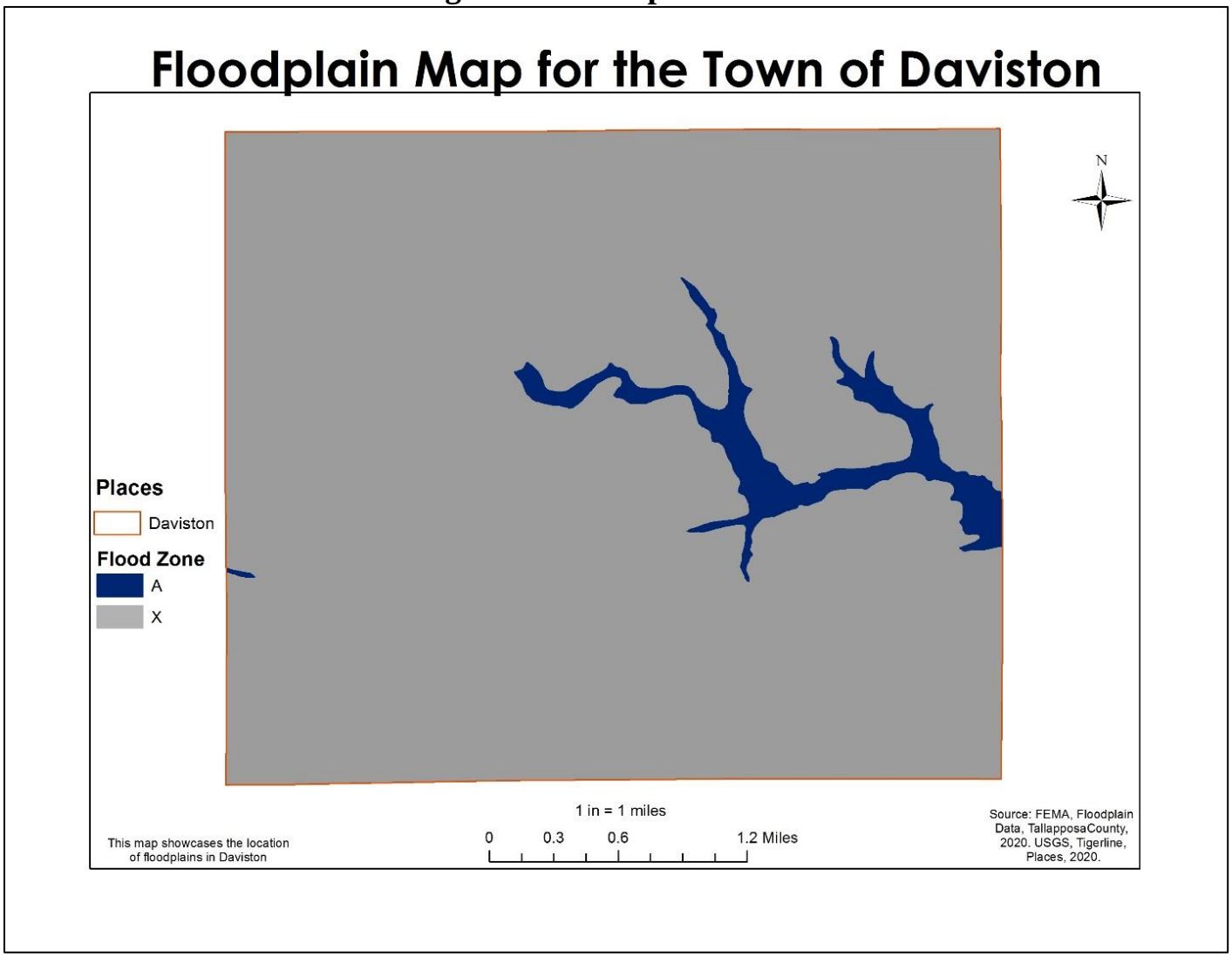


Figure 36: Floodplain of Jackson's Gap

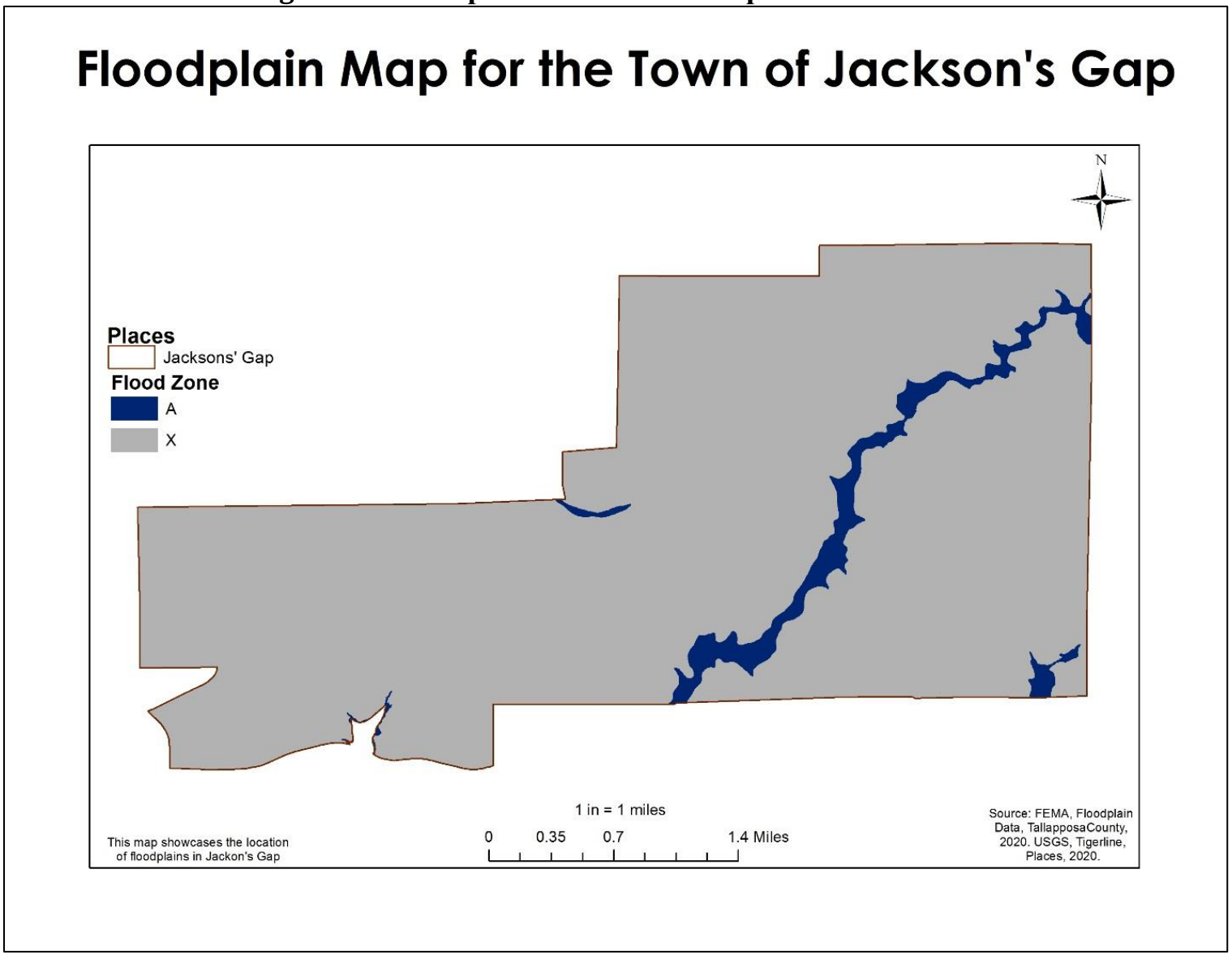
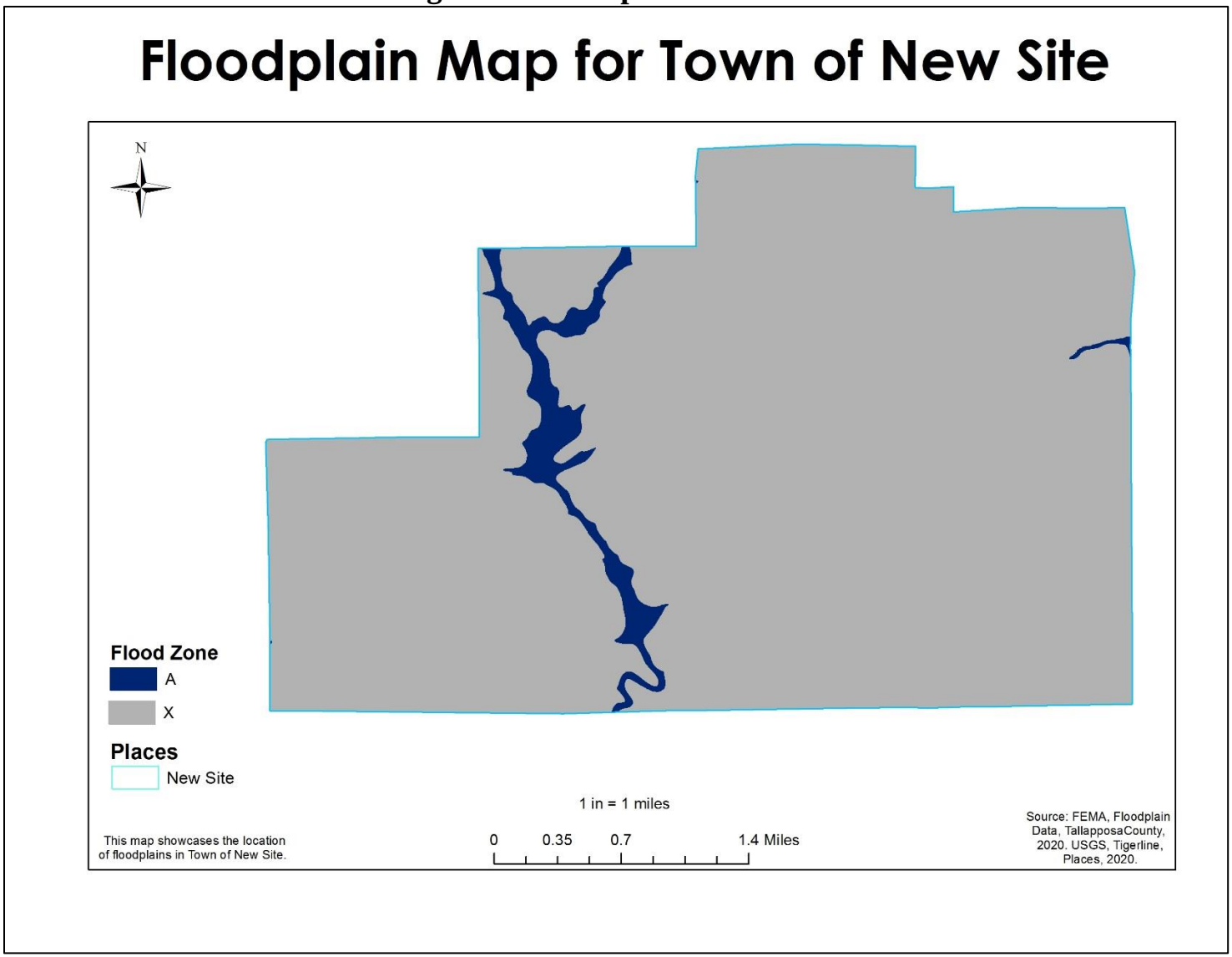


Figure 37: Floodplain of New Site



3.7.2 Extent by Jurisdiction

The severity of a riverine flood event is typically dependent on several factors, including drainage basin topography, recent precipitation and weather occurrences, and land surface. Periodic riverine flooding on adjacent lands is a natural occurrence. The most common method used to express flood frequency is a percent chance of occurrence in a giver year, or annual probability with a FEMA identified floodplain. A 100-year flood event has a one percent (1%) chance of occurring in any year within that floodplain. However, these type floods can occur multiple times during a 100-year period.

The extent of a flash flooding event varies depending on the local geography, rainfall intensity, and duration. Typically, flash flooding does not have as widespread of an impact on communities as a riverine floorings event. Due to the lack of advance warning before a flashflood event many streets and properties can become damage during these events.

Table 3.18 Flooding Extent by Jurisdiction

Jurisdiction	Flooding
Chambers (entire)	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Lafayette	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Lanett	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Valley	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Fredonia	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Cusseta	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Five Points	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Waverly	There are no flood zones in Waverly.
Chilton County (entire)	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Clanton	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Jemison	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Maplesville	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Thorsby	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Tallapoosa County (entire)	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Alexander City	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Cite of Dadeville	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
City of Tallassee	Flooding to depths from less than 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Camp Hall	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Daviston	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Jackson's Gap	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of New Site	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure

3.7.3 Previous Occurrences and Impact

The Chilton, Chambers and Tallapoosa Planning Area has experienced several major flooding events. There have been three zero disaster declarations due to extensive flooding in Chilton County while flash flooding is very common in Chambers and Tallapoosa County. Typically, the flash floods recede very quickly without significant disruption to the public but there have been instances of flash flooding that were registered with the National Climatic Data Center (at the time) and caused property and crop damage.

The Chilton County area has experienced few flooding events in recent years. Traditionally, these have been flash floods caused by heavy amounts of rainfall that recede very quickly without significant disruption to the public. Four flash floods have been recorded since 2006, causing a total of $55,000 in damages. On September 21, 2009, a warm air mass led to the development of slow-moving thunderstorms across the Central Alabama. Several roads throughout Chilton County became impassable due to flooding, and, on County Road 61 specifically, large sections of pavements were washed out. This incident caused $50,000 worth of damages. On January 24, 2010, a cold front pushed through Central Alabama, causing rain, thunderstorms, and, in some places, hail. Rainfall was record at 5.3 inches and flooded at least one house. This storm caused $5,000 worth of damages. Sub-tropical storm Alberto caused heavy rainfall throughout the Chilton County area on May 30, 2018. Though this storm flooded several parts of the county, no damages were reported. On April 19, 2020, a flash flood caused by heavy rain washed out several roads around the City of Clanton. However, no damage amounts were reported.

The following are areas in each county that experience reoccurring flooding:

1. Chilton County has suffered severe flooding over the years. The county is susceptible to flooding in the following areas:
   - : County Road 61, County Road 46; Jumbo Community.

2. Chambers County has suffered severe flooding over the years. The county is susceptible to flooding in the following areas:
   - Gilmore Avenue, Highway 29 and E 10th Street
   - Property along Tanyard Creek between N 11th Ave and N Gilmer Ave.
   - N Lanier Ave and Cherry Drive
   - N Lanier to AL state line
   - N 11th Ave between N 13th and 14th streets
   - N 12th street in the 600 block
   - Covington S/D at the lake
   - S 8th Ave at Moores Creek.
   - CR 156 Bridge
   - typical dirt road damage
   - CR 224 metal culvert damage

3. Tallapoosa County has suffered severe flooding over the years. The following areas are susceptible/prone to reoccurring flooding:

   - The south end of the county

- Areas in Alexander City, Areas in Hackneyville
- Areas in near the Goldville community
- Areas in New Site
- Hayes Mill Road Bridge suffered flooding and wash out. It was condemned and destroyed in 2015.

3.7.4 Probability of Future Occurrences

Since 2006, NOAA has recorded thirty-two flooding events in Chambers, Chilton, Tallapoosa counties. It is estimated that these flood events caused at least $185,000 in damages in the Chambers, Chilton, Tallapoosa counties, but this number could be much higher due has not report any monetary values of damages since 2011. The event frequency for flooding is 1.31 events per year, which is based on the thirty-two events that occurred in thirteen years. The annual risk of losses for floods based on the historical record was about $14,000 of damages per year. The probability of a flooding event is medium.

Table 3.19 Probability of Future Occurrences of Flooding

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flash Flood	**Chambers (entire)**	8	13	0.615
Flash Flood	City of Lafayette	1	13	0.077
Flash Flood	City of Lanett	2	13	0.154
Flash Flood	City of Valley	0	13	0.000
Flash Flood	Town of Cusseta	1	13	0.077
Flash Flood	Town of Five Points	0	13	0.000
Flash Flood	Town of Waverly	0	13	0.000
Flash Flood	Town of Fredonia	0	13	0.000
Flash Flood	Unincorporated County	4	13	0.308
Flash Flood	**Chilton County (entire)**	4	13	0.308
Flash Flood	Clanton	2	13	0.154
Flash Flood	Jemison	0	13	0.000
Flash Flood	Maplesville	1	13	0.077
Flash Flood	Thorsby	0	13	0.000
Flash Flood	Unincorporated County	2	13	0.154
Flash Flood	**Tallapoosa County (entire)**	8	13	0.615
Flash Flood	City of Alexander City	2	13	0.154
Flash Flood	Dadeville	0	13	0.000
Flash Flood	Daviston	0	13	0.000
Flash Flood	New Site	0	13	0.000
Flash Flood	Jackson’s Gap	0	13	0.000
Flash Flood	Tallassee	1	13	0.077
Flash Flood	Camp Hill	1	13	0.077
Flash Flood	Unincorporated County	2	13	0.154

Source: National Weather Service, Storm Event Database, Flooding, 2020)

3.8 Hail

3.8.1 Description

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.

Annually, hail causes over 1 billion dollars in damage to crops and property nationwide. All jurisdiction in Chambers, Chilton, and Tallapoosa counties are susceptible to the occurrence of hail and numerous instances reported according to NOAA.

3.8.2 Extent by Jurisdiction

The size of hailstones is related to the intensity of the thunderstorms that produce them, and to the temperature at the surface. The average size of hailstone that falls to earth is 6.35 mm. 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. Table 3.20 demonstrates the extent of hail damage all jurisdictions can experience.

Table 3.20: Hail Extent of All Jurisdictions

Hazard	Extent (All Jurisdictions)
Hail	Hail larger than 50-76 mm diameter resulting in property damage

Table 3.21: TORRO Hail Intensity Scale

Intensity	Typical Hail Diameter (mm)	Intensity Category	Probable Damage
H0	5	Hard Hail	No damage
H1	5-15	Potentially Damaging	Slight general damage to plants, crops
H2	10-20	Significant	Significant damage to fruit, crops, vegetation
H3	20-30	Severe	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	25-40	Severe	Widespread glass damage, vehicle bodywork damage
H5	30-50	Destructive	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	40-60	Destructive	Bodywork of grounded aircraft dented; brick walls pitted
H7	50-75	Destructive	Severe roof damage, risk of serious injuries
H8	60-90	Destructive	Severe damage to aircraft bodywork
H9	75-100	Super Hailstorms	Extensive structural damage: risk of severe or even fatal injuries to persons caught in the open
H10	Greater than 100	Super Hailstorms	Extensive structural damage: risk of severe or even fatal injuries to persons caught in the open

Source: State of Alabama HMP, 2018

The TORRO Hailstorm Intensity Scale, Table 3.21, relates the size of hailstones to the probable crop and property damage. The damage caused by hail is often compounded by the other hazards that tend to accompany hailstorms, tornadoes or thunderstorms. It is common to have large hail north of a tornado track.

3.8.3 Previous Occurrences and Impact

Hail events are very common in Chambers, Chilton, and Tallapoosa counties. Hail events are very common in Chambers, Chilton, and Tallapoosa counties. Since 2006, there have been 104 recorded instances of hailstorms.

On April 10th, 2009, a supercell thunderstorm brought large amount of severe weather to Central Alabama. During this weather event the community County and in Our Town in Tallapoosa County suffered significant damage from hail. In Our Town, NOAA reported hail with the diameter of 44.05 mm (1.75 inches), which destroyed roofs, windows in housing, and automobile damage. Also, on this day in Our Town near the Kowaliaga Bride NOAA reported hail with the diameter of 55.08mm (2.75 inches). This single event resulted in $45,000 in damages according to NOAA.

In the Falakto community in Chilton County a strong thunderstorm moved through Alabama on March 18th, 2013. These thunderstorms produced hail with the diameter 76.2 mm (3.0 inches) in the Falakto community. In the Davenport community on July 22nd, 2018 hail was reported with the diameter of 88.9 mm (3.5 inches). NOAA did not record any damages associated with the hail from these storm events, but hail of this size could damage roofs, automobiles, windows, as well as caused injury or death.

3.8.4 Probability of Future Occurrences

The probability of future hail events has been determined to be high for the planning area signifying 100% annual probability for occurrence. The probability of a hail event in Chambers, Chilton, and Tallapoosa counties was to be Minor to Limited with minimal disruption. Table 3.22 shows the future probability of future occurrences for hail event.

Table 3.22: Probability of Future Occurrences Hail

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Hail	**Chambers (entire)**	33	13	2.538462
Hail	City of Lafayette	1	13	0
Hail	City of Lanett	4	13	0
Hail	City of Valley	1	13	0
Hail	Town of Cusseta	1	13	0
Hail	Town of Five Points	0	13	0
Hail	Town of Waverly	0	13	0
Hail	Town of Fredonia	0	13	0
Hail	Unincorporated County	26	13	0
Hail	**Chilton County (entire)**	39	13	3.00
Hail	Clanton	12	13	0
Hail	Jemison	6	13	0
Hail	Maplesville	0	13	0
Hail	Thorsby	2	13	0
Hail	Unincorporated County	19	13	0
Hail	**Tallapoosa County (entire)**	33	13	2.538462
Hail	City of Alexander City	5	13	0.384615
Hail	Dadeville	3	13	0.230769
Hail	New Site	0	13	0
Hail	Jackson's Gap	1	13	0.076923
Hail	Camp Hill	1	13	0.076923
Hail	Unincorporated County	22	13	1.692308

Source: National Weather Service, Storm Event Database, Hail, 2020

3.9 High Winds & Thunderstorms

3.9.1 Description

Chambers, Chilton, and Tallapoosa counties are highly susceptible to high winds and thunderstorms. High wind events may occur any time of year, but occur more often in spring, summer, and fall seasons. Thunderstorms are weather events that form through the clash of different air masses, which may cause storms that occur singularly, in lines, or in clusters – sometime with very little warning. The effects of thunderstorms may impact a small area or multiple jurisdictions. Thunderstorm events may cause straight-line winds, hail, and lightning, and if long-lasting or severe, may cause flooding or tornadic activity. Severe thunderstorms may produce damage equivalent to tornadoes over a larger spatial area. Severe thunderstorm events may occur year-round in the region, but the peak of severe thunderstorm events is in spring with a smaller peak in fall.

The Division D Emergency Management Directors chose to address tornadoes as a separate hazard event.

3.9.2 Extent by Jurisdiction

Severe thunderstorms are defined by the National Weather Service as having wind speeds of 58 miles per hour or higher, producing hail at least ¾" in diameter, or possessing tornadic capabilities. The effects of severe thunderstorms will have varying spatial effects throughout the region area from widespread to localized impacts. Table 3.23 showcases the extent of damage that can occur from high winds/thunderstorms for all jurisdictions.

Table 3.23: High Winds and Thunderstorms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
High Winds & Thunderstorms	The National Weather Service defines high winds as "Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration." The National Weather Service defines a severe thunderstorm as "A thunderstorm that produces a tornado, winds of at least 58 mph **(**50 knots or ~93 km/h), and/or hail at least 1" in diameter**.** Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots or ~64 km/h) and/or hail of at least ½" is defined as approaching severe."

3.9.3 Previous Occurrences and Impact

Each jurisdiction in Chambers, Chilton, and Tallapoosa counties are vulnerable to the effects of high winds/thunderstorms and each county will experience multiple occurrences of this hazard every year. There have been 302 documented severe Thunderstorm/Wind events between January 1st of 2006 and March 31st, 2020. During these events, there was $1,079,000 in property damages, $0 in crop damage, 1 injury from severe Thunderstorm/Wind events in the region. Due to the isolated nature of these events, it is probable that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.

All of Chambers, Chilton, and Tallapoosa counties are uniformly susceptible to the occurrence of severe thunderstorms and high winds. High winds/severe thunderstorms can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific areas of storm effects. The average wind speeds are around 55 mph with guest up to 80 during these severe thunderstorm events. The following events are examples of impacts felt by various jurisdictions in Chambers, Chilton, and Tallapoosa counties due to high winds and thunderstorm events.

The most serve damage took place on June 28th, 2007 at 4:30 p.m.in New Site, which is in Tallapoosa County. This thunderstorm generated $315,000 in property damages. The storm produced straight line winds of 63 mph causing damage to a doors of city hall, damage to the fire department and gym buildings as well as numerous trees were blown down. In the Town of Jemison, located in Chilton County, suffered $600,000 in damages on May 3rd, 2009. The storm resulted in blown down trees and damages to buildings and automobiles.

In 2012 a one individual was injured when a supercell system produced a dangerous thunderstorm in the Town of Our Town on January 23rd, which is in Tallapoosa County. According to NOAA Event Narrative this thunderstorm "straight line wind damage 10.7 miles long began one mile southwest of U.S. Highway 63 on County Road 11, which uprooted trees. Damage continued to the northwest toward Jackson's Gap." The largest amount of damage was reported on the western side of Lake Martin due to winds of 90 mph. Zero property damages were reported, but destruction and damage to a church, homes, and RV were recorded. Zero deaths were reported from severe thunderstorm events. Due to the isolated nature of these events, it is probable that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.

3.9.5 Probability of Future Occurrences

Severe thunderstorm/high wind events that cause property damage and potential injuries/death may affect the planning area throughout the year and have averaged multiple occurrences a year in recent history. The probability of these events has been identified as High, with a 100% annual probability. The impact has been determined to be Limited.

Table 3.24 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flash Flood	**Chambers (entire)**	43	13	3.308
Flash Flood	City of Lafayette	8	13	0.615
Flash Flood	City of Lanett	2	13	0.154
Flash Flood	City of Valley	0	13	0.000
Flash Flood	Town of Cusseta	2	13	0.154
Flash Flood	Town of Five Points	1	13	0.077
Flash Flood	Town of Waverly	0	13	0.000
Flash Flood	Town of Fredonia	0	13	0.000
Flash Flood	Unincorporated County	30	13	2.308
Flash Flood	**Chilton County (entire)**	79	13	6.077
Flash Flood	Clanton	24	13	1.846
Flash Flood	Jemison	6	13	0.462
Flash Flood	Maplesville	12	13	0.923
Flash Flood	Thorsby	3	13	0.231
Flash Flood	Unincorporated County	34	13	2.615
Flash Flood	**Tallapoosa County (entire)**	103	13	7.923
Flash Flood	City of Alexander City	6	13	0.462
Flash Flood	Dadeville	16	13	1.231
Flash Flood	Daviston	6	13	0.462
Flash Flood	New Site	9	13	0.692
Flash Flood	Jackson's Gap	9	13	0.692
Flash Flood	Tallassee	5	13	0.385
Flash Flood	Camp Hill	3	13	0.231
Flash Flood	Unincorporated County	49	13	3.769

Source: National Weather Service, Storm Event Database, Thunderstorm Winds 2020

3.10 Landslides

3.10.1 Description

A landslide is a gravity-aided downward and outward movement of soil, rock, and vegetation that lies normally on a sloped surface. Landslides can occur from both natural and human-induced events. Common causes are composition changes on the surface, excessive rain, and construction practices.

Typically, areas that are prone to landslides are on or at the base of steep slopes, base of drainage channels, developed hillsides where leach field septic systems are used, and near previous landslide areas.

3.10. Extent by Jurisdiction

The Geologic Survey of Alabama has developed a map of landslide susceptibility based on state data, on Alabama rock types and USGS data on topography. Chambers, Chilton, and Tallapoosa counties generally have a Very Low to No landslide susceptibility risk, with very isolated pockets of high risk. Up to this point there have not been any landslides recorded by the EMA offices in Chambers, Chilton, and Tallapoosa.

There is not a magnitude scale for landslides. Therefore, defining the extent of landslides is subjective and difficult to predict. Due to the lack of susceptibility throughout the planning area, the extent of landslide incidents is estimated to be primarily isolated damages to structures and infrastructure.

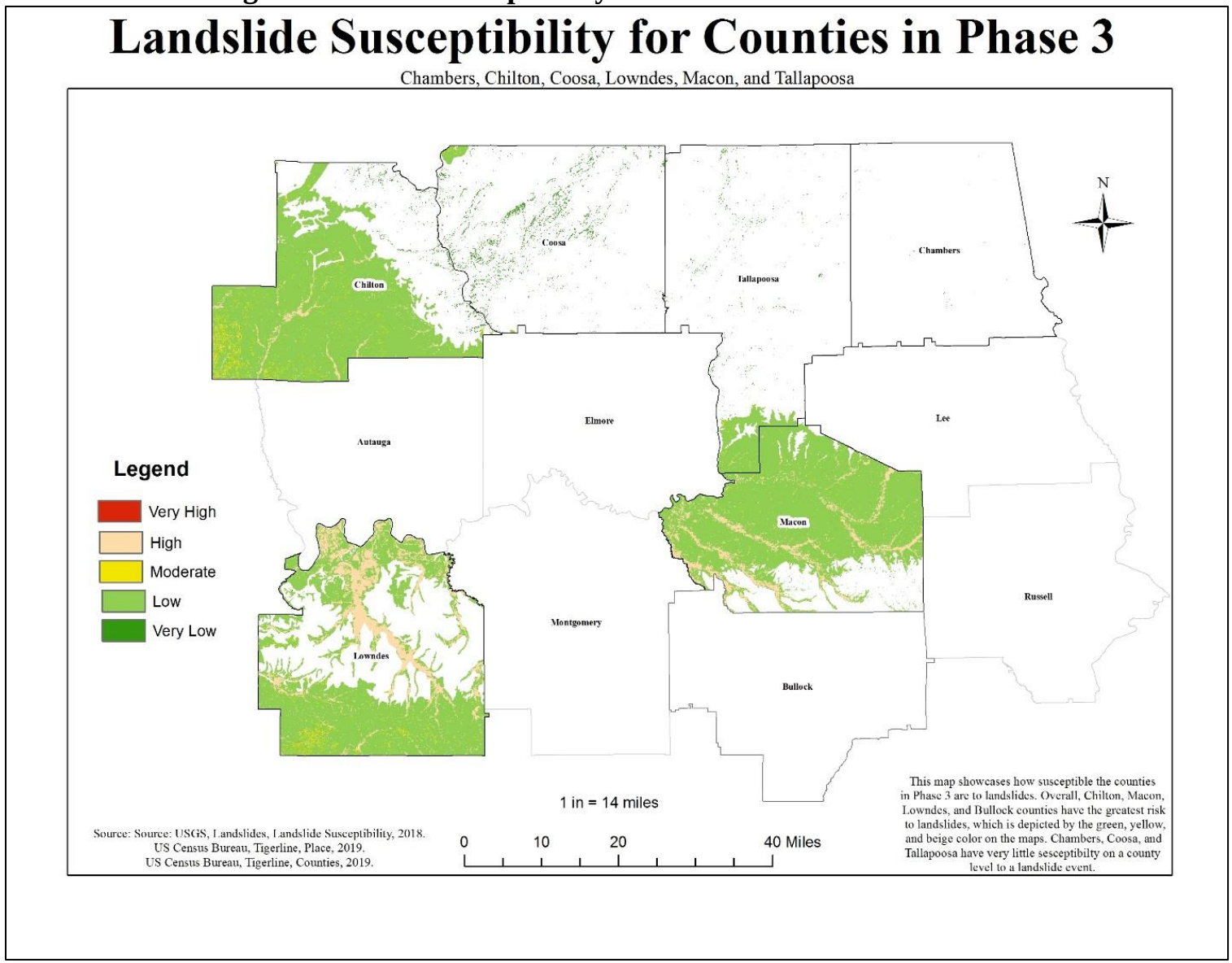
Table 3.25: Landslides Extent of All Jurisdictions

County	Extent
Chambers (entire)	This County is not susceptibility to landslides
City of Lafayette	This County is not susceptibility to landslides
City of Lanett	This County is not susceptibility to landslides
City of Valley	This County is not susceptibility to landslides
Town of Cusseta	This County is not susceptibility to landslides
Town of Five Points	This County is not susceptibility to landslides
Town of Waverly	This County is not susceptibility to landslides
Town of Fredonia	This County is not susceptibility to landslides
Unincorporated County	This County is not susceptibility to landslides
Chilton County (entire)	Movement of land beneath several acres Affecting multiple homes and businesses
Clanton	Movement of land beneath several acres Affecting multiple homes and businesses
Jemison	Movement of land beneath several acres Affecting multiple homes and businesses
Maplesville	Movement of land beneath several acres Affecting multiple homes and businesses
Thorsby	Movement of land beneath several acres Affecting multiple homes and businesses
Unincorporated County	Movement of land beneath several acres Affecting multiple homes and businesses
Tallapoosa County (entire)	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
City of Alexander City	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Dadeville	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
New Site	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Jackson's Gap	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Camp Hill	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Unincorporated County	Minimal movement of land. Potentially impacting a home, business, or agricultural lands

3.10.3 Previous Occurrences

The GSA map does not have dates listed detailing time frame, so it is from an indeterminate amount of time. There are zero landslides reported in historical record Chambers, Chilton, and Tallapoosa counties since the last update. No injuries, deaths, or damage estimates were reported. Figure 38 depicts that a majority Chambers, Chilton, and Tallapoosa counties have moderate to no susceptibility to landslides. Chambers County does not have any susceptibility to landslides.

Figure 38: Land Susceptibility



3.10.4 Probability of Future Occurrences

Based on historical information and local knowledge, the probability of landslides in Chambers, Chilton, and Tallapoosa counties was ranked as Moderate to None. The impact was ranked as minor to none, for Chambers, Chilton, and Tallapoosa counties.

3.11 Lightning

3.11.1 Description

Lightning is a discharge of electrical energy that creates a “bolt” that may stretch from clouds to the ground. An actual lightning strike only affects a small area, though many storms have thousands of lightning strikes that occur during an event. According to the National Weather Service, lightning will follow a path of least resistance, typically striking the tallest object in each area, which could include a person, a power pole, or trees. Lightning may cause building damage due to starting a fire, deaths through striking a person directly or in the immediate vicinity and may cause wildfire in some cases.

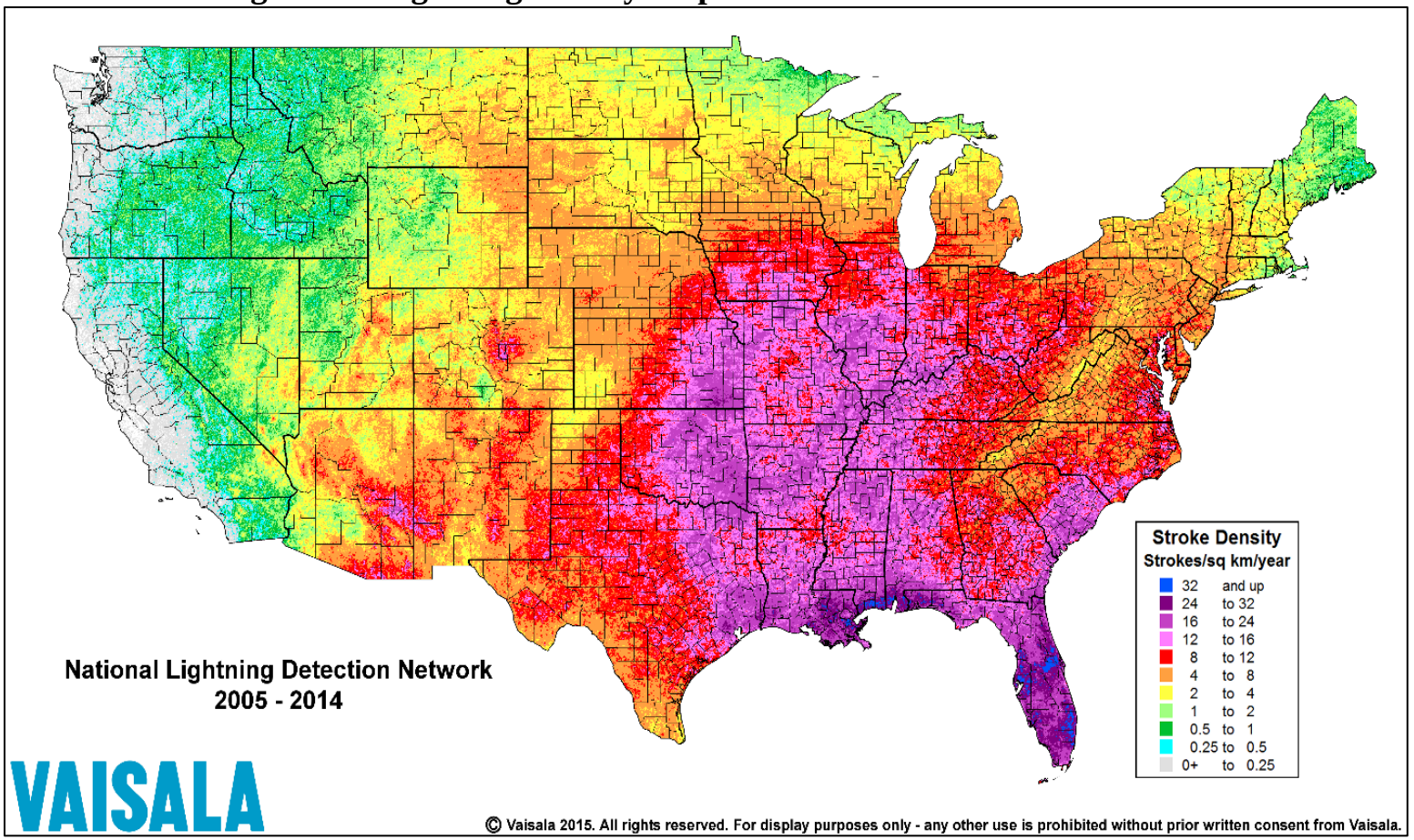
3.11.2 Extent by Jurisdiction

There are some 16 million lightning storms in the world every year. The rapid heating and cooling of air near the lightning cause thunder. Lightning is a major threat during a thunderstorm. In the atmospheric electrical discharge, a leader of a bolt of lightning can travel at speeds of 130,000 mph and can reach temperatures approaching 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. Table 3.26 shows the extent to which all jurisdictions in Chambers, Chilton, and Tallapoosa counties are susceptible to frequent lightning. Figure 39 is a lightning density map, which showcases that Chambers, Chilton, and Tallapoosa counties receive 8 to 24 strikes of lightning per km per year.

Table 3.26: Lightning Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Lightning	Lightning considered frequent when 4 to11 flashes take place per square km

Figure 39: Lightning Density Map



3.11.3 Previous Occurrences and Impact

Chambers, Chilton, and Tallapoosa have been subjected to storms and lightning strikes. Since 2006 $301,000 in property damage, three injuries in 2008, one in 2013, one in 2014, and one in 2017 were reported as a result of lightning.

All jurisdictions in Chambers, Chilton, and Tallapoosa counties are uniformly susceptible to the occurrence of lightning, which can result in injury to a person, damage or destruction to a home, damage to electronics, and start fires. The following examples show how lightning could impact each jurisdiction in Chambers, Chilton, and Tallapoosa counties.

Chambers, Chilton, and Tallapoosa counties have been subjected to lightning storms and strikes, and since 2006 there has been $301,000 in property damages. The damages reported from the communities of Tallapoosa county included house fires and boathouse fire due to lightning strikes. According to NOAA six persons has been injured by lightning strikes. Three people were injured after they were struck by two lightning strikes in Wind Creek State Park in 2008. A 24-year-old man was struck by lightning while in his front yard in 2014. There are no details on the other two individual/incidents who were struck by lightning.

3.11.4 Probability of Future Occurrences

Lightning events that have the potential to cause property damage and potential injury/casualty may affect Chambers, Chilton, Tallapoosa counties throughout the year. The probability of these events is high for all four counties, however, the impact ranges between minor and limited. Table 3.27 shows the probability of future lightning occurrences in Chambers, Chilton, Tallapoosa counties.

Table 3:27 Probability of Future Occurrences for Lightning

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Lightning	**Chambers (entire)**	0	13	0
Lightning	City of Lafayette	0	13	0
Lightning	City of Lanett	0	13	0
Lightning	City of Valley	0	13	0
Lightning	Town of Cusseta	0	13	0
Lightning	Town of Five Points	0	13	0
Lightning	Town of Waverly	0	13	0
Lightning	Town of Fredonia	0	13	0
Lightning	Unincorporated County	0	13	0
Lightning	**Chilton County (entire)**	0	13	3
Lightning	Clanton	0	13	0
Lightning	Jemison	0	13	0
Lightning	Maplesville	0	13	0
Lightning	Thorsby	0	13	0
Lightning	Unincorporated County	0	13	0
Lightning	**Tallapoosa County (entire)**	5	13	0.384615
Lightning	City of Alexander City	0	13	0
Lightning	Dadeville	0	13	0
Lightning	Daviston	1	13	0.076923
Lightning	New Site	0	13	0
Lightning	Jackson's Gap	0	13	0
Lightning	Camp Hill	0	13	0
Lightning	Unincorporated County	4	13	0.307692

Source: National Weather Service, Storm Event Database, 2020)

3.12 Sinkholes

3.12.1 Description

According to the Geological Survey of Alabama (GSA), the most common cause of land subsidence in Alabama is the development of sinkholes in areas that have underlying soluble limestone, dolomite, or salt rocks, such as karst terrain. Activities that can cause land subsidence, or sinkholes, include a change in the water table level, change in groundwater flow characteristic, and surface loading that puts pressure on the land surface, including human-induced causes.

3.12.2 Extent by Jurisdiction

The Alabama State Hazard Mitigation Plan states that the GSA considers sinkholes to be more prevalent in northern Alabama due to geology. The state plan also indicates that groundwater withdrawal is an important driver of sinkhole development in Alabama. A previous study estimated that more than 4,000 human-induced sinkholes and areas of subsidence have occurred in Alabama since 1900. Most have occurred since 1950, and most have resulted from a decline in the water table associated with groundwater withdrawals. Sinkholes related to wells tend to be located within 150 meters of the site of the withdrawal, while sinkholes related to quarry operations tend to be located within 600 meters of the site of withdrawal. According to the Alabama State Hazard Mitigation Plan, recent sinkholes associated with groundwater withdrawal have ranged from 1 to 90 meters in diameter, and from 0.3 to 30 meters in depth.

There is no magnitude scale for land subsidence or sinkholes. Therefore, defining the extent of these hazards is subjective and difficult to predict.

Table 3.28 Sinkhole Extent by Jurisdiction

Hazard	Jurisdiction	Extent
Sinkholes	**Chambers (entire)**	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	City of Lafayette	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	City of Lanett	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	City of Valley	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Cusseta	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Five Points	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Waverly	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Fredonia	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Unincorporated County	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	**Chilton County (entire)**	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Clanton	Collapse of the land resulting in cave in, structural damage to buildings or such as cracks, bulges, sags, or complete collapse
Sinkholes	Jemison	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Maplesville	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Thorsby	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Unincorporated County	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	**Tallapoosa County (entire)**	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse

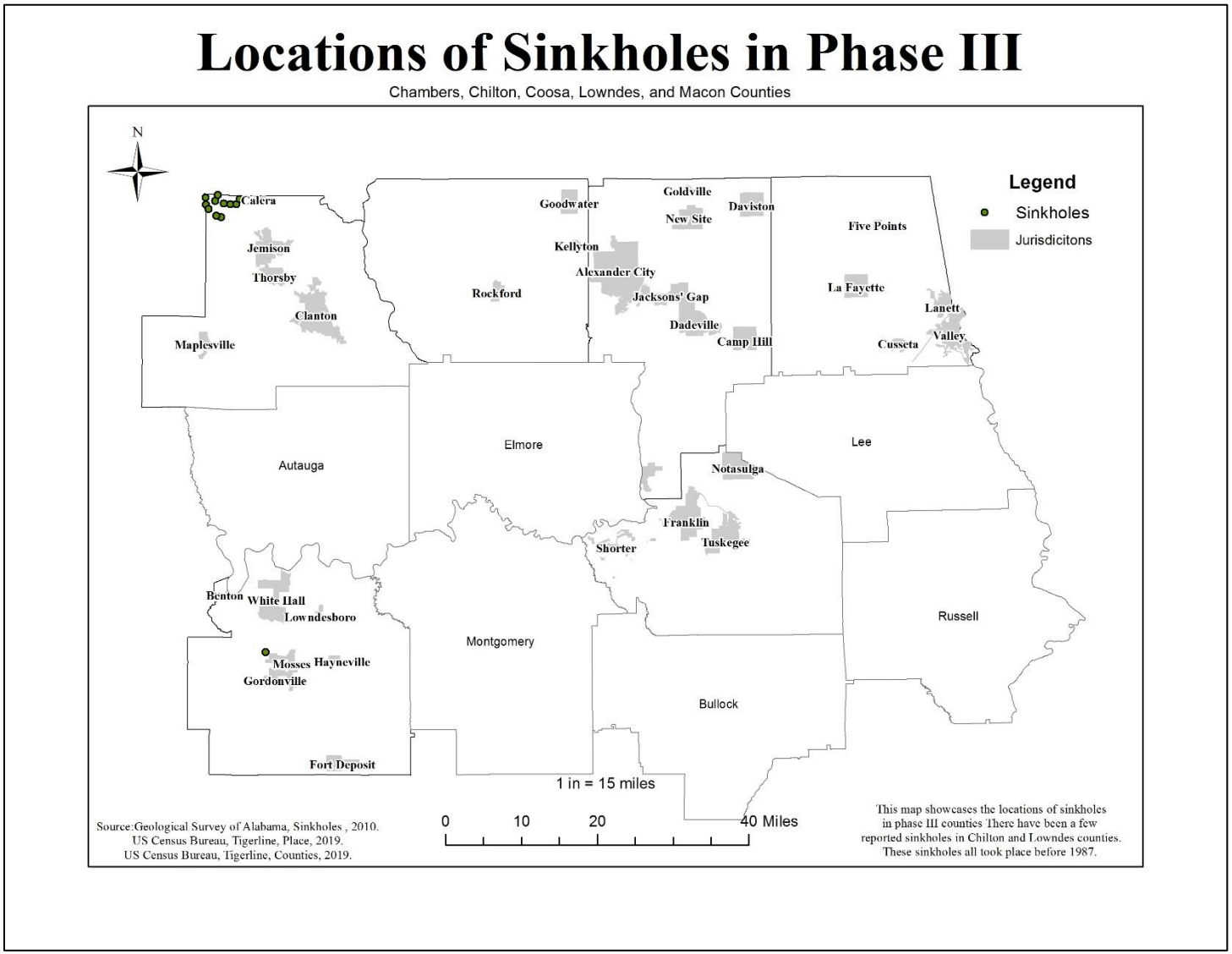
Sinkholes	City of Alexander City	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Dadeville	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Daviston	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	New Site	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Jackson's Gap	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Camp Hill	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Unincorporated County	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse

3.12.3 Previous Occurrences and Impact

Zero incidents of sinkholes were reported in the Chambers, and Tallapoosa counties, since the early 2006s. Sinkholes can occur as a result of drainage issues and past mining operations (rock quarry). Damages that can occur would be related to structural damage, septic systems, vehicles, and possibly injuries involved. According to the 2015 Hazard Mitigation Plan for Chilton County on February 18, 2011 a sinkhole occurred in North Chilton County at the residence of Glenn Greer. Another sinkhole occurred on March 18, 2013 at the residence. It is assumed these two incidences were manmade rather than naturally occurring.

Figure 40 shows the historical sinkholes that have occurred in Chambers, Chilton, and Tallapoosa counties prior to 1987. In 1980 there were nine sinkholes reported and two sinkholes in 1979 for Chilton County. These were all clustered in the northeast corner of the county. It is unclear if these sinkholes were natural or manmade due the lack of information in the historical record.

Figure 40: Historic Sinkholes Locations



3.12.4 Probability of Future Occurrences

Although sinkholes in the planning area are possible, they have been rated as a very low probability of occurrence. The impact has been determined to be minor.

Table 3.29: Probability of Future Occurrences Sinkholes

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Sinkholes	**Chambers (entire)**	0	13	0
Sinkholes	City of Lafayette	0	13	0
Sinkholes	City of Lanett	0	13	0
Sinkholes	City of Valley	0	13	0
Sinkholes	Town of Cusseta	0	13	0
Sinkholes	Town of Five Points	0	13	0
Sinkholes	Town of Waverly	0	13	0
Sinkholes	Town of Fredonia	0	13	0
Sinkholes	Unincorporated County	0	13	0
Sinkholes	**Chilton County (entire)**	2	13	0.153
Sinkholes	Clanton	0	13	0
Sinkholes	Jemison	0	13	0
Sinkholes	Maplesville	0	13	0
Sinkholes	Thorsby	0	13	0
Sinkholes	Unincorporated County	0	13	0
Sinkholes	**Tallapoosa County (entire)**	0	13	0
Sinkholes	City of Alexander City	0	13	0
Sinkholes	Dadeville	0	13	0
Sinkholes	Daviston	0	13	0
Sinkholes	New Site	0	13	0
Sinkholes	Jackson's Gap	0	13	0
Sinkholes	Camp Hill	0	13	0
Sinkholes	Unincorporated County	0	13	0

Source: Geological Survey of Alabama, Sinkhole Data, 2020.

3.13 Tornadoes

3.13.1 Description

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 the year. 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 weather event. According to NOAA, 13 minutes is the average amount of time a person must find a safe place from a tornado.

Tornadoes are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks 4th nationally for the number of killer tornadoes experienced, and 5th for the number of fatalities as a result of a tornado. The entire state and Chambers, Chilton, and Tallapoosa counties are susceptible to tornadoes. Tornadoes can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific area of tornado strikes.

3.13.2 Extent by Jurisdiction

Tornado intensity is classified using the Enhanced Fujita (EF) Scale, which is an update to the original Fujita Scale, implemented in February 2007. The EF Scale is still primarily a wind estimate indicator that is based on three-second gust derived by the levels of damage that occur during a tornado event. Table 3.31 shows the breakdown of the Enhanced Fujita Scale, and Table 3.30 shows the extent of damage all jurisdictions can receive.

Table 3.30 Tornado Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tornado	All jurisdictions can be impacted by tornadoes. Tornadoes can be as minor as EF0, which would product limited damage such as broken branches, minor roof damage, small or trees were blown down. These events can be as deadly and dangerous as an EF5, which would produce destruction of foundational homes, trees snapped/uprooted, or total destruction of vehicles.

Table 3.31: Enhanced Fujita Scale

EF/F Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	Damage Description
0	45-78	0	65-85	Light Damage: Some damage to chimneys; tree branches broken off; shallow-rooted trees pushed over; sign boards damaged.
1	79-117	1	86-110	Moderate Damage: The lower limit is the beginning of hurricane wind speed. Roof surfaces peeled off; mobile homes pushed off foundations or overturned; moving autos pushed off roads.
2	118-161	2	111-135	Considerable Damage: Roofs torn off from houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
3	162-209	3	136-165	Severe Damage: Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown; large missiles generated.
4	210-261	4	166-200	Devastating Damage: Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown; large missiles generated.
5	262-317	5	Over 200	Incredible Damage: Strong framed houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through air in excess of 100 yards; trees debarked.

Source: NOAA, NWS, Weather Forecast Office Norman, Oklahoma, Enhanced Fujita Scale

3.13.3 Previous Occurrences and Impact

According to the National Centers for Environmental Information, Storm Events Database, since 2006 there have been fifty-five documented tornado events in the Chilton, Chambers, and Tallapoosa, resulting in 2 fatalities and 16 injuries. Over $119,000,000 was reported in estimated property damage.

According to the historical record the most costly and deadly tornadoes struck Tallapoosa County on April 27th, 2007. This tornado was a part of a powerful storm system that would bring a deadly trail of destruction to the entire Southeast and would ultimately break the record for number of tornadoes in Alabama in a single day. An EF4 tornado touched down in central Elmore County at 19:36 (7:36pm) moved towards Lafayette, Alabama, and caused a 19.03 mile long and 880 yards wide path of destruction according to NOAA. Major destruction (complete destruction and damage) of multi-story homes, businesses, and automobiles) was found along the storm's trail. By the end at 20:01 (8:01pm) this tornado would take the life of 70-year-old women after her home was completely wiped off its slab. Ten persons were injured, and there was at least $115,000,000 in property damages.

Between Chambers, Chilton, and Tallapoosa counties saw 55 tornadoes since 1996. 1996, 2005, 2008, and 2011 were the deadliest and most costly year in twenty-three years. In 1996, there was

a total of five tornadoes reported in these counties with 2 EF0, 2 EF1, and 1 EF3. Of those five tornadoes, over $43,000 in property damages, and $47,000 in crop damages.

During 2011 a total of nine tornadoes were reported in the between Chambers, Chilton, and Tallapoosa counties with 3 EF0, 4 EF1, 0 EF2, 1 EF3, and 1 EF4 tornadoes. Out of those nine tornadoes, one death, 13 injuries, and over $117,882,090 in property damages were recorded. 1997, 2001, 2002, 2003, and 2015 were the only years with zero tornadoes reported in the region. Since 2011 there have been thirty-one tornadoes reported in the region, which resulted in one death and five injures reported. Since 1996 most tornadoes occurred during the hours of 11 to14 (11am to 2pm) and 17 to 22 (5pm to 10pm). Please refer to Figure 31 for more details about what hour of the day's tornadoes tend to occur.

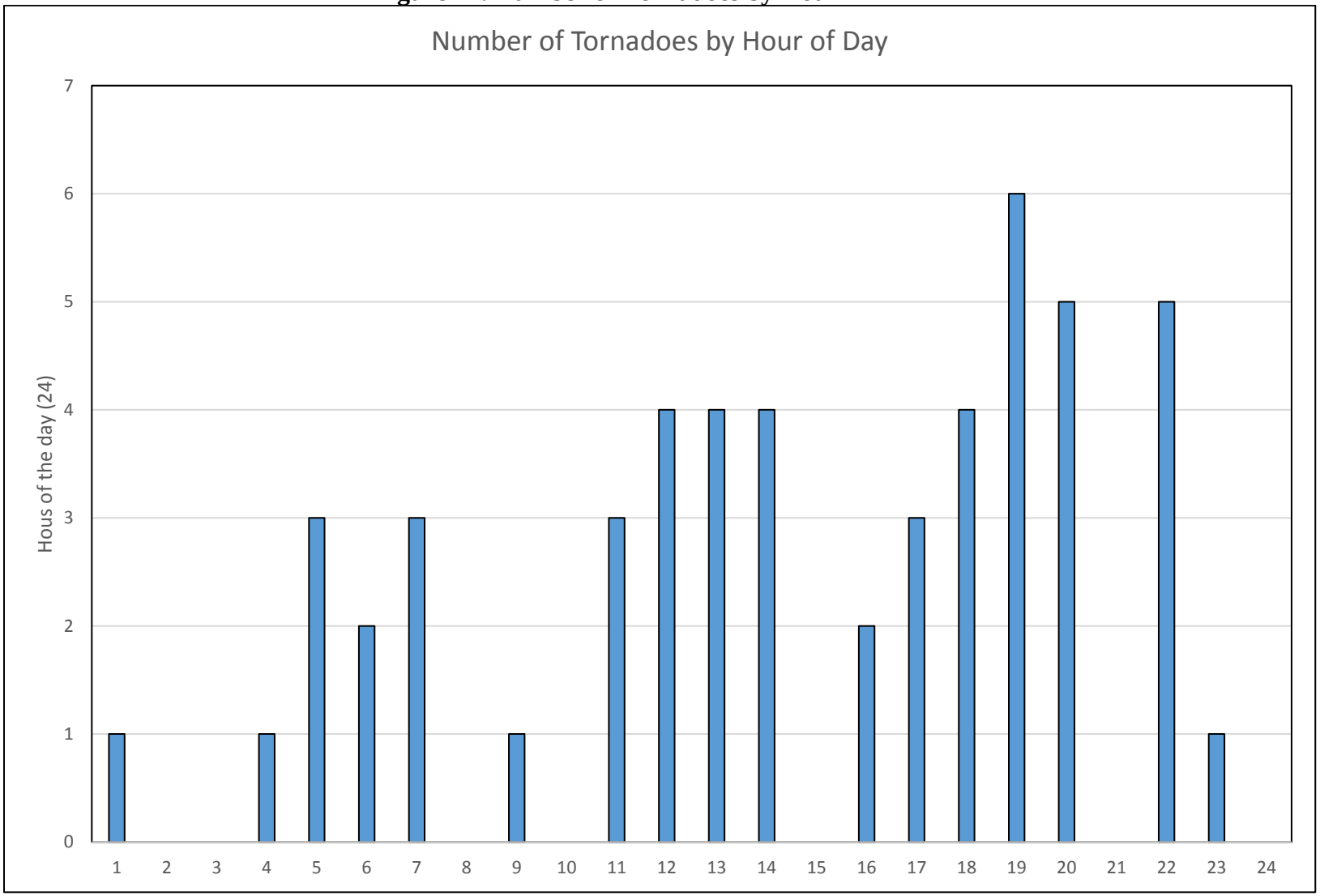
Table 3.32: Annual Tornado Summary: Chambers, Chilton, and Tallapoosa

Year	Number	Fatalities	Injuries	Property Damage	Crop Damage	F0/EF0	F1/EF1	F2/EF2	F3/EF3	F4/EF4	F5/EF5
1996	5	0	0	$430,000.00	$47,000.00	2	2	0	1	0	0
1997	0	0	0	$ -	$ -	0	0	0	0	0	0
1998	1	0	0	*	*	1	0	0	0	0	0
1999	0	0	0	$ -	$ -	0	0	0	0	0	0
2000	1	0	0	$50,000.00	$ -	1	0	0	0	0	0
2001	0	0	0	$ -	$ -	0	0	0	0	0	0
2002	0	0	0	$ -	$ -	0	0	0	0	0	0
2003	0	0	0	$ -	$ -	0	0	0	0	0	0
2004	3	0	0	$510,000.00	$	1	1	1	0	0	0
2005	5	0	0	$930,000.00	$	3	2	0	0	0	0
2006	2	0	0	$65,000.00	$	2	0	0	0	0	0
2007	3	0	0	$121,000.00	$	1	2	0	0	0	0
2008	6	0	0	$380,000.00	$ -	3	2	1	0	0	0
2009	4	0	0	$75,000.00	$ -	3	1	0	0	0	0
2010	1	0	0	$35,000.00	$ -	0	1	0	0	0	0
2011	9	1	13	$117,222,800.00	$ -	3	4	0	1	1	0
2012	5	1	3	$ -	$ -	0	1	4	0	0	0
2013	0	0	0	$ -	$ -	0	0	0	0	0	0
2014	1	0	0	$ -	$ -	1	0	0	0	0	0
2015	0	0	0	$ -	$ -	0	0	0	0	0	0

2016	1	0	0	$ -	$ -	0	1	0	0	0	0
2017	3	0	0	$ -	$ -	2	1	0	0	0	0
2018	3	0	0	$ -	$ -	3	0	0	0	0	0
2019	2	0	0	$ -	$ -	2	0	0	0	0	0
Total	**55**	**2**	**16**	**$ 119,818,800.00**	**$ 47,000.00**	**28**	**18**	**6**	**2**	**1**	**0**

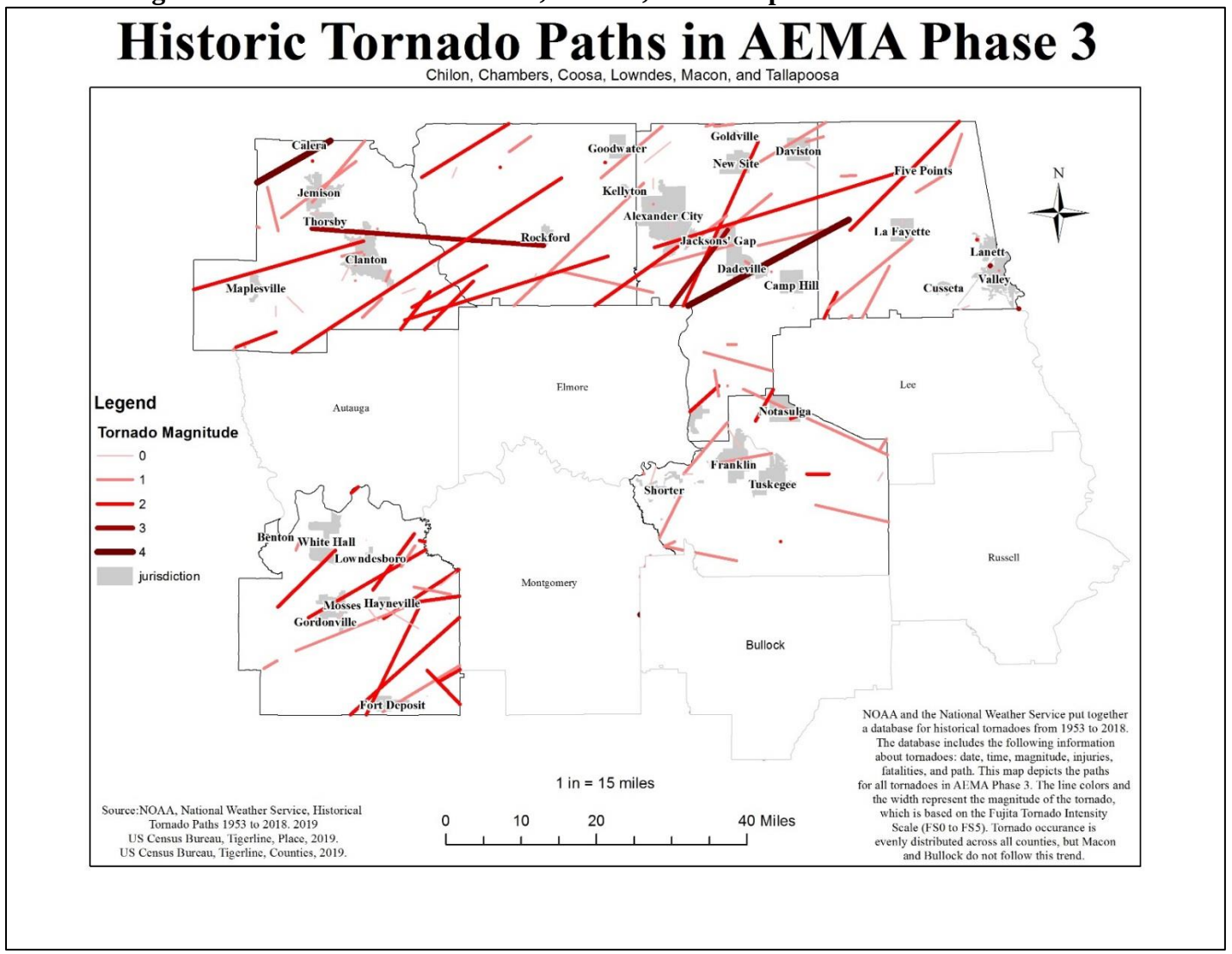
Source: NOAA, National Centers for Environmental Information, Storm Events Database, Chambers, Chilton and Tallapoosa Counties, 1996-2019. **Some data was not reported to NOAA, but this does not mean there was an absence of damage. **

Figure 41: Number of Tornadoes by Hour



Source: *NOAA, National Centers for Environmental Information, Storm Events Database, Chambers, Chilton, and Tallapoosa County, 1996-2019.*

Figure 42: Tornadoes in Chambers, Chilton, and Tallapoosa counties



Source: NOAA, National Centers for Environmental Information, Storm Events Database, Chilton, Chambers, Lowndes, Macon, and Tallapoosa counties 1996-2019.

3.13.4 Probability of Future Occurrences

All jurisdictions in the Chambers, Chilton, and Tallapoosa counties are vulnerable to tornadoes. Based on historical data, the annual probability of a tornado event has been deemed high. The impact of tornadoes in this region is identified as Catastrophic. Table 3.33 shows the future probability that a tornado will occurrence in each jurisdiction.

Table 3.33 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Tornado	**Chambers (entire)**	10	13	0.77
Tornado	City of Lafayette	1	13	0.08
Tornado	City of Lanett	0	13	0.00
Tornado	City of Valley	0	13	0.00
Tornado	Town of Cusseta	2	13	0.15
Tornado	Town of Five Points	1	13	0.08
Tornado	Town of Waverly	1	13	0.08
Tornado	Town of Fredonia	0	13	0.00
Tornado	Unincorporated County	5	13	0.38
Tornado	**Chilton County (entire)**	13	13	1.00
Tornado	Clanton	1	13	0.08
Tornado	Jemison	1	13	0.08
Tornado	Maplesville	1	13	0.08
Tornado	Thorsby	0	13	0.00
Tornado	Unincorporated County	11	13	0.85
Tornado	**Tallapoosa County (entire)**	15	13	1.15
Tornado	City of Alexander City	1	13	0.08
Tornado	Dadeville	1	13	0.08
Tornado	Daviston	0	13	0.00
Tornado	New Site	0	13	0.00
Tornado	Tallassee	0	13	0.00
Tornado	Jackson’s Gap	0	13	0.00
Tornado	Camp Hill	0	13	0.00
Tornado	Unincorporated County	13	13	1.00

Source: National Weather Service, Storm Event Database, Tornado, 2020)

3.14 Tropical Depression/ Tropical Storm / Hurricane

3.14.1 Description

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 Strom:** A tropical cyclone with maximum sustained winds of 39-73 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 are 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 rotating low-pressure weather system that has organized thunderstorms with constant wind speeds of 74 mph. At the center of a hurricane is an eye, which is a peaceful break from the storm. As a hurricane approaches shores, the sky will darken, winds will pick up, and the water will be pushed inland. Once a hurricane moves onto land it will quickly weaken due to the lack of access to warm water, which is the energy source of the storm. Since Chambers, Chilton, and Tallapoosa counties are hundreds of miles from the Atlantic Ocean or the Gulf of Mexico, these jurisdictions are not at have only expired tropical storms or tropical depressions because hurricanes cannot maintain their strength this far inland.

Historically Chambers, Chilton, and Tallapoosa counties have never been hit by a hurricane, only the degraded remnants of a hurricane, tropical storm, or tropical depression, but Chambers, Chilton, and Tallapoosa counties have been impacted. All jurisdictions in Chambers, Chilton, and Tallapoosa counties are susceptible to the occurrence of sustained high heavy rainfall, and tornadoes that are associated with a tropical storm, or tropical depression.

3.14.2 Extent by Jurisdiction

Hurricane Intensity is classified using the Saffir-Simpson Hurricane Wind Scale, which categorizes hurricane events primarily using maximum sustained winds, but also examining barometric pressure readings and potential storm surge. This gives an estimate of the potential damage that will occur from a hurricane. The Saffir-Simpson Scale is shown in Table 3.34.

Table 3.34: Saffir-Simpson Hurricane Wind Scale

Category	Sustained Wind Speed	Type of Damage Due to Hurricane Winds
1	74-95	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, and 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	Extremely dangerous winds will cause extensive damage: 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	Devastating damage will occur: Well-build framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156	Catastrophic damage will occur: 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.
5	157 or higher	Catastrophic damage will occur: 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.

Source: National Weather Service National Hurricane Center (2014)

Table 3.35 demonstrates the extent of damage all jurisdictions in Chambers, Chilton, and Tallapoosa counties could expect if a tropical event like a tropical storm or tropical depression occurs.

Table 3.35: Tropical Depression and Tropical Storm Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tropical Depressions/ Tropical Storms/ Hurricanes	A tropical storm with the maximum sustained surface winds ranging from 39-73 mph or a Category 1 (or higher) hurricane with maximum sustained winds 74 mph (up to +157 mph) will produce damage to homes, persons, utilities, close roads/bridges, structures, crops, and timber. These events can also bring localized flooding.

3.14.3 Previous Occurrences and Impact

According to NCDC/NOAA historical records, there have been six documented tropical depressions/tropical storms that have impacted these counties, not including Hurricane Opal which

resulted in the State of Alabama being a presidential disaster declaration. This declaration included Chambers, Chilton, and Tallapoosa counties.

The tropical depressions/Storms that have impacted the area resulted in property damage of $27,000 as of the 2006 reporting. The property damage has not been listed for the 2017 Tropical Storms that affected the area.

Tropical Depression Fay arrived in Chambers, Chilton, and Tallapoosa counties on August 25th, 2008 bringing heavy rains, sustained winds of 35mph, and wind gust up to 49 mph. It is estimated 800,000 customers lost power according to NOAA. Dozens of trees were downed trees resulting in $125,000 in property damage. Hurricane Fay produced tornadoes throughout Alabama, but this was addressed in section 3.13.

Tropical Depression Ida arrived in Chambers, Chilton, and Tallapoosa counties on September 11th, 2009, resulting in $2,000 worth of damages in each county. Winds up to 40 mph, heavy rains, and uprooted trees were reported. No deaths or injuries were reported in these counties as a result of this storm.

Hurricane Irma brought sustained winds of 30 to 45mph with strong wind gust and heavy rain on September 10th, 2017. While Chambers, Chilton, and Tallapoosa counties report $0 in damages there were reports of downed trees, loss of power, downed power line, and roads blocked. This storm still brought heavy rains and winds up to 45mph. Zero monetary or structural damages were reported, but many downed trees and power lines were reported.

3.14.4 Probability of Future Occurrences

Chambers, Chilton, and Tallapoosa counties are vulnerable to the effects of any tropical events as the storm moves inland. Typically, tropical events will be downgraded to tropical storms and tropical depressions by the time the storm arrives in the region. Tropical depressions and tropical storms have a low to medium probability of occurring, however, the impact in the region has been deemed to be Critical. Table 3.36 shows the probability of future occurrences in of a tropical depression, tropical storm and hurricane in Chambers, Chilton, and Tallapoosa counties.

Table 3.36: Probability of Future Occurrences Hurricanes

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Hurricane/ Tropical Storm/ Topical Depression	**Chambers (entire)**	3	13	0.230769
Hurricane/ Tropical Storm/ Topical Depression	City of Lafayette	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	City of Lanett	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	City of Valley	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Town of Cusseta	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Town of Five Points	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Town of Waverly	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Town of Fredonia	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Unincorporated County	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	**Chilton County (entire)**	3	13	0.230769
Hurricane/ Tropical Storm/ Topical Depression	Clanton	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Jemison	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Maplesville	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Thorsby	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Unincorporated County	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	**Tallapoosa County (entire)**	5	3	0.23
Hurricane/ Tropical Storm/ Topical Depression	City of Alexander City	NA*	13	0

Hurricane/ Tropical Storm/ Topical Depression	Dadeville	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Daviston	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	New Site	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Jackson's Gap	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Camp Hill	NA*	13	0
Hurricane/ Tropical Storm/ Topical Depression	Unincorporated County	NA*	13	0

*Source: National Weather Service, Storm Event Database, 2020) ** (Tropical Storms/ Tropical Depressions are only recorded at the county level)*

3.15 Wildfires

3.15.1 Description

According to the Alabama State Hazard Mitigation Plan, 2018, a wildfire can be defined as any non-structural fire that occurs in the wild. Wildfires are uncontrolled blazes fueled by weather, wind, and dry underbrush that can burn a significant amount of land in a very short period of time. Three conditions need to be present for a wildfire to burn: fuel, oxygen, and a heat source.

A Wildland-Urban Interface Fire is a fire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

Wildfires have a significant impact on the United States. Over 100,000 wildfires clear up to 5 million acres of US land every year. Wildfires can destroy everything in their path. Three distinct types of wildland fires have been defined and include: naturally occurring wildfire, human-caused wildfire, and prescribed fire. Wildfires are typically human caused, which distinguishes them from other natural disasters.

Based on an analysis by the Alabama Forestry Commission, there are 1,350 potential wildland-urban interface communities at risk of wildfire damage in Alabama, and the number of these communities is projected to increase with time, according to the Alabama HMP.

3.15.2 Extent by Jurisdiction

The magnitude of wildfire events is often classified as total number of acres burned and destructive impacts to people and property, including house fires and casualties. These elements are greatly dependent on other factors, such as weather conditions, available fuel, topography, and existing wildfire mitigation capabilities. Table 3.37 shows the extent or damage a wildfire could have on each jurisdiction.

Table 3.37: Wildfire Extent by Jurisdiction

Jurisdiction	Extent
Chambers (entire)	Property and timber damage over large acreage (100+)
City of Lafayette	Property and timber damage over very small acreage (5+)
City of Lanett	Property and timber damage over very small acreage (5+)
City of Valley	Property and timber damage over very small acreage (5+)
Town of Cusseta	Property and timber damage over very small acreage (5+)
Town of Five Points	Property and timber damage over very small acreage (5+)
Town of Waverly	Property and timber damage over very small acreage (5+)
Town of Fredonia	Property and timber damage over very small acreage (5+)
Chilton County (entire)	Property and timber damage over large acreage (100+)
Clanton	Property and timber damage over very small acreage (5+)
Jemison	Property and timber damage over very small acreage (5+)
Maplesville	Property and timber damage over very small acreage (5+)
Thorsby	Property and timber damage over very small acreage (5+)
Tallapoosa County (entire)	Property and timber damage over large acreage (100+)
City of Alexander City	Property and timber damage over very small acreage (5+)
Dadeville	Property and timber damage over very small acreage (5+)
Daviston	Property and timber damage over very small acreage (5+)
New Site	Property and timber damage over very small acreage (5+)
Tallassee	Property and timber damage over very small acreage (5+)
Jackson's Gap	Property and timber damage over very small acreage (5+)
Camp Hill	Property and timber damage over very small acreage (5+)

3.15.3 Previous Occurrences and Impact

Over the last 13 years, there have been 982 fires, affecting 15,956 acres in these three counties. Since 2009 there were 278 fire and 2,368 acres burned in Chambers County, 501 fire and 3,545 acres burned in Chilton County, and 463 fires and 4,738 acres burned in Tallapoosa. The most common cause of wildfires in this region is debris burning by residents.

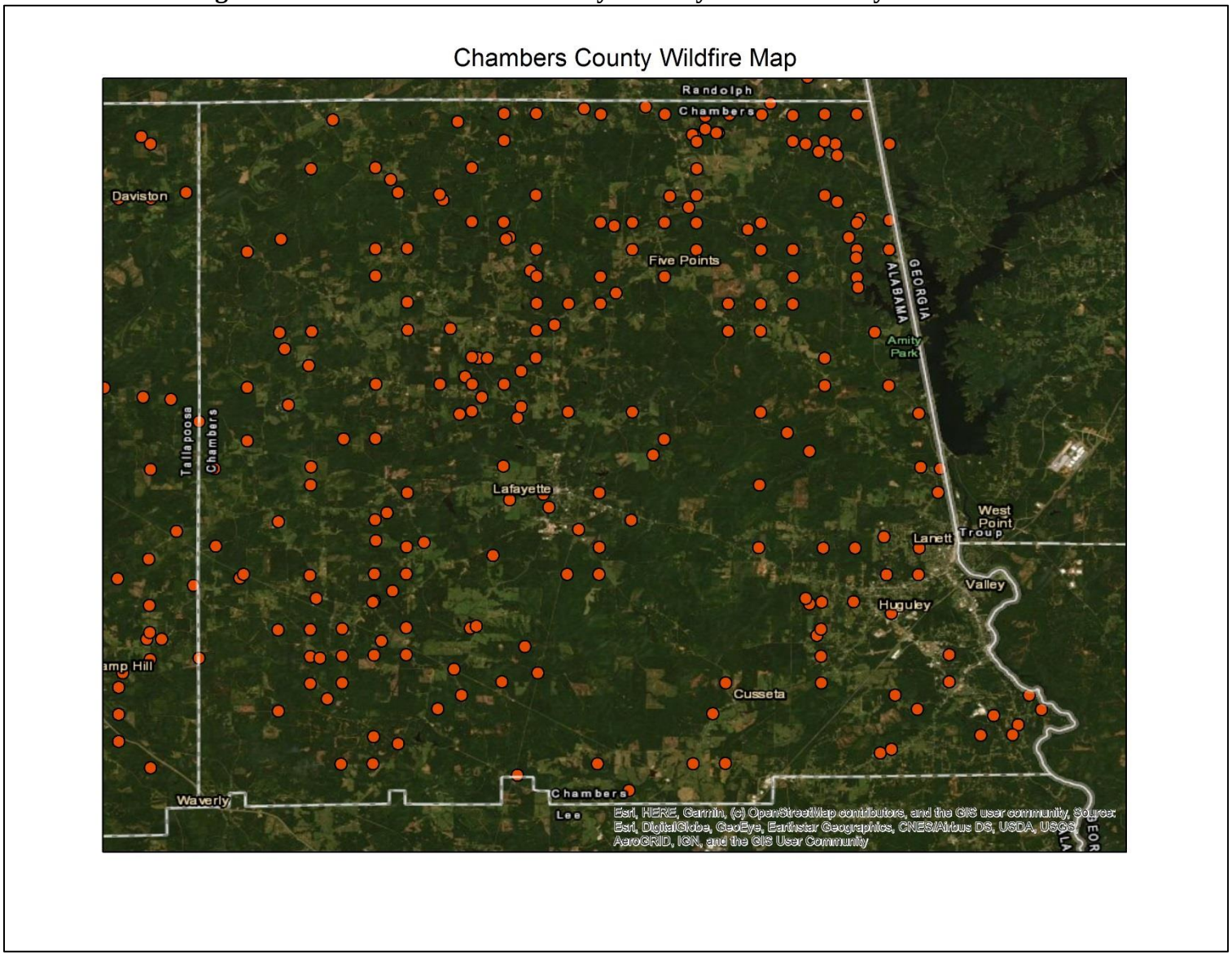
162 acres burned in Chambers County after a fire broke out on March 16th, 2013, which burned until it was contained later than evening. This was the largest fire reported in Chambers County since 2009. The average fire size over the last 10 years in Chambers County burned 8.5 acres.

On April 16th, 2017, a large fire was reported in Chilton County. This fire burned through 208 acres and was contained on April 18th, 2017. This is the largest fire reported in Elmore County since 2009. The average fire size over the last 13 years in Chilton County burned 7 acres.

On March 23rd, 2011, a wildfire broke out in Tallapoosa County burning 230 acres before the fire was contained three hours later. This was the largest fire documented by the Alabama Forestry Commission in Tallapoosa County, but the average fire will burn 10.23 acres.

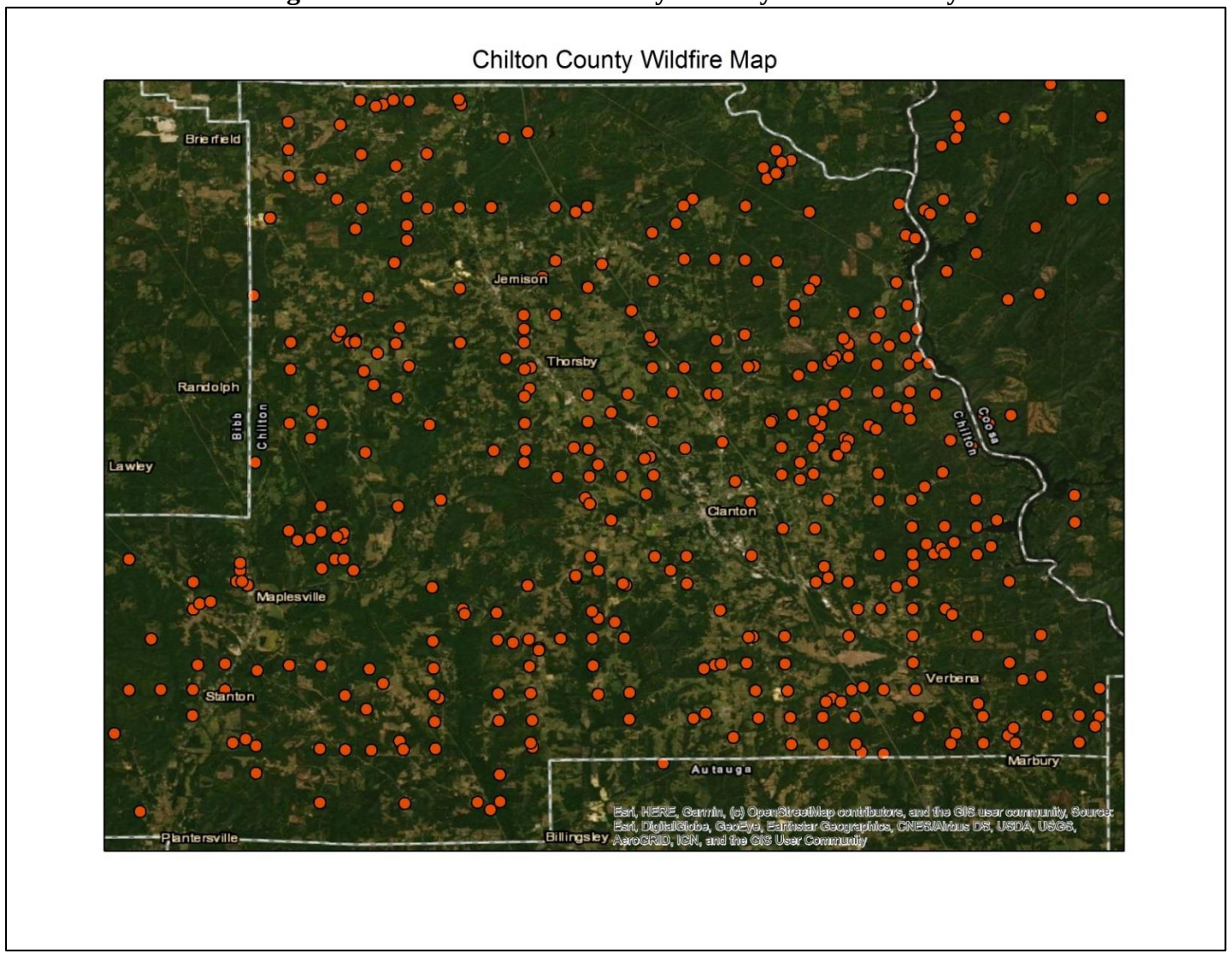
Due to the lack of data collection on fires, the details of these fires are not available. Figure 43 to 45 showcase the location of all wildfires hot have taken place in Chambers, Chilton, and Tallapoosa counties since January 2009.

Figure 43: Fires in Chambers County January 2007 – January 2020



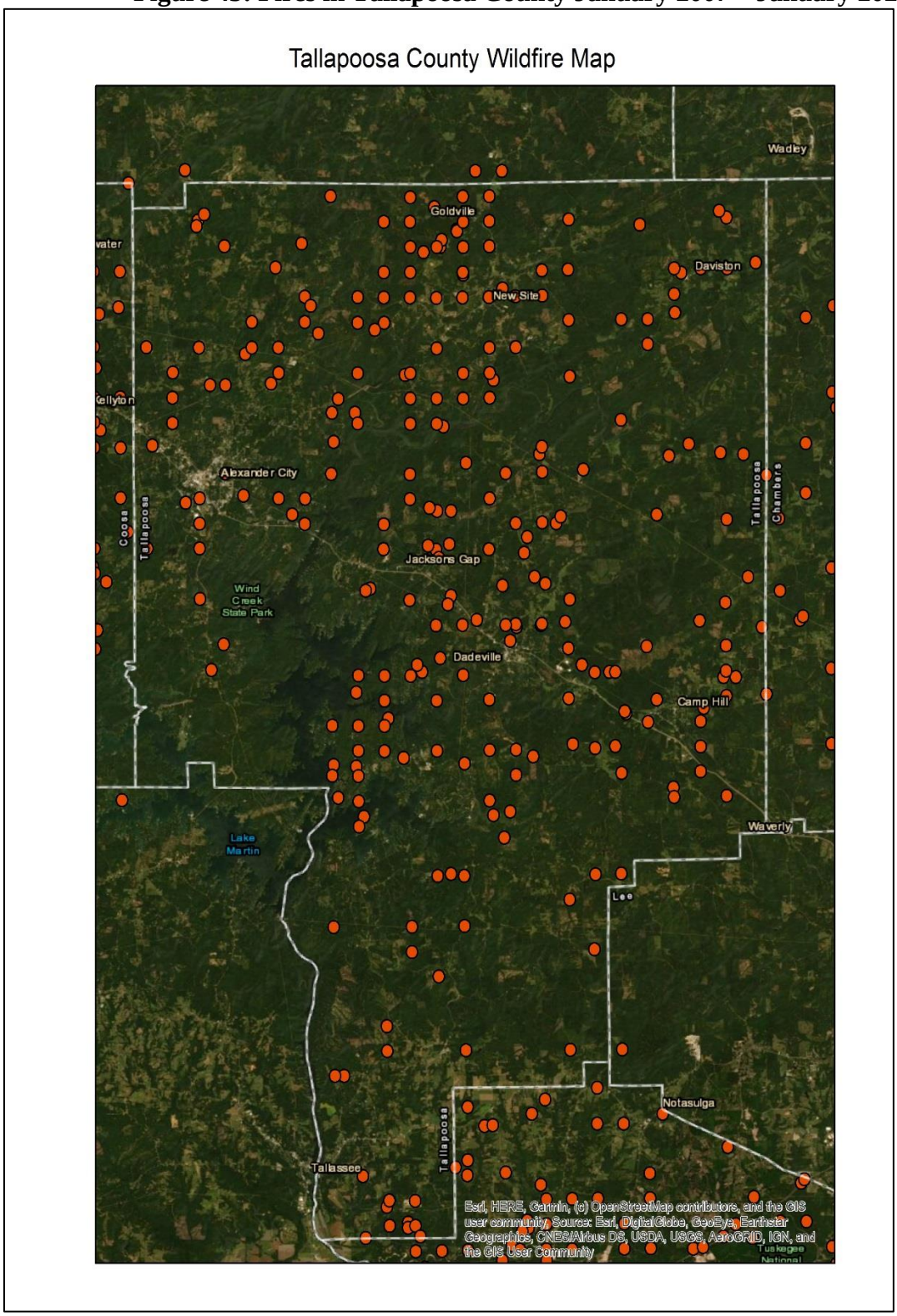
Source: Alabama Forestry Commission, Chambers County, Fire Locations, 2019.

Figure 44: Fires in Chilton County January 2007 – January 2020



Source: Alabama Forestry Commission, Chilton County, Fire Locations 2019

Figure 45: Fires in Tallapoosa County January 2007 – January 2020



Source: Alabama Forestry Commission, Tallapoosa County, Fire Locations 2019

3.15.4 Probability of Future Occurrences

The jurisdictions in Chambers, Chilton, and Tallapoosa counties are vulnerable to wildfires. The Alabama Forestry Commission classifies the jurisdictions in Chambers, Chilton, and Tallapoosa counties all probability of this hazard risk has been determined to be very low to medium depending upon the amount of urbanization. Although the Wildland-Urban Interface is high at these same locations. The impact has been deemed to be minor/limited. Please refer to Table 3.38 for the probability of future wildfire occurrences.

Table 3.38: Probability of Future Occurrences Wildfires

Hazard	Jurisdiction	Number Previous Events	Acres Burned	2009 to 2019	Frequency Event per Year	Average Acres Burned a Year
Wildfire	**Chambers (entire)**	278	2,368.60	10	27.8	0.230769
Wildfire	City of Lafayette	NA*		10	NA*	0
Wildfire	City of Lanett	NA*		10	NA*	0
Wildfire	City of Valley	NA*		10	NA*	0
Wildfire	Town of Cusseta	NA*		10	NA*	0
Wildfire	Town of Five Points	NA*		10	NA*	0
Wildfire	Town of Waverly	NA*		10	NA*	0
Wildfire	Town of Fredonia	NA*		10	NA*	0
Wildfire	Unincorporated County	NA*		10		0
Wildfire	**Chilton County (entire)**	501	3,545.32	10	50.1	0.230769
Wildfire	Clanton	NA*		10	NA*	0
Wildfire	Jemison	NA*		10	NA*	0
Wildfire	Maplesville	NA*		10	NA*	0
Wildfire	Thorsby	NA*		10	NA*	0
Wildfire	Unincorporated County	NA*		10	NA*	0
Wildfire	**Tallapoosa County (entire)**	463	4,738	10	46.3	1.666667
Wildfire	City of Alexander City	NA*		10	NA*	0
Wildfire	Dadeville	NA*		10	NA*	0
Wildfire	Daviston	NA*		10	NA*	0
Wildfire	New Site	NA*		10	NA*	0
Wildfire	Jackson's Gap	NA*		10	NA*	0
Wildfire	Camp Hill	NA*		10	NA*	0
Wildfire	Unincorporated County	NA*		10	NA*	0

Source :(Alabama Forestry Commission, Chambers, Chilton, and Tallapoosa counties, 2020)

*** (This data is not recorded by the Alabama Forestry Commission by jurisdiction, but only at the county level)*

3.16 Winter Storms

3.16.1 Description

Winter storms normally cause heavy amounts of frozen precipitation (snow, freezing rain, and ice), windy conditions, and extreme cold. The effect of winter storms on a community depends on how equipped the community is to handle the storm, as winter storms can cause owner outages, transportation problems, and collapsed roofs on structures. These events may make roads impassable and disrupt power. Loss of communications is a common occurrence during a severe winter storm. In Alabama, a snowfall of two inches or more is considered heavy snow, especially the further south you get in the state at the storm southern end of the state.

The related emergencies include hypothermia and other cold-related maladies. Fires break out due to improvised heating apparatuses is common, as is carbon monoxide poisoning. There usually is sufficient warning for the public to take protective steps. The facilitation of emergency heating and food is critical, with emergency heating centers and the rescuing of stranded motorists becoming priorities. These events are typically short-lived in the Chambers, Chilton, and Tallapoosa counties. The immediate threat from a winter storm, heavy snow or ice storm is traffic accidents, people trapped in their homes without supplies or hear, power outages, frozen water lines, and physical overexertion. The long-term damages of a multiple-day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages.

Areas in this region of Alabama receive winter storms infrequently and have only minor recorded damages. The entire Chambers, Chilton, and Tallapoosa counties are susceptible if a winter storm developed in the region, but these are typically short-lived.

3.16.2 Extent by Jurisdiction

Winter storms may have varying effects on the planning area dependent upon the severity and length of time. There is limited documentation on winter storms in the Chambers, Chilton, and Tallapoosa counties because these events do not take place annually. Table 3.39 demonstrates the extent of damages that can take place during a winter storm in all jurisdictions.

Table 3.39: Winter Storms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Winter Storms	Snow (six or more inches) and ice cause damage to homes, utilities, car accidents, close roads/bridges, and down trees.

3.16.3 Previous Occurrences and Impact

Since 2006, Chambers, Chilton, and Tallapoosa counties have experienced eight winter weather events and three winter storms, which resulted in snow, ice, or mixture. There were no injuries or deaths as well as zero number of monetary damages recorded from any of the winter weather/ storms.

In 2014, Chambers, Chilton, and Tallapoosa counties received a one to four inches of snowfall during a winter storm. Due to the accumulation of ice and snow on roadways causing travel to be

dangerous throughout all counties. Typically, these events caused road closures, vehicle accidents, and limited visibility in the region, but zero damages, injuries or deaths were directly caused by a winter storm.

On December 15th, 2010, a weak winter storm arrived in Alabama, which resulted in temperatures near or below freezing in Chilton County. According to NOAA this winter storm brought widespread freezing and sleet, which resulted in the accumulation of ice on the roads making driving conditions hazardous. These conditions resulted in many vehicles accidents on Interstate 65 due to ice on the road. No damages, injuries, or deaths were reported to NOAA.

In the evening of January 16th, of 2018 a winter storm struck Alabama resulting in two or four inches of snowfall in Chambers, Chilton, and Tallapoosa counties.

3.16.4 Probability of Future Occurrences

Based on previous episodes of winter storms in Chambers, Chilton, and Tallapoosa counties the probability of future storms is relatively low/medium. However, the impact can be critical based on historical events. Please refer to Table 3.40 for the probability of each winter storm occurrence in each jurisdiction.

Table 3.40: Probability of Future Occurrences Winter Storms

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Winter storm	**Chambers (entire)**	5	13	0.384615385
Winter storm	City of Lafayette	NA*	13	NA*
Winter storm	City of Lanett	NA*	13	NA*
Winter storm	City of Valley	NA*	13	NA*
Winter storm	Town of Cusseta	NA*	13	NA*
Winter storm	Town of Five Points	NA*	13	NA*
Winter storm	Town of Waverly	NA*	13	NA*
Winter storm	Town of Fredonia	NA*	13	NA*
Winter storm	Unincorporated County	NA*	13	
Winter storm	**Chilton County (entire)**	5	13	0.384615385
Winter storm	Clanton	NA*	13	NA*
Winter storm	Jemison	NA*	13	NA*
Winter storm	Maplesville	NA*	13	NA*
Winter storm	Thorsby	NA*	13	NA*
Winter storm	Unincorporated County	NA*	13	NA*
Winter storm	**Tallapoosa County (entire)**	6	13	0.461538462
Winter storm	City of Alexander City	NA*	13	NA*
Winter storm	Dadeville	NA*	13	NA*
Winter storm	Daviston	NA*	13	NA*
Winter storm	New Site	NA*	13	NA*
Winter storm	Jackson's Gap	NA*	13	NA*
Winter storm	Camp Hill	NA*	13	NA*
Winter storm	Unincorporated County	NA*	13	NA*

Source: National Weather Service, Storm Event Database, Winter Storms, 2020)
*** (winter storms are only recorded at the county level)*

3.17 Technological and Human Caused

Chambers, Chilton, and Tallapoosa counties have a susceptibility to technological and human-caused hazards. General discussions of hazards that may affect the area are described in the subsections below.

3.17.1 Structural Fire

The building codes and zoning ordinances prevent and control structures in most jurisdictions. Structures in commercial districts are the most vulnerable to fire separate from wildfires. This vulnerability can be attributed to more urban building patterns where these structures are located. Rural jurisdictions are typically served by volunteer fire departments, which continuously improve

the services to the community. Larger jurisdictions in the planning area are better equipped to deal with responding to structural fires.

3.17.2 Hazardous Material

A hazardous material is handled at some industrial and commercial businesses located in the planning area, which is an ongoing hazard due to the transportation of material. An accident with hazardous material could have negative impacts on the nearby areas. This section will be updated when more information regarding hazardous material is received.

3.17.3 Terrorism

FEMA classifies terrorism as using illegal force or violence against persons or property for the purpose of intimidation or ransom, performed by a domestic or international group. The threat of terrorism places certain facilities at greater risk, including government facilities, high profile areas, and utility infrastructure. Please refer to the examples below about different types of terror acts.

Biological or Chemical Attack: Liquid or other containments that can be dispersed to cause causalities and negative psychological impact.

Conventional Attacks: Active shooter, an individual or small group, which actively engaged in killing or attempting to kill people in a populated area.

Cyber Attacks: Normally used to gain information or negatively affect operations fuel to intrusion into a computer system or server.

Hostage Situation: Holding people against their will in order to achieve demands, which can be on the realm from international political situations to local domestic situations.

State and local agencies regularly conduct exercises and plan for these hazards.

SECTION 4. Vulnerability

4.1 Jurisdictional Vulnerability by Hazard
4.2 Risk Index
4.3 Probability of Future Occurrences
4.4 Total Population and Property Valuation Summary by Jurisdiction
4.5 Critical Facilities/ Infrastructure by Jurisdiction

4.1 Jurisdictional Vulnerability by Hazard

The stakeholders Chambers, Chilton, and Tallapoosa counties considered all the natural hazards that could affect the citizens and property in Chambers, Chilton, and Tallapoosa counties. The stakeholders used personal and professional experience, internet information, and risk assessment reports, past occurrences, public input, and other resources to identify hazards that are most likely to affect each jurisdiction in Chambers, Chilton, and Tallapoosa counties.

This section focuses on 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.

4.1.1 Dams

In Chilton County, three dams are classified as having high-risk hazard potential: Clanton Lake, located in the central portion of the county, and Lay and Mitchell Lake, which are both located on the Chilton County-Coosa County boarder.

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a failure could cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. Currently, we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any jurisdiction in Chilton County, Chambers, and Tallapoosa counties. This information will be provided in the next Hazard Mitigation Plan in five years.

In Chilton County, four dams ’hazard potential are classified as high, Lay Dam, Mitchell Dam, Gilbert Lake Dam, and Clanton Lake.

In Chambers County, two dams’ hazard potential are classified as high, LaFayette City Lake, Riverside No. 1, and Riverside No. 2. In Chilton County, four dams ’hazard potential are classified as high, Lay Dam, Mitchell Dam, Gilbert Lake Dam, and Clanton Lake.

In Tallapoosa County, three dams’ hazard potential are classified as high or significant, Walls Dam, Camp Hill Dam and Alexander City Dam.

High-risk dams are those with the capacity to cause both property and casualties in the downstream areas should the dam fail. There are several high-risk dams located in each of the counties for Phase III of the Hazard Mitigation plan. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams are the most susceptible, which is the most common type of dam found in Chamber, Chilton, and Tallapoosa counties. Concrete structures with spillways and controls would be less susceptible. The larger dams like Lay Dam and Mitchell Dam

on the Coosa River are operated by Alabama Power and are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

4.1.2 Drought

There is not a risk of losses for droughts based on a calculation from the historical record because zero damages have been reported for Chambers, Chilton, and Tallapoosa counties. The lack of evidence does not dismiss the risk associated with drought since qualitative records exist to show evidence of significant crop losses and risk to public water supply during drought. Droughts are potentially damaging to local agriculture and place the public at risk through water shortages in all jurisdictions in central Alabama. A significant drought could impact the drinking water supply from the following sources: West Point Lake, Lake Martin, well water/groundwater, Alabama River, Coosa River, and Tallapoosa River. The sources serve the following jurisdictions: Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site.

When a severer drought occurs the water, levels are depleting any jurisdiction (public water system or private well) resulting in a water shortage for the communities, which would impact all 118,392-person water supply or private wells. A drought would impact the Agricultural, Fishery, Forestry, and Hunting industries, which would impact 2.5% Chambers County, 1.7% Chilton County, and 0.4% of Tallapoosa County's economy. The livestock, agricultural and forestry lands are mostly in unincorporated portions of Chambers, Chilton, and Tallapoosa counties. The rivers and lakes such as Lake Martin, West Point Lake, Alabama River, Coosa River, or Tallapoosa River provide large areas for recreation for locals and tourist. The people bring in outside dollars for the local economies, but when a drought takes place the local economy suffers due to water shortages.

A drought can potentially impact all 118,392 residents living in any jurisdiction in Chambers, Chilton, and Tallapoosa counties. The impacts felt by the communities would be as followed: diminished ground and surface water; loss of crops; decrease in drinking water supply; private and public wells dry up. A drought can lead to shortages of water, strain public utilities, and major agriculture and tourism losses. The risk of drought is low to medium.

4.1.3 Earthquakes

While damage from a major earthquake could be catastrophic, the risks are very low for Autauga, Elmore and Montgomery counties. According to the USGS historical records, zero earthquakes have been reported in Chambers, Chilton, Coosa, and Tallapoosa counties.

Earthquakes could potentially impact all 118,392 residents and all structures in Chambers, Chilton, Coosa, and Tallapoosa counties. If a large earthquake from the New Madrid, South Carolina seismic zone, or the southern Appalachian seismic zone. A significant earthquake is highly unlikely while an improbable one could result in minor damage and possible minor injury in the counties. Since the overall risk of an earthquake is very low, the risk to lives and buildings minimal. While the risk is very low, it is important that the mitigation practices for earthquakes compliment other mitigation strategies and should be reviewed and incorporated into the mitigation plan.

The losses from earthquakes cannot be calculated based on the historical recorder since there have been zero earthquakes recorded in Chambers, Chilton, Coosa, and Tallapoosa counties. This evidence does not dismiss the risk associated with earthquakes. The probability of any type of losses from an earthquake in any jurisdiction in Chambers, Chilton, Coosa, and Tallapoosa counties is very low.

4.1.4 Extreme Temperature

Extreme temperatures in Chambers, Chilton, Coosa, and Tallapoosa counties can impact all 118,392 residents. Prolonged periods of high or low temperatures are not likely to impact the structures and facilities. However, these events might work in tandem with droughts or winter storm events. The probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of a cold event is rated as low to critical largely based on duration these events in the region have been short-lived. The following persons, industry, and assets are vulnerable to extreme temperatures in the Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Coosa County, Town of Goodwater, Town of Kellyton, Town of Rockford, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site,: elderly population (75+), children, water sources (public and private), livestock/animals, agricultural products, persons living in manufactured homes, a person under the poverty line, bridges (extreme cold), fisheries, forestry, as well as utilities such as power lines and water lines/pipes (extreme cold.). It necessitates a review of mitigation planning techniques to avoid injury to vulnerable populations, in particular the elderly population.

4.1.5 Flooding

Flooding is localized to areas close to surface water. Flood hazard areas are most readily identifiable when they appear on a flood hazard map produced by FEMA. However, flooding can impact a larger area than the properties shown of the FEMA Flood maps when unpredictable weather patterns occur or changes to drainage features take place. Due to lack of data, it is unclear how many persons are vulnerable to flooding across Chambers, Chilton, Coosa, and Tallapoosa counties. There are 45 NFIP policies in Chambers County. Based on the FEMA Flood Map persons living in flood zones in the City of Lanett, City of Valley, Town of Cusseta, City of LaFayette and Unincorporated Chambers County are the most at risk compared to those living in the flood zones.

The City of Lanett has a large floodplain compared to other jurisdictions in Chambers County. The floodplain is towards the northeastern portions of town. The flooding that occurs in Lanett is associated with creeks and streams overflowing their banks. When flooding occurs, residential homes, businesses, roads, utilities, bridges, and recreational facilities are vulnerable. Particularly those persons in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The City of Lanett's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, which can place a financial strain on the town and the local economy.

In the City of Valley, the floodplains are located towards right in the center of the town. Additionally, the floodplains run along the northern and southern portions of the cities along creek and streams. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Valley is associated with creeks and streams overflowing their banks. When flooding occurs residential homes, businesses, roads, utilities, and bridges are vulnerable. Particularly, those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The City of Valley's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain.

In the Town of Cusseta, the floodplains are located throughout the entire city along creek and streams. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Cusseta is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat flooding.

The City of Lafayette's floodplain goes through a large portion of the town. The floodplain comes from Mill Creek and Kellem Hill Creek, which run through the center of the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Lafayette's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the city and its economy.

The unincorporated areas of Chambers County do have potions of each county that are in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and rivers. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would-be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development storm water management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Chambers County can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process.

There are 47 NFIP policies are in Chilton County, but based on the FEMA Flood Map persons living in flood zones in the City of Clanton, City of Jemison, Town Thorsby, Town of Maplesville and Chilton County are the most at risk compared to those living in the flood zones.

In the City of Clanton, the floodplain goes right through the heart of the town. Citizens, commercial buildings, structures, roads, utilities, post office, senior center, and some residential housing are all vulnerable to flooding. This flooding is associated with poor storm water management and creeks that run through the town. A flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The City of Clanton's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town must continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding. City of Clanton has the most NFIP policies, and is also the only municipality within the county with a Certified Floodplain Manager

The City of Jemison's floodplain goes through a portion of the city, but most of it goes along the Northern border of the city. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Jemison's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

In the Town of Thorsby, the floodplain is not near the town limits. Still, a flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuate. The Town of Thorsby's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town must continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding.

The Town of Maplesville's floodplain goes through a large portion of the town. The floodplain comes from creeks which runs through the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Maplesville's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

The unincorporated areas of Chilton County do have potions of each county that are in a floodplain. These floodplains are scattered across the entire jurisdiction along creeks, streams, and the Coosa River. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would-be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Due to a lack of development storm water management systems are not available, which can increase areas' vulnerability to flooding. The infrastructure in the unincorporated areas of Chilton County can be vulnerable to flooding

such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process. Since floods cause significant damage to large numbers of structures, it is necessary to improve and continue the mitigation action plan to address potential losses. Due to lack of data, it is unclear how many persons are vulnerable to flooding, but there are currently 32 National Flood Policies in place within Chilton County. There are 116 NFIP policies are in Tallapoosa County, but based on the FEMA Flood Map persons living in flood zones in the City of Alexander City, the City of Dadeville, the Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, and Town of New Site are the most at risk compared to those living in the flood zones.

In the City of Alexander City, the floodplains in the center of the city due to the creeks and streams from Lake Martin that run through the southern portion of the city. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in City of Alexander City is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain in an urban area with lots of impervious surfaces. If the flooding occurs homes, businesses, roads, utilities, structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat the flood. The City of Alexander City's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management. There are no known critical facilities located in a floodplain.

The City of Dadeville has two floodplains that run down the eastern and western portion of the city. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Dadeville's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

The Town of Camp Hill's floodplain goes through a large portion of the town. The floodplain comes from creeks which runs through northeastern and southern the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. Camp Hill's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

In the Town of Daviston, the floodplain is located on the central and eastern portion the entire city. These floodplains are near residential homes, commercial areas, and roads. The flooding that occurs in Daviston is associated with creeks and streams overflowing their banks or localized flooding that occurs from heavy rain. If the flooding occurs homes, businesses, roads, utilities,

structures, parked vehicles, and bridges in the floodplain would be vulnerable. In the event of localized flooding homes and buildings outside of the floodplain may become flooded, which can put a financial burden on persons to recover, relocate, or evacuate. This is particularly concerning for those persons in poverty and the elderly because they may not have the monetary or physical means to combat flooding.

In the Town of Jackson's Gap, the floodplain is in a large portion on the eastern portion of the town. Citizens, commercial buildings, structures, roads, utilities, post office, Town Hall, senior center, and some residential housing are all vulnerable to flooding. This flooding is associated with poor storm water management and creeks that run through the town. A flood event can cause roads and utilities to washout, create sinkholes, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The Town of Jackson's infrastructure is vulnerable to flooding and can cause an economic burden for the town if the town must continuously fund projects that focus on fixing roads, fixing storm water management, and bridges that have been damaged from flooding.

The Town of New Site's floodplain goes through a large portion of the town. The floodplain comes from creeks which runs through the western portion of the town. When flooding occurs residential homes, businesses, roads, and structures are vulnerable. A flood event can cause roads and utilities to washout, flood homes, flood businesses, and cause roads to be impassable. Those people in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. New Site's infrastructure can be vulnerable to flooding such as roads, bridges, utilities, sidewalks, or storm water management, and could create unforeseen financial issues for the town and economy.

The unincorporated areas of Tallapoosa County do have potions of each county that are in a floodplain. These floodplains are scattered across the entire jurisdiction along rivers, streams, and rivers from Lake Martin. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would-be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The infrastructure in the unincorporated areas of Tallapoosa County can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process. The risk associated with flooding was assessed to be high for Tallapoosa County.

Please refer to Table 4.1 to see the NFIP repetitive loss information for Chambers, Chilton, Coosa, and Tallapoosa counties. According to the repetitive loss information from FEMA Chilton and Tallapoosa counties have not paid on a claim.

Table 4.1 NFIP Repetitive Loss Properties

State	County Name	Occupancy	FMA RL Properties	Insured FMA RL Properties	Total Paid in Claims on FMA RL Properties	NFIP RL Properties	Insured NFIP RL Properties	Total Paid in Claims on NFIP RL Properties
AL	CHAMBERS COUNTY	SINGLE FMLY	-	-	$ -	1	-	$24,151
AL	COOSA COUNTY	SINGLE FMLY	-	-	$ -	1	-	$ 158,193

Source: FEMA, Repetitive Loss Properties, 2020

4.1.6 Hail

Hail can impact all 118,392 residents living and all structures in Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties. The following persons, industry, and assets are vulnerable to hail in Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Coosa County, Town of Goodwater, Town of Kellyton, Town of Rockford, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site: vehicles (damage), home roofs (damage/destruction), windows (break/crack), person (injury or kill), livestock/animals (injury or kill), damage to crops and timber, manufactured homes, buildings walls (not brick), and power lines. The vulnerability to hail is sporadic due to the nature of damages incurred from hail, such as roofs, windows, homes, and automobiles. The overall risk from hail is low to medium, but due to the community's capacity to implement mitigation strategies against hail is nearly impossible. Protection is largely limited to property design, maintenance, and insurance, which are individual responsibilities. Unfortunately, due to the isolation of hail events, it is not feasible to conduct through public education and community investments.

4.1.7 Landslides

Zero landslide have been recorded by the any of the EMA offices in Chambers, Chilton, Coosa, and Tallapoosa counties. Since these counties have not experienced a landslide it is difficult to estimate the future damages or the probability of future occurrences. The Primary effects of a landslides in Chambers, Chilton, Coosa, and Tallapoosa counties would include property damages, road closures, erosion of soil, and infrastructure damages. The overall risk for landslides is low.

4.1.8 Lightning

Lightning strikes can impact all 118,392 residents living, all structures in Chambers, Chilton, Coosa, and Tallapoosa counties. Vulnerability to lightning is limited to scattered injury or loss of life as well as damages to properties such as homes, electronics, structures, and data losses. The following persons, industry, and assets are vulnerable to lightning in the Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Coosa County, Town of Goodwater, Town of Kellyton, Town of Rockford, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site: elderly persons, children, persons outside during lightning events, power lines, timber/trees, manufactured homes, crops, homes, structures, data not backed up, livestock/animals, electronics plugged into an outlet (computers, household appliances, or data servers), and any person in or on water (pool or boat). The overall risk from lightening is medium, it is necessary to review potential and current mitigation strategies due to how common and highly destructive lightning can be to a community.

4.1.9 Sinkholes

Sinkholes are a minor threat to all jurisdictions Chambers, Chilton, Coosa, and Tallapoosa counties because these sinkholes are typically manmade. Since sinkhole events are sporadic and rare, these events can potentially cause damage to life or property on a small scale. Homes, manufactured homes, structures, roads, utilities, persons, livestock /animals, and vehicles in all jurisdictions

could be vulnerable to a manmade sinkhole. Due to the lack of data on sinkholes in the Chambers, Chilton, Macon, and Tallapoosa counties currently, it is not possible to know how many persons, structures, buildings, and infrastructure are vulnerable to sinkholes in each jurisdiction. However, a mitigation plan is provided for sinkholes based on the ability of local jurisdictions to encourage thoughtful land use regulation and good infrastructure design.

4.1.10 Tornadoes

All 118,392 residents living and all structures in Chambers, Chilton, Coosa, and Tallapoosa counties are vulnerable to tornadoes. Although the location of where tornadoes take place is sporadic, losses from these tornado events can impact a wide variety of persons, assets, and infrastructure in each jurisdiction. The following persons, assets, and industry in Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site: elderly person, children, education institutions, medical facilities, persons in vehicles, vehicles, group homes, apartment complexes, manufactured homes, power lines, timber/trees, livestock/ animals, manufacturing facilities, residential homes, dilapidated homes, buildings, structures, roofs, and any power plant.

All 12,739 manufactured homes in Chambers, Chilton, and Tallapoosa counties are at risk of tornado depression because these homes are not built to withstand winds greater than 70 mph. These homes can be toppled, walls roofs can be ripped, or the home can be completed destroyed in a tornado. Persons living in manufactured homes, elderly persons, persons living in apartment complexes, persons living in poverty, and children at home alone may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a tornado event, which can put their lives at risk. These persons are found in every jurisdiction in Chambers, Chilton, Coosa, and Tallapoosa counties. The economy is also vulnerable to tornadoes if jurisdiction is hit hard enough destroying major retail stores, residential areas, schools, major employers, or utilities. Losing these assets will take a community year to recover and lots of money, which puts negative strains on the economy and causes the local jurisdiction to lose tax revenue. The overall risk from tornadoes is high, it is necessary to review potential and current mitigation strategies due to how sudden and destructive tornadoes can be to a community.

4.1.11 Tropical Depression / Tropical Storm/ Hurricane

A tropical depression, tropical storm, or hurricane can impact all 118,392 residents living and all structures in Chambers, Chilton, and Tallapoosa counties. Losses from high winds, heavy rains, and tornadoes from a tropical depression, tropical storm, or hurricane can impact homes, crops, timber, and infrastructure in all jurisdictions in Chambers, Chilton, and Tallapoosa counties. Risk tropical depression, tropical storm, or hurricane are high and require mitigating responses from all levels of government and from individuals throughout the region.

The potential areas of vulnerability during a tropical depression or tropical storm would be similar to those felt during a severe thunderstorm, flash flooding, or a tornado. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to high winds/thunderstorms in the Chambers County, City of LaFayette, City of Lanett, City Valley,

Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site: elderly persons, persons driving vehicles, vehicles, manufactured homes, power lines, power, crops and timber, injury to a person, buildings constructed of wooden or vinyl, dilapidated homes/structures, vehicles, persons living below the poverty line, and windows. Each jurisdiction can have issues due to the damages that high winds and thunderstorms can cause such as roads may be closed due to debris blocking the roads, downed "live" power lines can cause injury or death to persons, loss of power, loss of working traffic signals, disrupted utilities from uprooted trees, and communication issues due to loss of power.

All 12,739 manufactured homes in Chambers, Chilton, Coosa, and Tallapoosa counties are at risk during a tropical depression or tropical storm because the building materials can suffer from severe damage due to a strong straight line. These homes can be toppled as well as walls and roofs can be ripped off if the straight-line winds are strong enough. Those people may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a high wind and thunderstorm event, which can put their lives at risk.

4.1.12 Wildfire

Wildfires are a potentially damaging hazard that is experienced in Chambers, Chilton, and Tallapoosa counties. The areas that are closest to fuel sources such as uncleared forestland and timberland can be impacted negatively if a wildfire breaks out. While wildfires can impact all 129,247residents living and all structures in Chambers, Chilton, and Tallapoosa counties. All persons living in rural areas, 6,926 households in unincorporated Chambers County, 11,602 households in unincorporated Chilton County, and 6,249 households in unincorporated Tallapoosa County are at a greater risk to wildfires than those living in urban areas because of the long emergency response times and longer report times. The elderly living in each jurisdiction is vulnerable to wildfire because these persons may not be able to evacuate, or they may start the fire on accident. Timber, property, wildlife, and injury or loss of human life are all vulnerable to wildfires in each jurisdiction.

4.1.13 Winter Storm

Although winter storms are infrequent, these storms threaten all 129,247residents living and all structures in Chambers, Chilton, Coosa and Tallapoosa counties. Although a catastrophic loss is unlikely, all the jurisdictions in Chambers, Chilton, Coosa, and Tallapoosa counties are at risk from winter storms. These storms can damage structures that cannot properly bear the weight of ice and snow and can cause injury and loss of life where extended power outages and poor heating conditions may lead to exposure to the elements. The potential areas of vulnerability during the winter storm would be similar to those felt during extremely cold temperatures. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to winter storms in Chambers County, City of LaFayette, City of Lanett, City Valley, Town Cusseta, Town of Five Point, Town of Waverly, Chilton County, City of Clanton, City of Jemison, City of Calera, Town of Maplesville, Town of Thorsby, Tallapoosa County, City of Alexander City, City of Dadeville, City of Tallassee, Town of Camp Hill, Town of Daviston, Town of Jackson's Gap, Town of New Site: elderly persons, utilities (water lines, power, power lines), persons driving vehicles, animals/ livestock, and trees/timber. Each jurisdiction's roads, bridges, traffic signals,

and utilities can be vulnerable to winter storms if ice and/or snow accumulated in the jurisdictions. Persons living in poverty are more vulnerable to winter storms because they may not have the means to keep themselves and family members warm with or without power. The City of Dadeville has the largest portion of their population living below the poverty line has a poverty rate of 27%, and in the Town of Maplesville 26% of the population is living below the poverty line. Tallapoosa County has 20% of its total population living below the poverty line in area according to the ACS 2018 5-year ACS Estimates. Winter storms are rated as a high-risk natural hazard due to the infrequent events, which necessitates a mitigation plan.

4.2 Risk Index

The result of this process was the creation of a risk index, which established numeric ratings for each hazard relative to one another at the end of this section. Based on this analysis, the Stakeholder identified the following Tables 4.2 to 4.22 show the natural hazards as ones that continuously impact the jurisdictions of Chambers, Chilton, and Tallapoosa counties:

Table 4.2 Risk Index Chambers County

Chambers County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	M to L	Catastrophic	Long	2	A failure at any of the dams downstream from West Point Lake could have devastating consequences for the municipalities of Lanett and Valley, although the risk of a failure at any of these dams is very small. A failure at the Tallapoosa dam would have devastating effects on residents in the North end of the county along the river.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks. Droughts affect all areas and jurisdictions of Chambers County equally. Certain areas, such as agricultural areas and areas with vulnerable water supplies, may be more susceptible to the adverse effects of droughts.

Earthquake	Possible	Very Small	Limited	Short	3	Would impact entire County. Past occurrences have affected the county on the Mercalli scale of III to V.
Extreme Temperatures	Highly Likely	Small	Limited	Short	5	Would affect entire the County Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty. Due to high humidity extreme heat can take a toll on the population, livestock, and wildlife.

Flooding	Highly Likely	Moderate	Critical	Med	8	The City of Lanett frequently experiences extremely hazardous flooding throughout its principal commercial district and along its primary transportation corridor, U.S. 29. The City of Valley is equally susceptible to damages from flooding. Recurring flooding conditions severely hamper business operations and vehicular travel. Significant damages too many businesses from direct losses to buildings and contents and indirect losses due to business interruptions. Further, flooding results in road closures to the U.S. Highway 29 major thoroughfare and N Lanier Avenue, another major travel way. This creates an immense emergency response and public safety issue. The rural areas of the county are not free from the effects or risks of flooding. Several bridges and culverts have collapsed in past occurrences. Chambers County has extensive areas prone to flooding. Chambers County's primary concern is localized, flash flooding of roads and bridges and experiences riverine flooding, primarily along local streams and tributaries of the Chattahoochee River, many of which are flash floods.

Landslides	Unlikely	Very Small	Negligible	Short	1	Any future landslides are likely to be the result of construction activities and will be commensurately minor in scope. The probability of future landslides is relatively low compared to other hazards and is equally unlikely for all jurisdictions in Chambers County.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	Currently, sinkholes are not a threat to Chambers County. The probability of future sinkholes is equally small.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes. Tornadoes pose a significant threat to Chambers County communities with moderate to extensive damage and life-threatening risks to a vast population of mobile home parks, mobile home dwellers, and older housing that has not been updated structurally. The need for safe shelters in the highly populated areas of the county are a necessity to save lives in future events.

Thunderstorm	Highly Likely	Moderate	Limited	Med	8	All areas of Chambers County have equal exposure to severe storms, including thunderstorms, high winds, heavy precipitation, and hail. Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events. Large hail can cause injury and loss of life, property damages, including crop, damage to automobiles and buildings, and lightning and high winds can cause loss of life and considerable property damage.
Tropical Storm, Tropical Depression, Hurricane	Likely	Moderate	Limited	Med	7	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. People in areas along the rural parts of the county, particularly the North and West ends of the county, could see power outages for several days. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and

						extensive damage county wide.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along highways and hazardous traveling conditions. All participating jurisdictions are equally likely to experience winter storms/freezes, which may be accompanied by snow, freezing rains, and extreme temperature lows. The risks of winter storms and freezes include loss of life due to cold, power outages for extended periods of time, agriculture damage, and road hazards. Fallen trees and limbs and heavy snow loads can collapse roofs and cause downed power and communication lines
Wildfire	Possible	Moderate to High	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields. The rural areas of the county are at a higher risk for widespread damage from wildfires.

Table 4.3: Risk Index Five Points

Five Points						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	Unlikely, closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential areas located in the A floodplain are vulnerable. Also, several roads and streets in neighborhoods have the potential

						for localized flooding
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage in Town.

Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.4: Risk Index LaFayette

LaFayette						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	Unlikely, closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential, commercial, and areas located in the A floodplain are vulnerable. Roads are also vulnerable to localized flooding

						during storms.
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage Town wide.

Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.5: Risk Index Lanett

Lanett						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	A dam failure could cause major flooding to neighborhoods, businesses, and road south of the dams... Areas along small creeks are at risk.
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.

Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential areas located in the A floodplain are vulnerable. Also, several roads and streets in neighborhoods have the potential for localized flooding
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.

Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage town wide.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.6 Risk Index Valley

Valley						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	A dam failure could cause major flooding to neighborhoods, businesses, and road south of the dams... Areas along small creeks are at risk.
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential, commercial, and areas located in the A

						floodplain are vulnerable. Roads are also vulnerable to localized flooding during storms.
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds

						and extensive damage county wide.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.7: Risk Index Waverly

Waverly						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	Unlikely, closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	No Floodplain in the town
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.

Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage town wide.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.

Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.8: Risk Index Fredonia

Fredonia						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	L	Long	2	Unlikely, closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential areas located in the A floodplain are vulnerable. Also, several roads and streets in neighborhoods have the potential for localized flooding

Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage town wide.

Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.9: Risk Index Cusseta

Cusseta						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			

Dam failure	Possible	Small	L	Long	2	Unlikely, closest dam is too far to impact
Drought	Highly Likely	Large	L	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	N	Short	3	Would impact entire Town.
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential areas located in the A floodplain are vulnerable. Also, several roads and streets in the neighborhoods have the potential for localized flooding
Landslides	Unlikely	Very Small	Negligible	Short	1	The Town has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Limited	Med	3	The Town has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the Town uniformly due to the random patterns of tornadoes.

Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.

Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	Hurricanes pose the greatest threat to life and property, but tropical storms and depressions also cause extensive damage and loss of life. A tropical system would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods. Major tree damage would cause roadway issues and electrical system damage. People in areas along the rural parts of the county, particularly the North and West ends of the county, could see power outages for several days. The power outages then would affect the fresh water supply. Tropical systems pose a severe threat for tornadoes, flooding, high winds and extensive damage county wide.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.10: Risk Index Chiton County

Risk Index: Chilton County								
Hazard	**Frequency**	**Magnitude**	**Severity**			**Duration**	**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	Only 3 of the 13 dams in the county are considered to have a high risk of probable economic, environmental, or lifeline losses
Drought	Highly Likely	Large	N	L	N	Long	7	All jurisdictions are vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in Chilton County since 2006 exist. However, if an earthquake did occur, all jurisdictions would be affected.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting jurisdictions in Chilton County since 2006 exist. However, if a flood did occur, all jurisdictions in the surrounding areas could be affected.
Hail	Highly Likely	Moderate	N	L	N	Short	4	All jurisdictions are vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	All jurisdictions are vulnerable to and have records of thunderstorms and high winds.
Tornadoes	Likely	Moderate	CR	CR	L	Short	6	All jurisdictions are vulnerable to and have records of tornadoes
Tropical Storm /Tropical	Possible	Large	N	L	L	Medium	4	All jurisdictions are vulnerable to tropical depressions/storms and hurricanes

Depression / Hurricane								
Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	All jurisdictions are vulnerable to and have records of winter storms

Table 4.11: Risk Index Calera

Risk Index: Calera								
Hazard	**Frequency**	**Magnitude**	**Severity**			**Duration**	**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	The city has little to no vulnerability to dam failure; low damage potential
Drought	Highly Likely	Large	N	L	N	Long	7	The Town is vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in since 2006 exist. However, if an earthquake did occur, the town would be affected minimally.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting jurisdictions in Calera since 2006 exist. However, if a flood did occur, the areas near the floodplains would most likely be impacted.
Hail	Highly Likely	Moderate	N	L	N	Short	4	The Town is vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	The Town is are vulnerable to and have records of thunderstorms and high winds.
Tornadoes	Likely	Moderate	CR	CR	L	Short	6	The Town is are vulnerable to and have records of tornadoes
Tropical Storm /Tropical Depression / Hurricane	Possible	Large	N	L	L	Medium	4	The Town is vulnerable to tropical depressions/storms and hurricanes

Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	The Town is vulnerable to and have records of winter storms

Table 4.12: Risk Index Thorsby

Risk Index: Thorsby								
Hazard	**Frequency**	**Magnitude**	**Severity**			**Duration**	**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	The city has little to no vulnerability to dam failure; low damage potential
Drought	Highly Likely	Large	N	L	N	Long	7	The Town is vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in since 2006 exist. However, if an earthquake did occur, the town would be affected minimally.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting jurisdictions in Thorsby since 2006 exist. However, if a flood did occur, the areas near the floodplains would most likely be impacted.
Hail	Highly Likely	Moderate	N	L	N	Short	4	The Town is vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	The Town is are vulnerable to and have records of thunderstorms and high winds.
Tornadoes	Likely	Moderate	CR	CR	L	Short	6	The Town is are vulnerable to and have records of tornadoes
Tropical Storm /Tropical Depression / Hurricane	Possible	Large	N	L	L	Medium	4	The Town is vulnerable to tropical depressions/storms and hurricanes

Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	The Town is vulnerable to and have records of winter storms

Table 4.13 Risk Index: Jemison

Risk Index: Jemison								
Hazard	**Frequency**	**Magnitude**	**Severity**		**Duration**		**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	The city has little to no vulnerability to dam failure; low damage potential
Drought	Highly Likely	Large	N	L	N	Long	7	The Town is vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in since 2006 exist. However, if an earthquake did occur, the town would be affected minimally.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting jurisdictions in Clanton since 2006 exist. However, if a flood did occur, the areas near the floodplains would most likely be impacted.
Hail	Highly Likely	Moderate	N	L	N	Short	4	The Town is vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	The Town is are vulnerable to and have records of thunderstorms and high winds.
Tornadoes	Likely	Moderate	CR	CR	L	Short	6	The Town is are vulnerable to and have records of tornadoes
Tropical Storm /Tropical Depression / Hurricane	Possible	Large	N	L	L	Medium	4	The Town is vulnerable to tropical depressions/storms and hurricanes

Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	The Town is vulnerable to and have records of winter storms

Table 4.14: Risk Index Clanton

Risk Index: Clanton								
Hazard	**Frequency**	**Magnitude**	**Severity**			**Duration**	**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	The city has little to no vulnerability to dam failure; low damage potential
Drought	Highly Likely	Large	N	L	N	Long	7	The City is vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in since 2006 exist. However, if an earthquake did occur, the town would be affected minimally.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting Clanton since 2006 exist. However, if a flood did occur, the areas near the floodplains would most likely be impacted.
Hail	Highly Likely	Moderate	N	L	N	Short	4	The City is vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	The City is are vulnerable to and have records of thunderstorms and high winds.
Tornadoes	Likely	Moderate	CR	CR	L	Short	6	The Town is are vulnerable to and have records of tornadoes
Tropical Storm /Tropical Depression / Hurricane	Possible	Large	N	L	L	Medium	4	The City is vulnerable to tropical depressions/storms and hurricanes

Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	The City is vulnerable to and have records of winter storms

Table 4.15: Risk Index Maplesville

Risk Index: Maplesville								
Hazard	**Frequency**	**Magnitude**	**Severity**			**Duration**	**Vulnerability**	**Geographic Locations Vulnerability**
			Health	***Property***	***Function***			
Dam Failure	Unlikely	Very Small	N	L	L	Short	2	The city has little to no vulnerability to dam failure; low damage potential
Drought	Highly Likely	Large	N	L	N	Long	7	The Town is vulnerable to drought and heat waves.
Earthquake	Unlikely	Very Small	N	N	N	Short	2	No records of past earthquakes affecting jurisdictions in since 2006 exist. However, if an earthquake did occur, the town would be affected minimally.
Flooding	Unlikely	Very Small	N	N	N	Short	3	No records of past floods affecting jurisdictions in Maplesville since 2006 exist. However, if a flood did occur, the areas near the floodplains would most likely be impacted.
Hail	Highly Likely	Moderate	N	L	N	Short	4	The Town is vulnerable to and have records of hail.
Sinkholes	Possible	Very Small	N	N	N	Long	2	Naturally occurring sinkholes are rare but possible.
Thunderstorms/ High Winds	Highly Likely	Large	N	L	N	Medium	7	The Town is are vulnerable to and have records of thunderstorms and high winds.

Tornadoes	Likely	Moderate	CR	CR	L	Short	6	The Town is are vulnerable to and have records of tornadoes
Tropical Storm /Tropical Depression / Hurricane	Possible	Large	N	L	L	Medium	4	The Town is vulnerable to tropical depressions/storms and hurricanes
Wildfire	Highly Likely	Small	N	N	N	Medium	3	Wildfires are a somewhat common occurrence in the county, averaging around 46 events per year. However, the average number of acres of land affected by these fires is approximately 7 acres per fire. No records of sever damages have been recorded.
Winter storm	Likely	Large	N	L	L	Long	5	The Town is vulnerable to and have records of winter storms

Table 4.16: Risk Index for Tallapoosa County

Tallapoosa County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	Many unincorporated/incorporate areas lie along one of the lakes or rivers in the county. A dam failure could cause major flooding to farmland, pastures, neighborhoods, and even some industrial parks. Areas along Tallapoosa Rivers and the small creeks are at risk. Also, the area below the Russell Mills Dam is at risk to flood in the event of a dam failure.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, agriculture, forestry, and fisheries throughout the county.
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire county. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.

Flooding	Likely	Moderate	Limited	Short	8	All residential areas around the Tallapoosa River, Lake Martin, and many creeks are vulnerable. Also, several roads and streets in the neighborhoods area have the potential for localized flooding. The areas between Martin Dam and Thurlow Dam are susceptible to localized flooding.
Landslides	Unlikely	Very Small	Negligible	Short	1	The Southern portion of the Tallapoosa County has a very low susceptible landslide. The rest of the county has zero susceptibly.
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Unlikely	Small	Negligible	Short	1	The County has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	10	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	6	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.

Wildfire	Possible	Moderate	Critical	Med	8	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields. Persons and structures in the unincorporated areas of Tallapoosa County are at higher risk of wildfires than those in incorporated areas.

Table 4.17: Risk Index for Alexander City

Alexander City						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			

Dam failure	Possible	Small	Limited	Long	2	Many incorporate areas lie along one lake or rivers in the county. A dam failure could cause major flooding to neighborhoods, businesses, and road. Areas along Tallapoosa Rivers and the small creeks are at risk. Also, the area below the Russell Mills Dam is at risk to flood in the event of a dam failure.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, rivers, and lakes
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire county. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.

Flooding	Likely	Small	Limited	Short	8	All residential areas around the Tallapoosa River, Lake Martin, and many creeks are vulnerable. Also, several roads and streets in the neighborhoods area have the potential for localized flooding.
Landslides	Unlikely	Very Small	Negligible	Short	1	Alexander City has zero susceptibly to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	Area is subject to lighting and could cause fires or damages to electrical system
Sinkholes	Possible	Small	Negligible	Short	1	The City has reported zero natural sinkholes.
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.

Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.18: Risk Index for Town of Camp Hill

Town of Camp Hill						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	A dam failure could cause major flooding to neighborhoods, businesses, and road. Areas along small creeks are at risk.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, rivers, and lakes
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town

Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	All residential areas around the many creeks are vulnerable. There is a floodplain that runs southwest of U.S. Highway 280, east of Old 280 Road, and in the northwest corner of Camp Hill. Persons and structures in this area are vulnerable to flooding.
Landslides	Unlikely	Very Small	Negligible	Short	1	Camp Hill has zero susceptibly to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Sinkholes	Possible	Small	Limited	Short	1	The Town has reported zero natural sinkholes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.

Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.19: Risk Index for City of Dadeville

City of Dadeville						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	A dam failure could cause major flooding to neighborhoods, businesses, and roads. Areas near Farington Dam could be impacted if the dam failed.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, rivers, and lakes
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.

Flooding	Likely	Small	Limited	Short	8	All residential areas around the many creeks are vulnerable. There is a floodplain that runs southwest of U.S. Highway 280, east of Old 280 Road, and in the northwest corner of Camp Hill. Persons and structures in this area are vulnerable to flooding.
Landslides	Unlikely	Very Small	Negligible	Short	1	Dadeville has zero susceptibly to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The City is subject to lighting and could cause fires or damages to electrical system
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Sinkholes	Possible	Small	Limited	Short	1	The City has reported zero natural sinkholes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.20 Risk Index of Jackson's Gap

Town of Jackson's Gap						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	If a dam north of Jackson's Gap failure it could cause flooding to neighborhoods, businesses, and roads.

Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.
Flooding	Likely	Small	Limited	Short	8	A floodplain is present from the northwest corner towards the south-central portion of Jackson's Gap along Many Creek. In the event of a flood business, homes, and infrastructure could be impacted. Minimal localized flooding could occur during a severe thunderstorm, but this would not be widespread.
Landslides	Unlikely	Very Small	Negligible	Short	1	Jackson's Gap has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system

Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Sinkholes	Possible	Small	Limited	Short	1	The Town has reported zero natural sinkholes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.21: Risk Index Daviston

Town of Daviston						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	A dam failure could cause major flooding to neighborhoods, businesses, and roads.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town. Extreme heat would impact the elderly most, and extreme cold could impact persons living in poverty.

Flooding	Likely	Small	Limited	Short	8	All residential areas around the many creeks are vulnerable. There is a floodplain that runs in the east and central portion of Daviston and is north of AL Highway22. Persons and structures in this area are vulnerable to flooding.
Landslides	Unlikely	Very Small	Negligible	Short	1	Daviston has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Sinkholes	Possible	Small	Limited	Short	1	The Town has reported zero natural sinkholes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.
Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

Table 4.22: Risk Index of New Site

Town of New Site						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons
						/infrastructures are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	Possible	Small	Limited	Long	2	If a dam north of New Site failure it could cause flooding to neighborhoods, businesses, and roads.
Drought	Highly Likely	Large	Limited	Long	7	Drought would impact water supply, agriculture lands, forestry lands, and creeks.
Earthquake	Possible	Very Small	Negligible	Short	3	Would impact entire town
Extreme Temperatures	Highly Likely	Small	Limited	Short	3	Would affect entire the Town. Extreme heat would impact the elderly most, and extreme cold could impact persons living in

						poverty.
Flooding	Likely	Small	Limited	Short	8	The Town of New Site has one flood plain that starts in the north section of town towards the southern end of the Town limits. The Floodplain is along Timbergut Creek and Poe Branch. In the event of a flood business, homes, and infrastructure could be impacted. Minimal localized flooding could occur during a severe thunderstorm, but this would not be widespread.
Landslides	Unlikely	Very Small	Negligible	Short	1	New Site has zero susceptibility to landslides.
Lightning	Highly Likely	Small	Limited	Short	9	The Town is subject to lighting and could cause fires or damages to electrical system
Tornado	Highly Likely	Large	Critical	Med	9	A tornado has the potential to impact all portions of the county uniformly due to the random patterns of tornadoes.
Sinkholes	Possible	Small	Limited	Short	1	The Town has reported zero natural sinkholes.
Thunderstorm	Highly Likely	Moderate	Limited	Med	8	Due to the frequency of thunderstorms the town is uniformly vulnerable to straight-lined winds that are associated with thunderstorms. Minor to serious damage to structures, fallen trees, and infrastructure is possible during these events.
Tropical Storm /Tropical Depression / Hurricane	Possible	Moderate	Limited	Med	6	A major storm would cause large scale tree downing, home damage, and localized flooding to several residential neighborhoods within the town.

Winter Storm	Highly Likely	Large	Critical	Med	8	Winter storm would affect the persons living in poverty and elderly. Also, would cause major travel issues along the major state highway.
Wildfire	Possible	Moderate	Limited	Med	5	Wildfire would endanger the residential neighborhoods, as many are surrounded by woods or fields.

4.3 Probability of Future Occurrences and Damage Estimates

Tables 4.23 to 4.25 estimates hazard event frequency of occurrence cumulatively for Chambers, Chilton, and Tallapoosa counties. These estimates were calculated from events recorded over approximately a 13-year time period, 2006 to 2019 based on data from NOAA and local EMA. There is no guarantee the recorded level of hazard events will continue into the future at the same rate. However, the figures below will provide at least a possible estimate of potential damages.

Table 4.23: Probability of future Occurrence and Estimated Damages for Chambers County

Hazard	Occurrences	Time (Years) 2006- 2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	63 months have been associated with a drought event	13	N/A	4.85	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	3 events (Heat & Cold)	13	$0	0.23 event per year	$0
Flooding***	8 events	13	$4,216,168.34	0.615 events per year	$527,021
Hail	33 events	13	$2,000	2.54 events per year	$61
High Winds/Thunderstorms	92	13	$77,000	7.08 events per year	$837
Landslides	N/A	13	N/A	N/A	N/A
Lightning	0 Lightning events resulting in damage/injury/death	13	NA	NA	NA
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	3 events	13	$16,750.43	0.23 event per year	$5,583
Tornadoes	21 events	13	$2,110,000	1.62 events per year	$100,476.19
Wildfire**	278 events	13	2,368 acres burned	27.8events per year	8.52 acres
Winter Storms	5 event days	13	$0	0.38 event per year	$0

**The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision.*

***Due to the historical record on monitory figures for wildfires in Alabama this information was left blank.*

****Flooding figures may not be accurate due to information available.*

Table 4.24: Probability of future Occurrence and Estimated Damages for Chilton County

Hazard	Occurrences	Time (Years) 2006-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	41 months have been associated with a drought event	13	N/A	3.15	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	5 events (Heat & Cold)	13	$0	0.38 event per year	$0
Flooding***	4 events	13	$55,000	0.307 events per year	$13,750
Hail	39 events	13	$0	3 events per year	$0
High Winds/Thunderstorms	79	13	$273,000	6.08 events per year	$3,456
Landslides	N/A	13	N/A	N/A	N/A
Lightning	0	13	N/A	N/A	N/A
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	3 events	13	$7,000	0.1 event per year	$2,333
Tornadoes	13 events	13	$298,000	1 event per year	$46,480
Wildfire**	501 events	13	3,545.32 acres burned	50.1 events per year	7.07 acres
Winter Storms	5 event days	13	$0	0.38 event per year	$0

**The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision. **Due to the historical record on monitory figures for wildfires in*

*Alabama this information was left blank. ***Flooding figures may not be accurate due to information available.*

Table 4.25: Probability of Future Occurrence and Estimated Damages for Tallapoosa County

Hazard	Occurrences	Time (Years) 2006- 2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	10 years in this time frame have been associated with a drought event	13	N/A	0.769 event per year	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	11 events (Heat & Cold)	13	$150,000	0.85	$13,636
Flooding***	15 events	13	$1,800,000	1.15 events per year	$120,000
Hail	18 events	13	$0	1.38 events per year	$0
High Winds/Thunderstorms	63	13	$232,000	7.08 events per year	$2,521
Landslides	N/A	13	N/A	N/A	N/A
Lightning	0 Lightning events resulting in damage/injury/death	13	$	N/A	$0
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	4 events	13	$13,000	0.31 event per year	$3,250
Tornadoes	14 events	13	$2,192,000	1.08 events per year	$156,571
Wildfire**	210 events	13	2,353.60 acres burned	15.23 events per year	12.44 acres
Winter Storms	4 event days	13	$0	0.31 event per year	$0

**The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision. **Due to the historical record on monitory figures for wildfires in Alabama this information was left blank. ***Flooding figures may not be accurate due to information available.*

4. 4 Total Population and Property Valuation Summary by Jurisdiction

This data in Table 4.26 is derived from local municipal government and tax valuation from the local revenue offices, as well as the 2010 Census population. This data is for Tax Year 2019. This data provides an estimate of total exposure in the planning area.

Table 4.26: Total Population and Property Information by Jurisdiction

Jurisdiction	2018 Population	Number of Buildings	Tax Appraised Value of Improvements
Chambers (entire)	33,826	NA*	NA*
City of Lafayette	2,945	NA*	NA*
City of Lanett	6,318	NA*	NA*
City of Valley	9,305	NA*	NA*
Town of Cusseta	112	NA*	NA*
Town of Five Points	258	NA*	NA*
Town of Waverly	154	NA*	NA*
Town of Fredonia	220	NA*	NA*
Unincorporated County	14,734	NA*	NA*
Chilton County (entire)	43,930	11,241*	$885,044*
Clanton	8,984	NA	NA
Jemison	2,650	NA	NA

Maplesville	686	NA	NA
Thorsby	2,110	NA	NA
Unincorporated County	47,468	NA	NA
Tallapoosa County (entire)	40,636	20002	$2,735,341,840.00
City of Alexander City	14,621	7780	$1,062,490,500.00
Cite of Dadeville	3,115	2022	$269,692,300.00
City of Tallassee	5,013	1464	$102,570,280.00
Town of Camp Hall	1,101	855	$57,146,940.00
Town of Daviston	186	225	$15,649,960.00
Town of Jackson's Gap	779	764	$90,585,140.00
Town of New Site	791	761	$63,910,640.00
Unincorporated County	14,997	6123	$1,065,483,980.00

***It is important to note that actual values may be somewhat higher than those values assigned for tax purposes. Also, these values do not include tax-exempt structures such as government buildings and churches.*

**The individual data was unavailable at this time for all jurisdiction in Chambers County, Clanton, Maplesville, Jamison, Calera, and Thorsby will be updated in 2025.*

4.5 Critical Facilities/Infrastructure by Jurisdiction

Critical facilities are defined as facilities that are essential to the community or may be crucial to the delivery of vital services, such as utilities and public safety. Critical facilities may also house or serve an at-risk population such as schools, hospitals, or nursing homes. Critical facilities would also likely result in catastrophic financial loss if severely damaged or destroyed, such as major industrial buildings, courthouses, and other government facilities. Critical facilities may vary from a transmission line that provides vital electricity to the community, to a hospital that provides medical care, or to the public safety facilities that serve a community.

A concerted effort was made using information from the public, EMA, local government officials, and industry stakeholders to identify the critical facilities. Such facilities were considered vital to transportation, energy, communication, health care, utility systems, food services, and the delivery of public safety. Structures that are occupied by at-risk populations such as schools are also included. They are listed with the most current estimated replacement cost, according to their insured values in Table 4.20 through 4.22. The information listed below was provided by the individual jurisdictions.

Other critical facilities locations are the facilities that store Extremely Hazardous Substances (EPCRA Section 302-Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA, Section 313 Toxic Chemicals, CAA 122) Regulated Chemicals for Accidental Release Prevention and other facilities that are covered. Local EMA offices maintain these lists.

Table 4.27 to Table 4.29 are a list of critical facilities summarized by type in the planning area. This list is not all-inclusive and includes facilities prioritized by specific jurisdictions. An inventory of critical facilities will be reviewed periodically and continually updated to reflect any changes in each of the jurisdictions.

Table 4.27: Critical Facilities Asset Inventory and Estimates Values for Chambers County

County	Jurisdiction	Critical Facilities	Estimated Cost
Chambers	Chambers County	Chambers County 911 & EMA	NA*
Chambers	Chambers County	Chambers County Courthouse & Annex	NA*
Chambers	Chambers County	Chambers County Sheriff's Department	NA*
Chambers	Chambers County	Chambers County Highway Department	NA*
Chambers	Chambers County	Chambers County Health Department	NA*
Chambers	Chambers County	Chambers County DHR	NA*
Chambers	Chambers County	Chambers County Detention Facility	NA*
Chambers	City of Valley	City of Valley PD	NA*
Chambers	City of Valley	City of Valley City Hall	NA*
Chambers	City of Valley	City of Valley Community Center	NA*
Chambers	City of Valley	City of Valley Street Department	NA*
Chambers	City of Valley	East Al Water & Sewer	NA*
Chambers	City of Valley	East AL Fire & EMS Stations 1, 2 and 3	NA*
Chambers	City of Lanett	City of Lanett City Hall	NA*
Chambers	City of Lanett	City of Lanett Street, Water & Sanitization Departments	NA*
Chambers	City of Lanett	City of Lanett Power Department	NA*
Chambers	City of Lanett	City of Lanett Fire & EMS	NA*
Chambers	City of Lanett	City of Lanett Housing Authority	NA*
Chambers	City of Lanett	City of Lanett PD	NA*
Chambers	City of Lafayette	City of Lafayette City Hall	NA*
Chambers	City of Lafayette	City of Lafayette Fire & EMS	NA*
Chambers	City of Lafayette	City of Lafayette PD	NA*
Chambers	City of Lafayette	City of Lafayette Street, Water & Sanitization Departments	NA*
Chambers	City of Lafayette	City of Lafayette Power	NA*
Chambers	Town of Cusseta	Cusseta VFD	NA*
Chambers	Town of Five Points	Five Points VFD	NA*
Chambers	Town of Fredonia	Fredonia VFD	NA*
Chambers	Chambers County	Abanda VFD	NA*
Chambers	Chambers County	Oak Bowery	NA*
Chambers	Chambers County	Mt Olive VFD	NA*
Chambers	Chambers County	Ridge Grove VFD	NA*
Chambers	Chambers County	Standing Rock VFD	NA*
Chambers	Chambers County	Union Hill VFD	NA*
Chambers	Chambers County	West Chambers VFD	NA*
Chambers	Lanett Jurisdiction	Huguley Fire Station #1	NA*

Chambers	Cusseta Jurisdiction	Huguley Fire Station #2	NA*
Chambers	City of Valley	East AL Nursing Home	NA*
Chambers	City of Valley	East AL Home Health Office	NA*
Chambers	City of Valley	East AL Hospice Office	NA*
Chambers	City of Lafayette	Lafayette Nursing Home	NA*
Chambers	City of Lafayette	Lafayette Extended Care	NA*
Chambers	City of Lanett	Golden Living Center	NA*
Chambers	City of Valley	Sylvia Word Manor	NA*
Chambers	City of Valley	Lakewood Senior Living	NA*
Chambers	City of Valley	Valley Haven School (Special Needs)	NA*
Chambers	City of Valley	J.D Alsobrook Center	NA*
Chambers	Acts Academy	Acts Academy - Private	NA*
Chambers	Lafayette JD	Plainview Head start	NA*
Chambers	City of Valley	Southern Union State Community College	NA*
Chambers	City of Lanett	Springwood School - Private	NA*
Chambers	City of Valley	Temple Christian School	NA*
Chambers	City of Lafayette	Chambers Academy	NA*
Chambers	Lafayette JD	Chambers County Career Tech	NA*
Chambers	Town of Five Points	Five Points Elementary	NA*
Chambers	City of Lafayette	JP Powell Middle School	NA*
Chambers	City of Lafayette	Lafayette Eastside Elementary	NA*
Chambers	City of Lafayette	Lafayette High School	NA*
Chambers	City of Lanett	Lanett Senior High School	NA*
Chambers	Lanett JD	Huguely Elementary	NA*
Chambers	City of Lanett	Lanett Central Elementary	NA*
Chambers	City of Lanett	Lanett Junior High School	NA*
Chambers	City of Valley	Bob Harding Shawmut Elementary	NA*
Chambers	City of Valley	Fairfax Elementary	NA*
Chambers	City of Valley	Lafayette Lanier Elementary	NA*
Chambers	City of Valley	Valley High School	NA*
Chambers	City of Valley	WF Burns Middle School	NA*
Chambers	City of Valley	National Guard Armory	NA*
Chambers	Chambers County	Chambers County Industrial Development Authority	NA*
Chambers	City of Valley	EAMC Lanier Hospital	NA*
Chambers	City of Lanett	Lanett Municipal Airport	NA*
Chambers	Lafayette JD	Chambers County BOE	NA*
Chambers	Chambers County	Chambers County Industrial Park	NA*
Chambers	Chambers County	Cusseta Industrial Park	NA*
Chambers	Lanett JD	Huguley Industrial Park	NA*

Chambers	City of Valley	Valley Industrial Park	NA*
Chambers	Town of Cusseta	Ajin USA	NA*
Chambers	Lanett JD	WestRock	NA*
Chambers	Lanett JD	Knauf Insulation	NA*
Chambers	Town of Cusseta	Wooshin USA	NA*
Chambers	Town of Cusseta	Daedong Hi-lex for America	NA*
Chambers	City of Lafayette	Saehaesung Alabama Inc	NA*
Chambers	City of Valley	KMIN USA Inc	NA*
Chambers	Lanett JD	Letica Corp	NA*
Chambers	City of Lafayette	Kardoes Rubber / Hexpol Co	NA*
Chambers	Town of Cusseta	Great Lakes Metal Stamping	NA*
Chambers	City of Lafayette	East AL Lumber	NA*
Chambers	Town of Cusseta	Leehan America Inc	NA*
Chambers	City of Valley	West Unified Communications Services	NA*
Chambers	Lanett JD	Charter/WOW Communications	NA*

*Estimated costs for these facilities are unavailable to the Chambers County EMA director at this time. This information will be added in the 2025 update.

Table 4.28: Critical Facilities Asset Inventory and Estimates Values for Chilton County

County	Jurisdiction	Critical Facilities	Estimated Cost
Chilton	Chilton County	Courthouse/911	$3,466,156
Chilton	Chilton County	Chilton County Road Department	$9,476
Chilton	Chilton County	Chilton County Airport	$125,866
Chilton	Chilton County	Chilton County Health Department	$72,390
Chilton	Chilton County	Enterprise Community Shelter (tornado shelter)	$72,600
Chilton	Chilton County	West Chilton Community Shelter (Red Cross Shelter)	$102,600
Chilton	Chilton County	Collins Chapel Baptist Church (Red Cross Shelter)	$282,500
Chilton	Chilton County	Verbena First Baptist (Red Cross Shelter)	$339,700 2nd church ($183,700)
Chilton	Chilton County	Providence #2 Baptist Church (Red Cross Shelter)	$694,900
Chilton	Chilton County	Union Grove Baptist Church (Red Cross Shelter)	$241,226
Chilton	Chilton County	Chilton County Baptist Association (Red Cross Shelter)	$96,346
Chilton	Chilton County	Chilton County Medical Center (Hospital)	$412,515
Total			**$6,106,975**

Table 4.29: Critical Facilities Asset Inventory and Estimates Values for Tallapoosa County

County	Jurisdiction	Critical Facilities	Estimated Cost
Tallapoosa	Tallapoosa County	Buttston Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Eagle Creek Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Hackneyville Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Ourtown/Willow Point Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Paces Point Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Reeltown Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Stillwaters Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Union Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Buttston Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Eagle Creek Volunteer Fire Department Station 1 and 2	NA*
Tallapoosa	Tallapoosa County	Hackneyville Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Ourtown/Willow Point Volunteer Fire Department Station 1 and 2	NA*
Tallapoosa	Tallapoosa County	Paces Point Volunteer Fire Department Station 1, 2, and 3	NA*
Tallapoosa	Tallapoosa County	Reeltown Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Stillwaters Volunteer Fire Department	NA*
Tallapoosa	Tallapoosa County	Dadeville Elementary School	NA*
Tallapoosa	Tallapoosa County	Dadeville High School	NA*
Tallapoosa	Tallapoosa County	Dadeville Football Stadium / Ball Fields	NA*
Tallapoosa	Tallapoosa County	Horseshoe Bend K-12	NA*
Tallapoosa	Tallapoosa County	Horseshoe Bend Football Stadium and Ball Fields	NA*
Tallapoosa	Tallapoosa County	Reeltown Elementary School	NA*
Tallapoosa	Tallapoosa County	Reeltown High School	NA*
Tallapoosa	Tallapoosa County	Reeltown Football Field / Ball Fields	NA*
Tallapoosa	Tallapoosa County	BOE Office	NA*
Tallapoosa	Tallapoosa County	Bus Shop	NA*

Tallapoosa	Tallapoosa County	Union Volunteer Fire Department Station 1 and 2	NA*
Tallapoosa	Tallapoosa County	Dadeville Courthouse	NA*
Tallapoosa	Tallapoosa County	Courthouse Annex	NA*
Tallapoosa	Tallapoosa County	District Shops (1-5)	NA*
Tallapoosa	Tallapoosa County	Engineering Office	NA*
Tallapoosa	Tallapoosa County	Jackson's Gap Water Authority	NA*
Tallapoosa	Tallapoosa County	Hackneyville Water Authority	NA*
Tallapoosa	Tallapoosa County	Walnut Hill Water Authority	NA*
Tallapoosa	Tallapoosa County	Wall Street Water Authority	NA*
Tallapoosa	Tallapoosa County	911 Administrative Office	NA*
Tallapoosa	Tallapoosa County	Tallapoosa County Sheriff's Office/Jail	NA*
Tallapoosa	Daviston	FEMA Community Safe Room	NA*
Tallapoosa	Daviston	Town Hall	NA*
Tallapoosa	Daviston	Fire Station	NA*
Tallapoosa	New Site	Town Hall, PD in same building	NA*
Tallapoosa	New Site	Fire Department	NA*
Tallapoosa	New Site	Senior Center	NA*
Tallapoosa	New Site	Gym	NA*
Tallapoosa	New Site	Ball Fields	NA*
Tallapoosa	New Site	Water Authority	NA*
Tallapoosa	New Site	Playground	NA*
Tallapoosa	Alexander City	BOE Office	NA*
Tallapoosa	Alexander City	Jim Pearson Elementary School	NA*
Tallapoosa	Alexander City	Stephens Elementary School	NA*
Tallapoosa	Alexander City	Radney Elementary School	NA*
Tallapoosa	Alexander City	Alexander City Middle School	NA*
Tallapoosa	Alexander City	Benjamin Russell High School	NA*
Tallapoosa	Alexander City	BOE Bus Shop	NA*
Tallapoosa	Alexander City	City Hall Alexander City	NA*
Tallapoosa	Alexander City	Police Department	NA*
Tallapoosa	Alexander City	Station 1 Fire Department	NA*
Tallapoosa	Alexander City	Station 2 Fire Department	NA*
Tallapoosa	Alexander City	Adelia M. Russell Library	NA*
Tallapoosa	Alexander City	Bud-Porch Senior Center	NA*
Tallapoosa	Alexander City	T.C. Russell Air Terminal and Airfield	NA*
Tallapoosa	Alexander City	Soccer Complex	NA*
Tallapoosa	Alexander City	6th Street Park	NA*
Tallapoosa	Alexander City	Sports Plex 250 Acres (+/-)	NA*

Tallapoosa	Alexander City	20 Athletic Fields	NA*
Tallapoosa	Alexander City	2 City Pools	NA*
Tallapoosa	Alexander City	4 Playgrounds	NA*
Tallapoosa	Alexander City	1 Boat Ramp	NA*
Tallapoosa	Alexander City	1 Golf Course	NA*
Tallapoosa	Alexander City	Stand Park	NA*
Tallapoosa	Alexander City	Cooper Recreation Center	NA*
Tallapoosa	Alexander City	50 Plus Senior Activity Center	NA*
Tallapoosa	Alexander City	Splash Pad	NA*
Tallapoosa	Alexander City	Byers Field	NA*
Tallapoosa	Alexander City	Inert Landfield	NA*
Tallapoosa	Alexander City	Public Works/Facilities	NA*
Tallapoosa	Alexander City	Fresh Water Treatment Facility	NA*
Tallapoosa	Alexander City	Wastewater / Sewage Treatment Facility	NA*
Tallapoosa	Dadeville	City Hall	NA*
Tallapoosa	Dadeville	Fire Department	NA*
Tallapoosa	Dadeville	Police Department	NA*
Tallapoosa	Dadeville	Ball Fields-McKelvey Park	NA*
Tallapoosa	Dadeville	Recreation Center	NA*
Tallapoosa	Dadeville	Public Works/Facilities	NA*
Tallapoosa	Dadeville	2 Parks	NA*
Tallapoosa	Dadeville	Water Department/Distribution	NA*
Tallapoosa	Dadeville	Gas Department	NA*
Tallapoosa	Dadeville	Sewage Treatment Facility	NA*

*Estimated costs for these facilities are unavailable to the Tallapoosa County EMA director at this time. This information will be added in the 2025 update.

4.6 Vulnerable Populations in Chambers, Chilton, and Tallapoosa Counties

4.6.1 Background

According to the CDC social vulnerability refers to a community's resilience after an external hazard has taken place. These hazards may be natural-caused or human-caused disasters. When a community's social vulnerability is reduced human and economic losses are less likely. The CDC created a Social Vulnerability Index to measure how vulnerable a county or census tract is to any hazard. The measurement is based on a calculation that uses fifteen census variables, which help identify the vulnerable portion of a population. The CDC uses a scale of 0 to 1. A score of 0 indicates that a community has no vulnerable to any hazard, but a score of 1 means a community is extremely vulnerable to any hazard.

4.6.2 Overall Vulnerability

Tallapoosa	Alexander City	20 Athletic Fields	NA*
Tallapoosa	Alexander City	2 City Pools	NA*
Tallapoosa	Alexander City	4 Playgrounds	NA*
Tallapoosa	Alexander City	1 Boat Ramp	NA*
Tallapoosa	Alexander City	1 Golf Course	NA*
Tallapoosa	Alexander City	Stand Park	NA*
Tallapoosa	Alexander City	Cooper Recreation Center	NA*
Tallapoosa	Alexander City	50 Plus Senior Activity Center	NA*
Tallapoosa	Alexander City	Splash Pad	NA*
Tallapoosa	Alexander City	Byers Field	NA*
Tallapoosa	Alexander City	Inert Landfield	NA*
Tallapoosa	Alexander City	Public Works/Facilities	NA*
Tallapoosa	Alexander City	Fresh Water Treatment Facility	NA*
Tallapoosa	Alexander City	Wastewater / Sewage Treatment Facility	NA*
Tallapoosa	Dadeville	City Hall	NA*
Tallapoosa	Dadeville	Fire Department	NA*
Tallapoosa	Dadeville	Police Department	NA*
Tallapoosa	Dadeville	Ball Fields-McKelvey Park	NA*
Tallapoosa	Dadeville	Recreation Center	NA*
Tallapoosa	Dadeville	Public Works/Facilities	NA*
Tallapoosa	Dadeville	2 Parks	NA*
Tallapoosa	Dadeville	Water Department/Distribution	NA*
Tallapoosa	Dadeville	Gas Department	NA*
Tallapoosa	Dadeville	Sewage Treatment Facility	NA*

*Estimated costs for these facilities are unavailable to the Tallapoosa County EMA director at this time. This information will be added in the 2025 update.

4.6 Vulnerable Populations in Chambers, Chilton, and Tallapoosa Counties

4.6.1 Background

According to the CDC social vulnerability refers to a community's resilience after an external hazard has taken place. These hazards may be natural-caused or human-caused disasters. When a community's social vulnerability is reduced human and economic losses are less likely. The CDC created a Social Vulnerability Index to measure how vulnerable a county or census tract is to any hazard. The measurement is based on a calculation that uses fifteen census variables, which help identify the vulnerable portion of a population. The CDC uses a scale of 0 to 1. A score of 0 indicates that a community has no vulnerable to any hazard, but a score of 1 means a community is extremely vulnerable to any hazard.

4.6.2 Overall Vulnerability

The Figure 56 is based on the data collected from the CDC's Social Vulnerability Index (SVI), which depicts the overall social vulnerability for Chambers, Chilton, and Tallapoosa counties. The overall SVI score for Chambers County 0.8404, Chilton County is 0.7440, and Tallapoosa County is 0.9093, which is based on a scale 0 to 1.

Each county has a range of vulnerability from low to high at the census tract level. Tallapoosa County is the most vulnerable county in Phase III-A, but the range of vulnerability is from low to high. The western portion of unincorporated Tallapoosa County and Alexander City has the lowest rate of vulnerability. The City of Alexander City and the southern portions of unincorporated Tallapoosa County have a medium to high vulnerability rate. Coosa County's vulnerability varies widely from around the county. The areas near towns or cities have a low to medium rate of vulnerability, but the Rockford area has the highest vulnerability rate. Chambers and Chilton County are the least vulnerable in Phase III-A.

Due to the medium to high vulnerability populations in Tallapoosa and Coosa counties each jurisdiction should create plans and policies to protect these individuals from injury or death during any hazard. Additional information about those individuals who are the most vulnerable will be added to the update for the Hazard Mitigation Plan. Understanding where the vulnerable population pockets are in each jurisdiction will help identify what hazards will or are more likely to impact these vulnerable people. Even though Chambers and Chilton counties have a low to medium county wide vulnerability each jurisdiction should be aware where these vulnerably population live.

The CDC breaks down the fifteen variables into four themes that summarize how an area is socially vulnerable to a hazard. The themes focus on education, socioeconomic, housing, language skills, housing, ethnicity, family characters, and access to vehicles. Please refer to Figure 46 to Figure 50 for the details regarding vulnerability based on the specific themes.

4.6.3 Housing and transportation

The housing and transportation are based on data from the American Community Survey for 2012-2016 for following variables: multi-unit housing, mobile homes, home crowing, no access to vehicles, and group quarters. Figure 47 shows that there is major despair for portions population living in Chambers, Chilton and Tallapoosa counties to living conditions and access to transportation, thus making these people more vulnerable to natural hazards. Small towns, the City of City of Alexander City, and other unincorporated areas are more likely to have vulnerability to hazards than those persons living in places like Jackson's Gap, New Site, and Clanton. Persons living in multi-unit housing, manufactured homes, or in a crowded home are vulnerable to natural hazards such as tornadoes, flooding, hail, high winds/ thunderstorms, winter storms, tropical storms, and dam failure because these types of homes do not provide a safe environment to ride out a hazard. These types of homes are not built to the same standards as standalone home, for example manufactured homes are built to withstand maximum winds of 70 mph. These structures will not survive high winds or tornadoes. Persons who do not have access to transportation are vulnerable to dam failure, flooding, high winds/ thunderstorms, tornadoes, wildfire, winter storms because the option to leave their home is at the mercy of obtaining a way to leave such as by vehicle, public transportation, bike, or walking. These modes of transportation are not viable for

all individuals due to a lack of access or physical abilities. These persons who do not have the ability to leave are at risk because certain natural hazards provide little warnings such as a wildfire, dam failure, or tornado. If persons do not have a safe place in their home or access to transportation (of any type) then their lives will be vulnerable/ risked during the event of a natural hazard. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.4 Housing Composition and Disability

Figure 58 shows where people live in Chambers, Chilton and Tallapoosa counties who are more vulnerable to hazards based on housing composition and the number of persons with disabilities. The housing composition and disability map is based on data from the American Community Survey for 2012-2016 for the following variables: aged 65+, aged 17 and under, single-parent household, aged 5 and over with a disability. All four counties have a range of vulnerability from low to high census tracts based on the housing composition and individuals with disabilities. The rural areas in Chilton County such as Jemison, Thorsby, or unincorporated Chilton County have a smaller portion of the population that are highly vulnerable to hazards. The City of Alexander City and the western and southern portion of Tallapoosa County have the largest portions of the population that are highly vulnerable to hazards. In terms of hazard mitigation, the housing composition is important to understand because children and the elderly are more vulnerable to succumb injuries during a hazard such as extreme heat or tornado event than a young or middle-aged adult. Natural hazards are also dangerous if a child or elderly is home alone during the event because they may not have the knowledge or ability to address or react to a hazardous situation. For example, if a child is home alone during a tornado event, he or she may not have the knowledge or experience to know where their safe place during a tornado, which makes that child vulnerable. Persons who have a disability (physical or mental) are extremely vulnerable to hazards of any type because they may be socially or logistically isolated when a hazard such as a dam failure, flooding, winter storm, or tornado. These persons may not be able to evacuate quickly or may not even know the natural hazard event is taking place. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.5 Socioeconomics

Figure 59 shows what census tracts in Chambers, Chilton and Tallapoosa counties where people live who are more vulnerable to hazards based on the socioeconomic status of the population living in the planning region. Vulnerability data based on socioeconomic status, refer to the figure below, is gathered from the American Community Survey for 2012-2106 for following variables: poverty, unemployment, per capita income, and no high school diploma. All but two census tracts in Autauga County have a medium to a high level of vulnerability based on the population's socioeconomic status. The City of Alexander City has a low vulnerability. Rural Chilton County has a low vulnerability to hazards based on socioeconomic status, but other areas in Chambers County, such as Five Points have a medium to a high level of vulnerability based on the population's socioeconomic status. Vulnerability to natural hazards due to socioeconomics can make a person or a family vulnerable to all hazards. These persons may not have the financial ability to prepare for hazards before the event happens such as winter storms or droughts, but they may not also have the financial ability to recover once a natural hazard event has taken place. The ability to evacuate during or before a hazard happens may not be an option for those persons who

have socioeconomic difficulties. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.6 Minority and English Language Proficiency

Figure 50 shows where in Chambers, Coosa, Chilton and Tallapoosa counties persons live who are vulnerable to hazards based on the population's minority status and English language proficiency. The minority and English language proficiency map are based on data from the American Community Survey for 2012-2016 for the following variables: Ethnicity and English language proficiency. Tallapoosa County has the lowest number of persons who are vulnerable based on minority status and English proficiency. Chilton County has a low to medium rate of vulnerable, but the southwest corner of county near Jemison and Thorsby has a high pocket of vulnerability. In the Eastern and southern portions of Coosa County the largest portion of persons vulnerable to any hazard based on the population's ethnicity and ability to communicate in English. Providing information out in multiple languages is important because not everyone can read, write, or understand verbal English. For those individuals who are not English proficient obtaining useful information about natural hazards is essential to their survival. If a person is unaware that a hazardous event is/going to take place due to a language barrier their life is at stake to all-natural hazards. These persons will essentially be taken by surprise when a tornado, wildfire, winter storm, flood, or dam failure take place in their community. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

Figure 46: Social Vulnerability Chambers, Chilton, and Tallapoosa counties

Social Vulnerbility for AEMA Phase 3

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

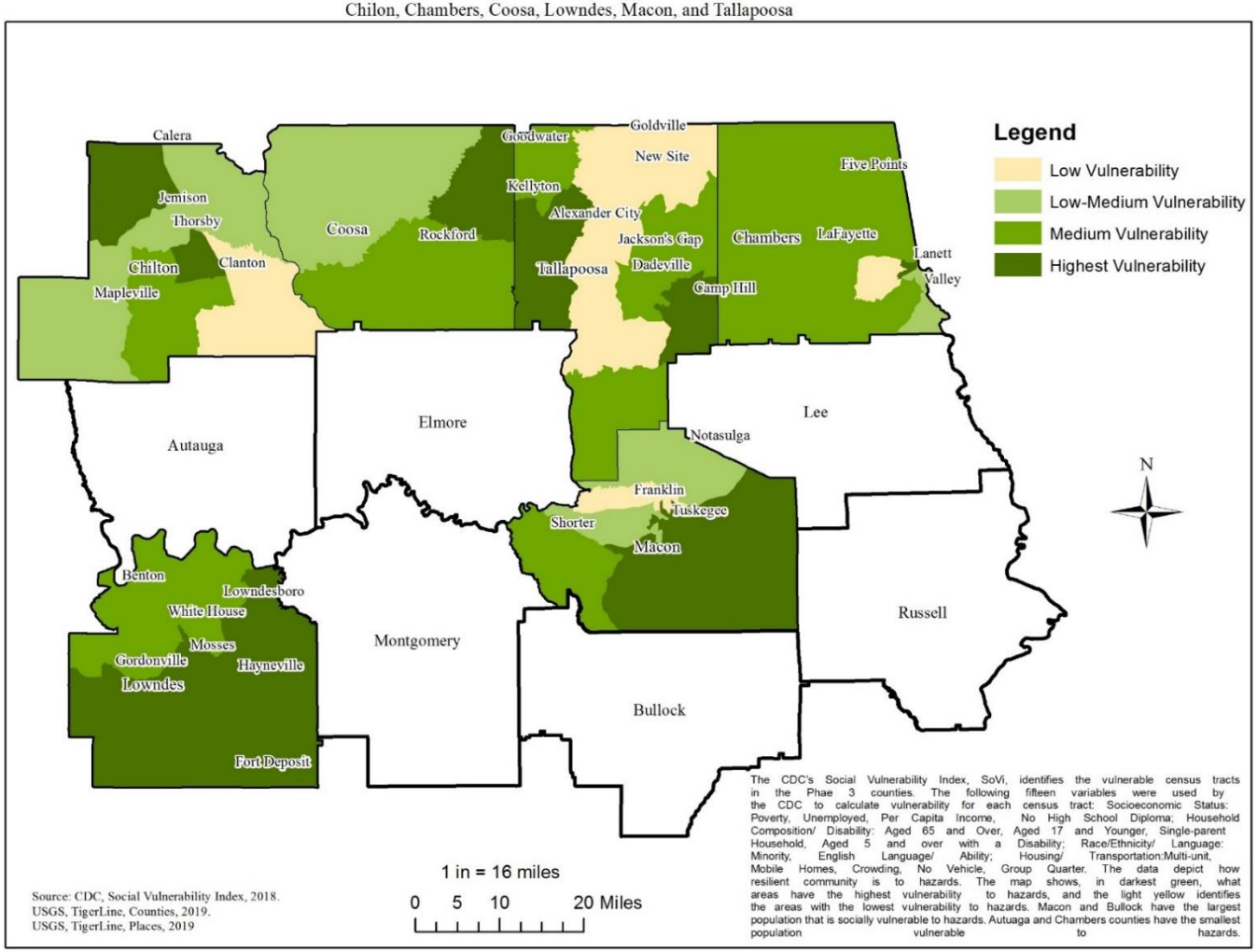


Figure 47: Social Vulnerability Themes Chambers, Chilton, and Tallapoosa counties

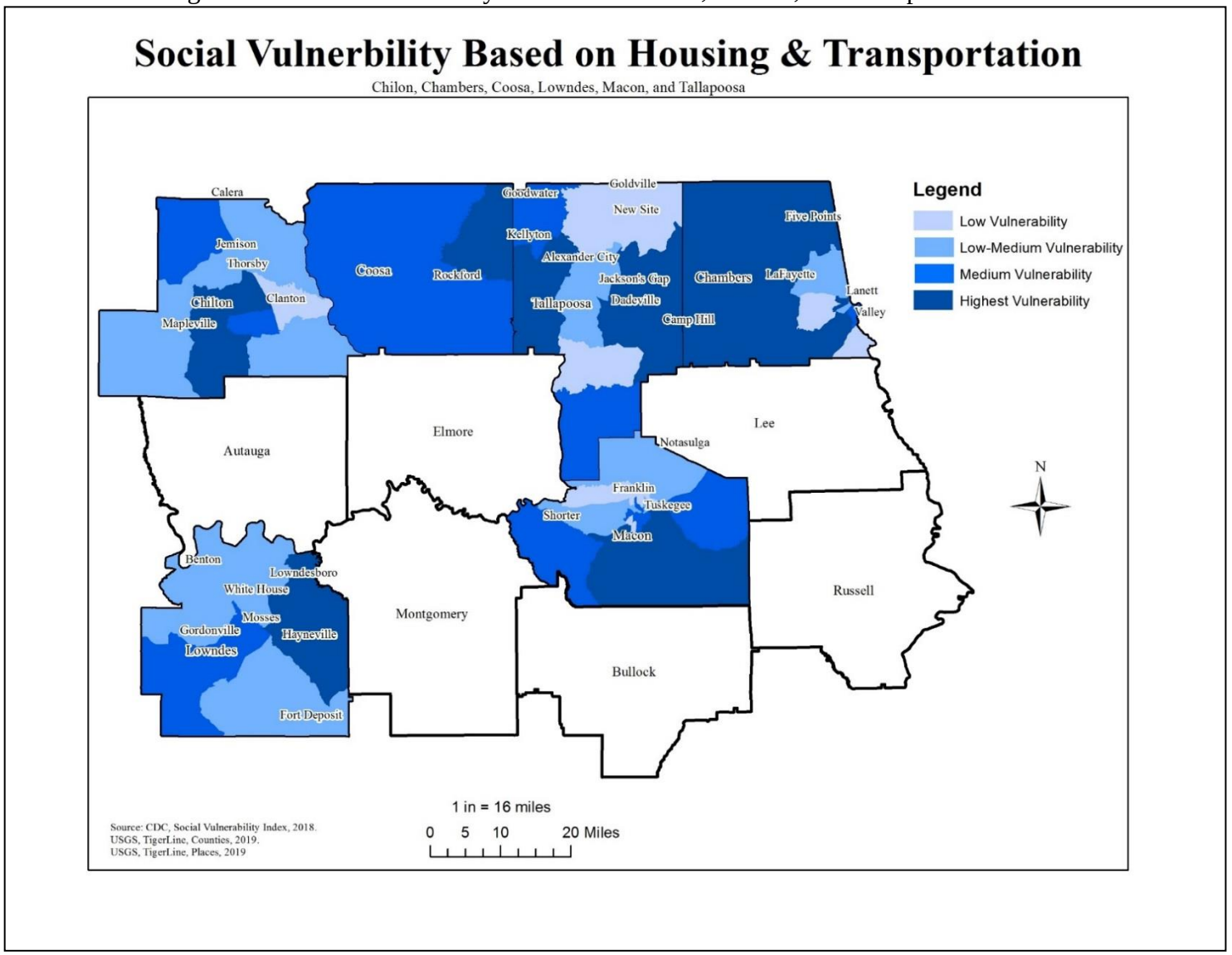


Figure 48: Social Vulnerability Themes **Chambers, Chilton, and Tallapoosa** counties

Social Vulnerbility based on Housing & Disability

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

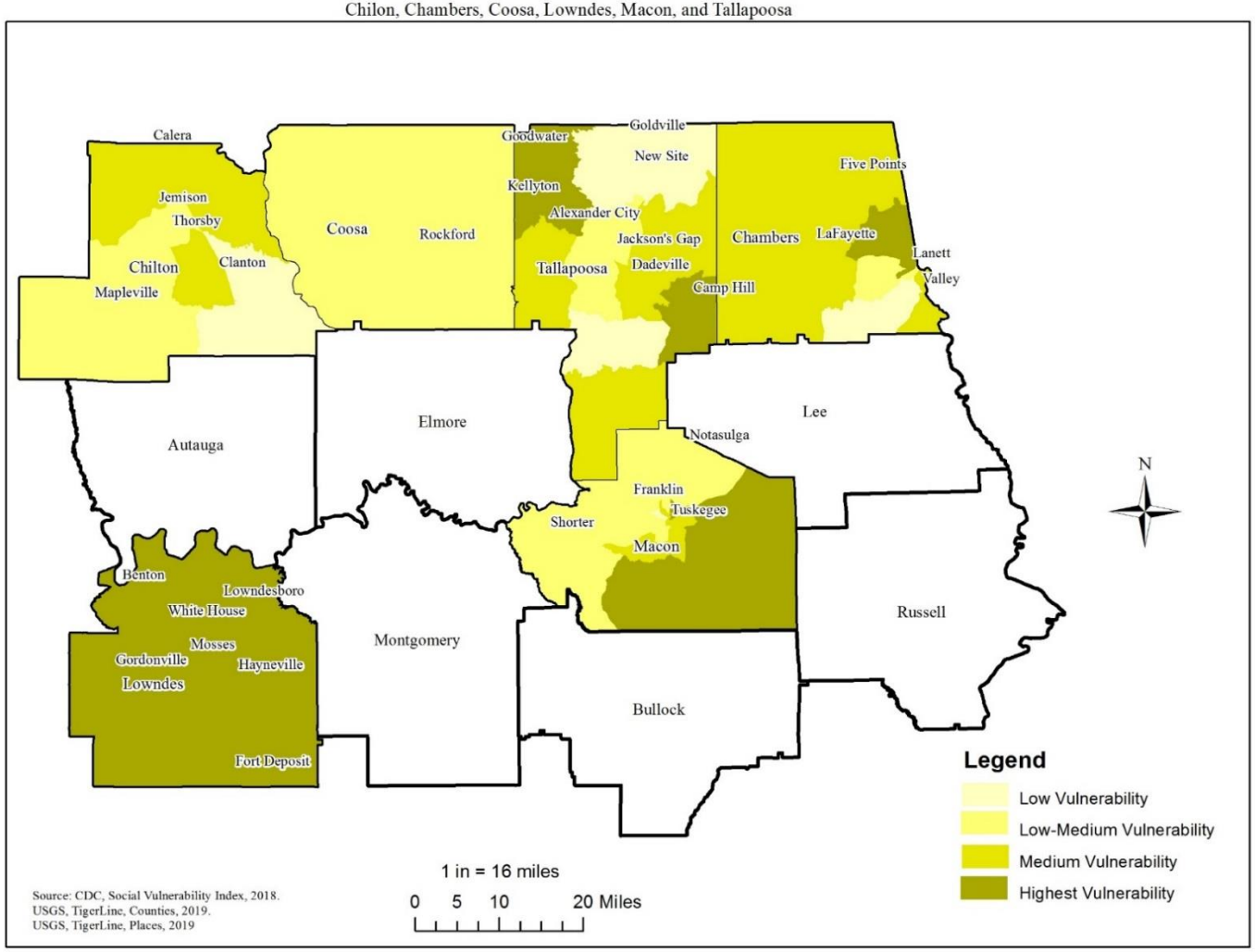


Figure 49: Social Vulnerability Themes **Chambers, Chilton, and Tallapoosa** counties

Social Vulnerbility Based on Socieconomics

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

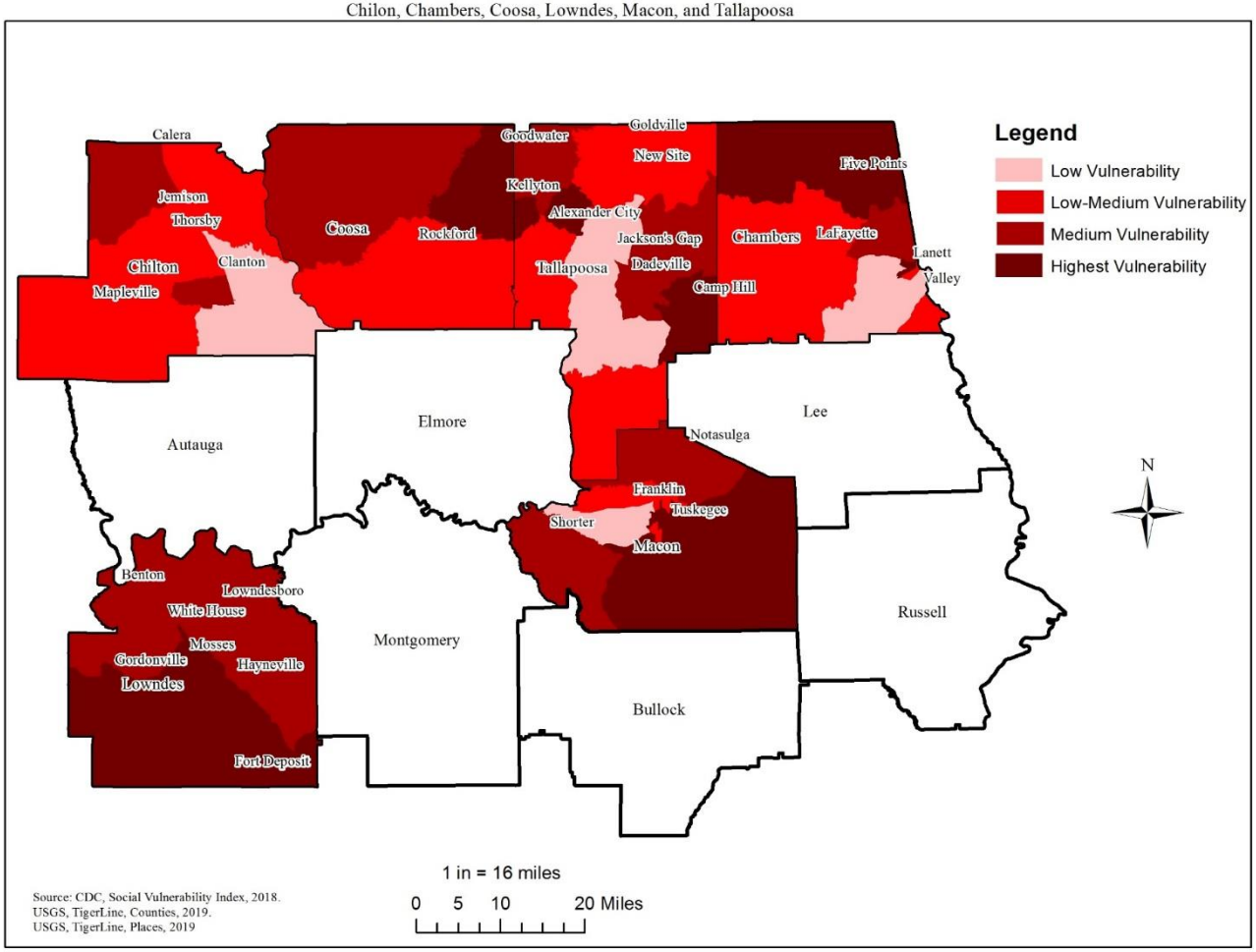
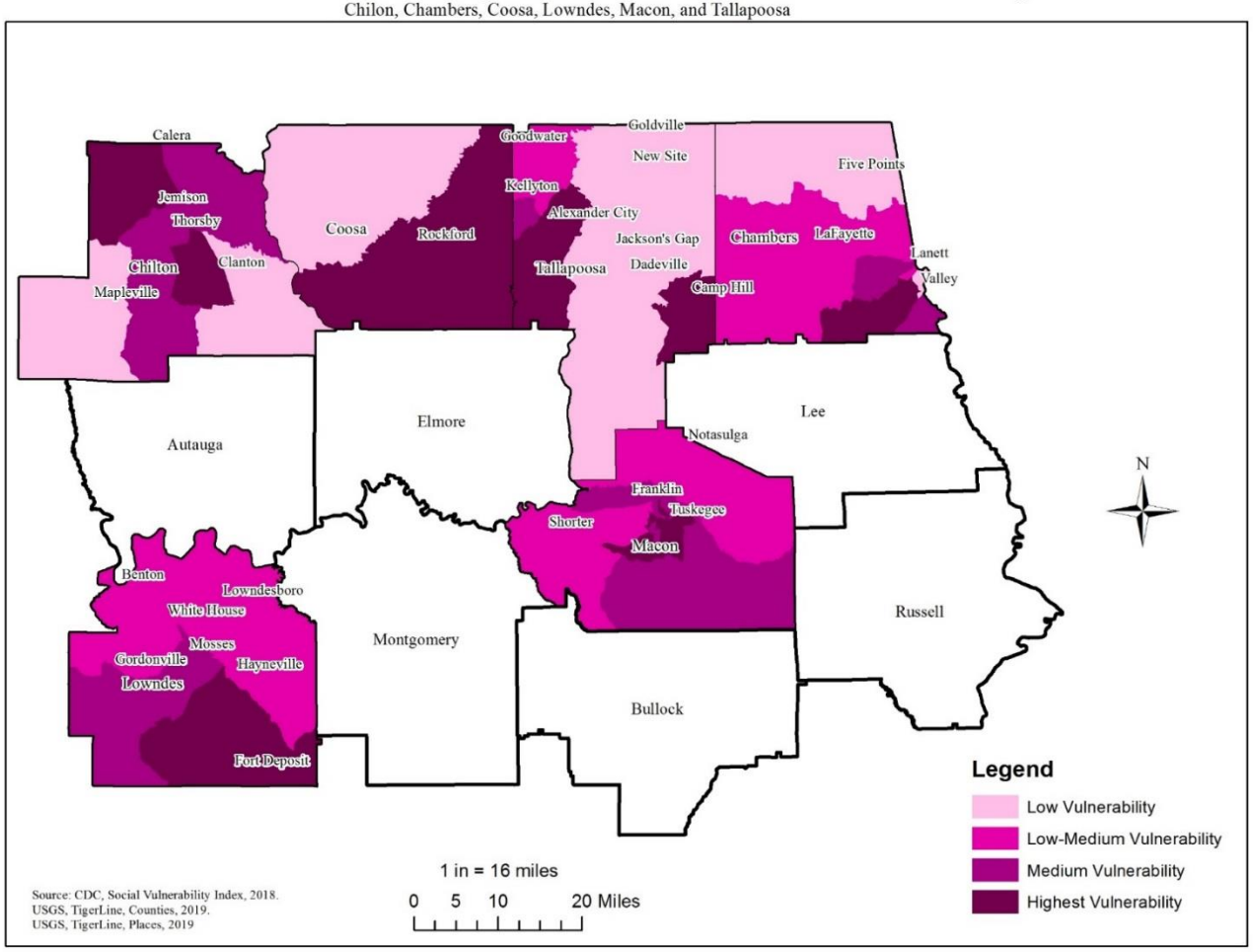


Figure 50: Social Vulnerability Themes Chambers, Chilton, and Tallapoosa counties

Social Vulnerbility based on Minority Status

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa



SECTION 5 – MITIGATION STRATEGY

Mitigation Planning Process
5.2 Regional Mitigation Goals
5.3 Regional Mitigation Strategies
5.4 Capabilities Assessment for Local Jurisdictions
5.5 Jurisdictional Mitigation Action Plans
5.5.1 Lee-Russell Council of Governments Mitigation Action Plans
5.5.2 Chambers County Jurisdiction Actions
5.5.3 Chilton County Jurisdiction Actions
5.5.4 Tallapoosa County Jurisdiction Actions

5.1 Mitigation Planning Process

Local planning stakeholders were asked to review the progress of their previously adopted mitigation goals and to reevaluate those strategies based on updated information from the Risk Assessment and vulnerability to each profile hazard. The goals and strategies were viewed in light of the impact and extent of hazard occurrences in local jurisdictions and the region.

5.2 Mitigation Goals

Mitigation goals are broad statements that focus on long-term visions to reduce or avoid vulnerabilities to identified hazards within the region. Through the planning process, six primary goals were developed from corresponding goals in previous local mitigation plans. The mitigation goals expected to be achieved by development, adoption, and continuation of this plan include:

1. **PREVENTION**: Manage the development of land and buildings to minimize the risk of life and property loss due to hazard events.
2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.
3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
4. **STRUCTURAL MITIGATION**: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
5. **EMERGENCY SERVICES**: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

5.3 Mitigation Strategies

Mitigation strategies are broad, yet more defined actions that help to further define mitigation goals. A wide range of activities that are aligned with the six-goal categorizations was considered in order to help achieve the established mitigation goals, in particular emphasizing mitigation concerning new and existing buildings and infrastructure. These strategies also provide additional background to addressing any specific hazard concerns. The six-goal categorizations used for mitigation strategies include Prevention, Property Protection, Natural Resource Protection, Structural Mitigation, Emergency Services, and Public Awareness and Education. These are discussed in detail below, as well as identifying appropriate hazard(s) that are mitigated through these approaches.

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment of development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program-NFIP (Flooding)

7. Capital improvements planning (All Hazards)
8. Railroad Crossing Study

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of flood-prone properties (Flooding)
2. Relocation of flood-prone properties (Flooding)
3. Elevation of flood-prone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as a floodplain, wetlands, and steep slopes. Examples of natural resource protection activities include:

1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Sinkholes/Land Subsidence, Wildfire)

Goal #4: Structural Mitigation

Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing the construction of appropriate structures. Examples of structural mitigation protection activities include:

1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (Tornadoes, Extreme Temperatures, Winter Storms)
6. Underground Utilities (Tornadoes, Wildfire, Lighting, Hurricane/Tropical Storm/Depression)

Goal #5: Emergency Services

Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:

1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)
5. Provision of alternative power, e.g., generators (All Hazards)
6. Debris removal (All Hazards)

Goal #6: Public Education and Awareness

Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:

1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)

5.4 Capabilities Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive mitigation strategy by examining existing programs, regulations, resources, and practices. This determination allows a jurisdiction to assess whether mitigation actions are feasible, due to financial resources, political climate, administrative capacity, and other jurisdictional capabilities.

The Alabama Emergency Management Agency (AEMA) Division D is a twelve-county region composed of municipalities with a myriad of governmental powers. The specific area for this Phase III-An included Chambers, Chilton, Coosa, and Tallapoosa counties Hazard Mitigation Plan is four counties with twenty-six municipalities. All counties governments are governed by an elected commission.

The mitigation strategies listed in Section 5.5 are framed by the capacity and capabilities of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources.

Communities work together through the county Emergency Management Agency for assistance related to planning for mitigation and to implement specific strategies. Authority overspending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent feather of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, tow communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority.

Table 5.1 summarizes the statutory authority and resources of each jurisdiction and its present use or intended future use of these powers to implement potential actions and types of actions listed in the hazard mitigation plan. The table describes powers or policies that are granted to different types of jurisdictions in general terms, describes the jurisdictions that currently apply those policies in their mitigation efforts, describes the jurisdictions that intend to apply those authorities and policies for future implementation and describes the means by which each jurisdiction will incorporate the mitigation action into its existing powers, authorities, policies, and capabilities.

Table 5.1: Statutory Authority and Resources

Multi-Jurisdictional Hazard Mitigation Plan: Capability Assessment	Authorized for:	Practiced by:	Incorporated through:
Police power: ability to regulate activities of individuals in the jurisdiction for purposes of health, safety, and public welfare	Municipalities	All	Council or Commission action to enact and enforce regulations
Control of public expenditures: ability to acquire property and improve property owned by the jurisdiction; capacity to borrow and expend funds	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Building code enforcement: ability to enforce codes related to building materials and construction standards outside of flood hazard areas	Municipalities	All	Council or Commission action to enact and enforce regulations
Floodplain management authority: ability to regulate development in areas of special flood hazard in compliance with NFIP standards; includes authority to regulate land use and subdivisions inside of flood hazard areas	Municipalities, Counties	All	Council or Commission action to enact and enforce regulations
Purchase properties subject to flooding and maintain as permanent open space	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Capital improvements: ability to plan and implement public infrastructure to mitigate hazards	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Zoning authority: ability to divide political jurisdiction into districts for purposes of regulation buildings and their use, both inside and outside of flood hazard areas	Municipalities	All	Council action to enact and enforce regulations
Subdivision regulations: ability to regulate new developments involving new parcels and infrastructure, both inside and outside flood hazard areas	Municipalities, Counties	All	County Commission or Council action to enact and enforce regulations
Storm water management program: ability to regulate retention, detention, and release of storm water runoff	Municipalities	All	Council action to enact and enforce regulations

Table 5.2 below provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in the Chambers, Chilton, Coosa, and Tallapoosa counties. A “Yes” (Y) indicates the item is currently in place and being implemented. A “No” (N) indicates the item is not in place or being implemented. An asterisk (*) indicates the item is currently being developed for future implementation.

Table 5.2: Relevant Plans, Ordinances, and Programs

Jurisdiction	Zoning Ordinance	Code Enforcement	Master Plan (Date)	Initial FBHM Identified	Certified Floodplain Manager	NFIP Participation	Subdivision Regulations
Chambers (entire)	**No**	**Yes**	**No**	**Yes**	No	**Yes**	Yes
City of Lafayette	Yes	Yes	No	Yes	No	Yes	Yes
City of Lanett	Yes	Yes	2012	Yes	No	Yes	Yes
City of Valley	Yes	Yes	2019	Yes	No	Yes	Yes
Town of Cusseta	No	No	No	**No**	No	**No**	Yes
Town of Five Points	No	No	No	Yes	No	Yes	Yes
Town of Waverly	No	No	No	**No**	No	**No**	Yes
Chilton County (entire)	**No**	**Yes**	**No**	**Yes**	No	**Yes**	Yes
Clanton	Yes	Yes	2007	Yes	Kelli Alexander	Yes	Yes
Jemison	Yes	Yes	2009	Yes	No	Yes	Yes
Maplesville		Yes	No	Yes	No	Yes	Yes
Thorsby	Yes	Yes	2006	Yes	No	Yes	Yes
Tallapoosa County (entire)	**No**	**Yes**	**No**	**Yes**	No	**Yes**	Yes
City of Alexander City	Yes	Yes	2007	Yes	No	Yes	Yes
Cite of Dadeville	Yes	Yes	2019	Yes	No	Yes	Yes
City of Tallassee	Yes	Yes	2040	Yes	Casie Pritchard	Yes	Yes
Town of Camp Hall	No	No	2010	Yes	No	Yes	Yes
Town of Daviston	No	No	No	Yes	No	Yes	Yes
Town of Jackson's Gap	Yes	Yes	No	Yes	No	Yes	Yes
Town of New Site	No	Yes	No	Yes	No	Yes	Yes

5.5 Mitigation Actions

This section identifies and analyzes a range of mitigation actions and projects under consideration to achieve the regional mitigation goals for reducing the effects of hazard events for the region at large, as well as each of the jurisdictions within the region. Local planning stakeholders used knowledge and expertise in dealing with natural hazards was invaluable in updating the strategy. The primary considerations used to update and prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, development trends, and economic, environmental issues, and local capabilities to determine the most appropriate plan of action for their jurisdictions. Each action or project listed has accessory information, such as designation of a lead agency, hazard(s) addressed, and potential funding source(s). The following table describes the key elements of the Mitigation Action Plans.

Table 5.3: Mitigation Actions and Projects for Consideration

Jurisdiction Name	
Goal	Category of goal that is met: #1: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events (PREVENTION) #2: Protect structures and their occupants and contents from the damaging effects of hazard events (PROPERTY PROTECTION) #3: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands (NATURAL RESOURCE PROTECTION) #4: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable (STRUCTURAL MITIGATION) #5: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events (EMERGENCY SERVICES) #6: Educate and foster public awareness of hazards and techniques available for mitigation (PUBLIC EDUCATION AND AWARENESS)
Action	Title and description of action to be undertaken
Hazards Addressed	Hazard which the action addresses
Lead Agency	Entity responsible for undertaking the action
Funding Source	Level of funding required for action, where applicable
Priority/Status	Categorization based on the following projected criteria:

Benefit/ Cost Score	The Benefit/Cost score included in the jurisdictional Mitigation Action Plans are considered at the planning level and does not include a full analysis of all costs and benefits associated with action implementation. For example, a mitigation action that scores "High" in benefits and "Low" in costs will be listed as "Moderate" in the plan due to providing a long-term solution, but with a high implementation cost. For some projects, such as routine or ongoing operations conducted with local operating funds and existing staff, this may be the only explicit comparison of costs and benefits. For projects of which grant funding or bond issues may be sought, more in-depth evaluations of costs and benefits may be required. As specific project scopes are detailed, the benefits and costs of an action can be identified with more precision and the benefit-cost ratio (BCR) that results from a full benefit-cost analysis may differ from the planning level Benefit/Cost score presented in the plan. It should be noted that higher scores do not necessarily correspond to high priorities, nor do low scores correspond to low priority projects. An important action with a high priority to a jurisdiction may have a lower Benefit/Cost score because of its complexity, assumed high expense, and other potential costs. Jurisdictions should not be discouraged or deterred from further consideration of actions which have low scores until additional, more specific, evaluations of the costs and benefits has been undertaken. **Low**: Benefits: Projects that only benefit a limited population or provides short-term benefits / Costs: projects likely to cost over $100,000 and requiring additional funding or staffing outside of normal operations and is complicated to implement. **Moderate**: Benefits: Projects that would be felt by moderate amount of population in jurisdiction or solves a problem for several years / Costs: projects that may need additional funding or continued study or staffing outside of normal operations, with estimated costs between $10,000 and $100,000. **High**: Benefits: Projects that benefit many in the jurisdiction that are long-term solutions / Costs: projects that can be implemented by existing personnel with little additional burden on budget and uncomplicated to implement.

Table 5.4: Mitigation Action Plan Chambers County

Chambers County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority-Status	Benefit/Cost Score	Jurisdiction	Status
1	Comprehensive Plans and Smart Growth. Establish an active comprehensive planning program that is consistent with Smart Growth principles of sustainable community development. Develop and maintain an up-to-date comprehensive plan. Each plan should address natural hazards exposure and include long-term disaster resistance measures. The vulnerability and environmental suitability of lands for future development should be clearly addressed. Local plans should assess the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	All	Local Governments and east Alabama regional planning and development commission	ADECA, Local, ARC	Medium	Moderate	Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Prepare a five-year capital improvement plan (CIP) to include capital projects that implement the natural hazards element of the community's comprehensive plan or projects identified in the Community Mitigation Action Program of this multi-hazard mitigation plan.	All	Local Governments and east Alabama regional planning and development commission	ADECA, Local, ARC	Medium	Moderate	Chambers County, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025

1	Maintain a centralized, countywide natural hazards and risk assessment database in GIS that is accessible to local planners and emergency management personnel, including such data as, flood zones, geohazards, major drainages structures, dams/levees, hurricane surge areas, tornado tracks, disaster events and their extents, and a comprehensive inventory of critical facilities within all jurisdictions.	All	Local Governments, EARPDC EMA	ADECA, Local, ARC	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
1	Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	All	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
1	Mark depths of flooding and storm surge immediately after each event. Enter and maintain these historical records in GIS.	Flooding	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	High	Moderate	Chambers County	Continuous and Ongoing 2020-2025
1	Carry out detailed planning and engineering studies for sub-basins in critical flood hazard areas to determine watershed-wide solutions to flooding.	Flooding	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	Moderate	Moderate	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Identify existing culturally or socially significant structures and critical facilities within the jurisdictions that	All	Local Governments, EARPDC	ADECA, Local, ARC,	Moderate	Low	Chambers County, Lanett, and	Continuous and Ongoing

	have the most potential for losses from natural hazard events and identify needed structural upgrades.		EMA	EMA			Valley	2020-2025
1	Evaluate elevation and culvert sizing of existing roadways in flash flood-prone areas to ensure compliance with current standards for design year floods and develop a program for construction upgrades as appropriate.	Flooding	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	High	Moderate	Chambers County	Continuous and Ongoing 2020-2025
1	Inventory and map existing fire hydrants throughout the jurisdiction and identify areas in need of new fire hydrants.	Wildfire	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
1	Identify problem drainage areas, conduct engineering studies, evaluate feasibility, and construct drainage improvements to reduce or eliminate localized flooding.	Flooding	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	High	Low	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Consider large lot size restrictions within flood prone areas designated on Flood Insurance Rate Maps.	Flooding	Local Governments, EARPDC EMA	ADECA, Local, ARC, EMA	Moderate	High	Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
3	Examine regulatory options and feasibility of requiring open space areas for recreation, landscaping, and drainage control.	Flooding	Local Governments and EMA	ADECA, Local, ARC, EMA	Moderate	High	Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025

6	Train local flood plain managers through programs offered by the State Flood Plain Coordinator and FEMA's training center in Emmetsburg, Maryland.	Flooding	Local Government, BOE, and EMA	Local, BOE and EMA	Moderate	Low	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
6	Maintain a library of technical assistance and guidance materials to support the local floodplain manager.	Flooding	Local Government, BOE, and EMA	Local, BOE and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Promote the adoption of uniform flood hazard prevention ordinance among all NFIP communities. The ordinance standards should encourage flood plain management that maintains the natural and beneficial functions of flood plains by maximizing the credits that could be obtained for "Higher Regulatory Standards" under the Community Rating System (CRS) Program.	Flooding	Local Governments and EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Maintain membership for locally designated flood plain managers in the Association of State Flood Plain Managers and the Alabama Association of Flood Plain Managers and encourage active participation.	Flooding	Local Governments and EMA	Local and EMA	High	Moderate	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025

1	Actively participate in the National Flood Insurance Program as a member in good standing.	Flooding	Local Governments and EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Promote good construction practices and proper code enforcement to mitigate structural failures during natural hazard events.	All	Local Governments and EMA		High	High	Lanett and Valley	Continuous and Ongoing 2020-2025
1	Evaluate and revise as appropriate, building codes for roof construction to maximize protection against wind damage from hurricanes, tornadoes, and windstorms; encourage installation of "hurricane clips."	Tornadoes, Hurricanes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	High	Lanett and Valley	Continuous and Ongoing 2020-2025
1	Relocate existing utility lines underground, where feasible and cost effective, and require, through local subdivision and land development regulations, the placement of all new utility lines underground for large residential subdivisions and commercial developments.	Tornadoes, Severe Storms, Winter Storms/Freezes, Hurricanes	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County	Continuous and Ongoing 2020-2025
1	Ensure fire safety ordinances properly regulate open burning, the use of liquid fuel and electric space heaters.	Wildfires	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett,	Continuous and Ongoing 2020-2025

							Valley and Waverly	
1	Establish and enforce minimum property maintenance standards that reduce or eliminate unsafe structures.	All	Local Governments, EARPDC, EMA	Local and EMA,	High	High	Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Require the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	Tornadoes, Hurricanes, Severe Storms	Local Governments, EARPDC, EMA	Local, BOE, and EMA	High	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
1	Enact local ordinance that requires community storm shelters within sizeable residential developments, such as, mobile home parks, apartment complexes, planned residential communities, and campgrounds/RV parks.	Tornadoes, Hurricanes, Severe Storms	Local Governments, EARPDC, EMA	Local, and EMA	High	Moderate	Lanett and Valley	Continuous and Ongoing 2020-2025
1	Review and revise as necessary, landscaping standards for parking lots that reduce the size of impervious surfaces and encourage natural infiltration of rainwater.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	High	Lanett and Valley	Continuous and Ongoing 2020-2025
1	Consider the adoption/enforcement of storm water management regulations that maintain pre-development runoff rates.	Flooding	Local Governments, EARPDC, EMA	Local, ARC, and EMA	Moderate	High	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025

1	Develop, adopt and implement subdivision regulations that require proper storm water infrastructure design and construction.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Support legislation to establish a State dam safety program.	Dam/Levee Failure	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Apply for/maintain membership in the CRS Program; continue to upgrade rating.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
1	Perform vulnerability assessments of critical facilities to identify retrofit projects to improve the safety of occupants and mitigate damages from hazards.	Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
1	Conduct wildfire vulnerability assessments, including the	Wildfire	Local Governments	Local and	Moderate	Moderate	Chambers County,	Continuous and

	vulnerability of critical facilities and number of residential properties in these risk areas, and prepare a comprehensive inventory to identify high and moderate wildfire risk areas.		, EARPDC, EMA	EMA			Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Ongoing 2020-2025
2	Relocate buildings out of hazardous flood areas, with emphasis on pre-FIRM residential buildings, where deemed more cost effective than property acquisition or building elevation.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Low	Low	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Acquire and demolish flood prone or substantially damaged structures and replace with permanent open space.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Low	Low	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Utilize the most recent NFIP repetitive loss property list, and other appropriate sources, to create and maintain a prioritized list of acquisition mitigation projects based on claims paid.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Elevate certain buildings in flood prone areas where acquisition or relocation is not feasible, with emphasis on Pre-FIRM buildings;	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Five Points,	Continuous and Ongoing 2020-2025

	where feasible, elevation is preferable to flood proofing.						Lafayette, Lanett, and Valley	
2	Repair, elevate and weatherize existing homes for low- to moderate-income families.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	Moderate	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Flood proof pre-FIRM non-residential buildings, where feasible.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Retrofit existing buildings, critical facilities, and infrastructure against potential damages from natural and manmade hazards.	Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
2	Provide technical advisory assistance to building owners on available building retrofits to protect against natural hazards damages.	Flooding, Tornadoes, Hurricanes, Severe Storms and Earthquakes	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Moderate	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025

2	Promote the purchase of insurance coverage by property owners and renters for flood damages in high-risk areas.	All	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Five Points, Lafayette, Lanett, and Valley	Continuous and Ongoing 2020-2025
2	Install lightning and/or surge protection on existing critical facilities.	Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
2	Conduct ongoing tree trimming programs along power lines	Hurricanes, Tornadoes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Moderate	Chambers County	Continuous and Ongoing 2020-2025
2	Install backup power generators for critical facilities.	Hurricanes, Tornadoes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

6	Continue to participate in environmental awareness events to provide the public information on hazard exposure and mitigation measures, such as Severe Weather Week.	All	Local Governments, EARPDC, BOE, EMA	Local, BOE, and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
6	Conduct materials distribution, via the internet and other media, and other outreach activities and workshops to encourage families and individuals to implement hazard mitigation measures in their homes.	All	Local Governments, EARPDC, BOE, EMA	Local, BOE, and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
6	Promote disaster resilience within the business community through workshops, educational materials and planning guides, intended to assist business owners in recovering from a disaster event in a timely manner.	All	Local Governments, EARPDC, BOE, EMA	Local, BOE, and EMA	Moderate	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

6	Distribute outreach materials to citizens, builders and business owners inquiring about a flood problem, a building permit or other natural hazard related questions.	Flooding	Local Governments, EARPDC, BOE, EMA	Local, BOE, and EMA	Moderate	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
6	Through local libraries, maintain and distribute free and current publications from FEMA, NWS, USGS, and other federal and state agencies.	All	Local Governments, EARPDC, BOE, EMA	Local, BOE, and EMA	Moderate	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
6	Distribute hazard mitigation brochures to students through area schools.	All	Local Governments, EARPDC, EMA	Local, BOE, and EMA	Moderate	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

1	Provide technical assistance to homeowners, builders, and developers on flood protection alternatives.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Moderate	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025
6	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	All	Local Governments, BOE, EARPDC, EMA	Local, BOE, and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
5	Promote the use of weather radios in households and businesses.	All	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

5	Require the installation of weather radios in all public buildings and places of public assembly.	All	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
5	Acquire/obtain and distribute weather radios and emergency response instructions to municipal residents.	All	Local Governments, EARPDC, EMA	Local and EMA	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
5	Upgrade siren-warning systems to provide complete coverage to all jurisdictions. Maintain current sirens systems.	All	Local Governments, EARPDC, EMA	Local and EMA	Low	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

5	Upgrade critical communications infrastructure.	All	Local Governments, EARPDC, EMA	Local and EMA	Moderate	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
5	Promote and encourage individual investment of NOAA Weather Radios and weather alert phone Apps through the public; acquire bulk purchases of NOAA weather radio systems for rural areas and poverty-stricken areas and ultimately for the county as a whole	All	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
5	Participate in the “Turn Around Don’t Drown” program by purchasing and installing signs in known flash flood bridge overpass locations.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

3	Increase open space acquisitions through the FEMA EMA Grant Programs and other flood plain acquisition efforts.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Low	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
3	Keep builders and developers informed of Federal wetlands permitting requirements of the Corps of Engineers.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025
3	Adopt and/or enforce regulations prohibiting dumping and littering within river and stream corridors.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Lanett, and Valley	Continuous and Ongoing 2020-2025
3	Utilize technical assistance available from the Alabama Cooperative Extension System with Best Management Practices (BMP).	Flooding, Wildfires, Landslides	Local Governments, EARPDC, EMA	Local and EMA	Moderate	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and	Continuous and Ongoing 2020-2025

							Waverly	
3	Enforce water use restrictions during periods of drought to conserve existing water supplies.	Droughts/heat waves, wildfires	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
4	Prepare and implement standard operating procedures and guidelines for drainage system maintenance.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	Moderate	High	Chambers County	Continuous and Ongoing 2020-2025
4	Construct drainage improvements to reduce or eliminate localized flooding in identified problem drainage areas.	Flooding	Local Governments, EARPDC, EMA	Local and EMA	High	Low	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

4	Construct new community safe rooms in accessible locations and add safe rooms within new and existing public and institutional buildings, such as schools, colleges and universities, senior centers, community centers, hospitals, and government buildings.	Hurricanes, Tornadoes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	Moderate	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
4	Establish a program for subsidizing safe room and storm shelter construction in appropriate locations and facilities.	Tornadoes, Hurricanes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025
4	Encourage the construction of safe rooms in new and existing homes and buildings.	Tornadoes, Hurricanes, Severe Storms	Local Governments, EARPDC, EMA	Local and EMA	High	High	Chambers County, Cusseta, Five Points, Fredonia, Lafayette, Lanett, Valley and Waverly	Continuous and Ongoing 2020-2025

Table 5.5: Mitigation Action Strategies for Chilton County

Chilton County Mitigation Action Plan: County Goals								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority -Status	Benefit/Cost Score	Jurisdiction	Status
Establish a comprehensive countywide hazard mitigation system	Adopt & update a comprehensive plan, subdivision regulations, floodplain management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future buildings, infrastructure	Floods & Flash Floods	EMA; Flood Plain Manager; Asst. County Engineer	HMGP	High	Moderate	County	Continuous and Ongoing 2020-2025 No zoning ordinances, building/ technical codes, or comprehensive plan have been adopted to guide the community's long-term growth and development. There is no mid-range capital improvement plan or guides for the county's annual budget. There is no full-time professional planner or building

	and critical facilities.							inspector on staff. This is due to lack of funding during the planning period.
Establish a comprehensive countywide hazard mitigation system	Continue to participate in the NFIP	Floods & Flash Floods	EMA; Flood Plain Manager; Asst. County Engineer	HMGP	High	High	County	Continuous and Ongoing 2020-2025 Chilton County is a participating member of the NFIP and plans to continue its membership; therefore, wants to keep this action in the plan.
Reduce the county's risk from natural hazards	Protect property by relocating the structure out of harm's way, acquiring, and clearing the property, elevating the structure above flood levels, placing barriers between property and hazards	Floods & Flash Floods; Fires	Flood Plain Manager; Asst. County Engineer	HMGP	High	Moderate	County	Continuous and Ongoing 2020-2025 Due to lack of funding the county has been unable to complete this project. The county wants to keep this action in the plan.

	(e.g., low flood walls, firebreaks, and sewer backup valves), retrofitting a structure and carrying property insurance.							
Reduce the county's vulnerability to natural hazards	Increase community awareness of hazard mitigation and preparedness for natural hazards according to the county's vulnerability	All	County Commission	Local Grants	Medium	Moderate	County	Continuous and Ongoing 2020-2025 This project has not been completed due to lack of funding. The county wants to keep this action in the plan.
Reduce the county's vulnerability to natural hazards	Purchase emergency generators for post-disaster mitigation, as needed.	All	EMA	HMGP; ADECA	High	Moderate	County	Continuous and Ongoing 2020-2025 The county wants to keep this action in the plan. The county was able to provide information to the public and municipalities on

								the hazard mitigation program, however little response was given. They plan to continue the efforts during this planning period.
Reduce the county's vulnerability to natural hazards	Pursue grant opportunities to implement the safe room plan	Thunderstorms, Tornadoes, High & Strong Winds	EMA	HMGP	High	High	County	Continuous and Ongoing 2020-2025 The county received funds from the Governor's Emergency Relief program to help with their in-kind contribution towards their Hazard Mitigation Community Safe Room Grant. The county wishes to keep this mitigation action in the plan.

Reduce the county's vulnerability to natural hazards	Explore grant opportunities with rural water authorities for additional fire hydrants in the county.	Fire	EMA	ADECA ; ARWA	High	High	County	Continuous and Ongoing 2020-2025 Due to the lack of funds the county was unable to secure the resources to search for such grants. The county wants to keep this action in the plan.
Reduce the county's vulnerability to natural hazards	Construct a Fire Training Tower and a Firing Range for police use, in addition to pursuing grant funds for training in natural disaster response for fire and police department.	All	EMA; Fire; Law Enforcement	Fire; Law; Local; Federal Grants	High	Moderate	County	Continuous and Ongoing 2020-2025 The county wants to keep this action in the plan. They have been unable to secure the funds and resources for this project.

Reduce vulnerability of new and future development	Adopt and update a comprehensive plan, subdivision regulations, floodplain management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future buildings, infrastructure and critical facilities.	All	County Commission	Local Grants	Medium	Moderate	County	Continuous and Ongoing 2020-2025 This project has not been completed due to lack of funding. The county wants to keep this action in the plan.
Reduce vulnerability of new and future development	*Continue to provide structural projects such as wind retrofits,	Flood	County Engineer; Flood Plain Manager/	HMGP	High	Moderate	County	Continuous and Ongoing 2020-2025

	drainage improvements, reservoirs and retention or detention basins which store excess waters, levees and floodwalls which place barriers between the source of flooding and damage-prone properties, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or carry it faster, diversions that redirect high flows to another location and channel maintenance: keeping streams, ditches, and		Asst. County Engineer					The county wants to continue this action. Details about each specific project can be found below**

	storage basins clear.							
Foster public support and acceptance of hazard mitigation	Provide public involvement activities and publish public information brochures on natural hazards.	All	EMA	HMGP	High	High	County	Continuous and Ongoing 2020-2025 The county wants to keep this action in the plan. The county was able to provide information to the public and municipalities on the hazard mitigation program, however little response was given. They plan to continue the efforts during this planning period.
Reduce the county's risk from natural hazards	Construct storm retrofits to educational buildings	Thunderstorms, Tornados, High & Strong Winds	BOE	HMGP, ADECA, Gov's Emergency Relief Fund,	Low	Moderate	County	Continuous and Ongoing 2020-2025 New action item

				Local Funds				
Reduce the county's risk from natural hazards	Construct/install community safe rooms to educational buildings to include generators	Thunderstorms, Tornados, High & Strong Winds	BOE	HMGP, ADECA, Gov's Emergency Relief Fund, Local Funds	Low	Moderate	County	Continuous and Ongoing 2020-2025 New action item
Reduce the county's risk from natural hazards	Construct/install individual storm shelters to educational buildings	Thunderstorms, Tornados, High & Strong Winds	BOE	HMGP, ADECA, Gov's Emergency Relief Fund, Local Funds	Low	Moderate	County	Continuous and Ongoing 2020-2025 New action item
Reduce the county's risk from natural hazards	Provide generators for educational buildings	All	BOE		High	Moderate	County	Continuous and Ongoing 2020-2025 New action item
Reduce the county's risk from natural hazards	Construct/install a community safe room in Volunteer Fire station	Thunderstorms, Tornadoes, High & Strong Winds	BOE	HMGP, ADECA, Gov's Emergency Relief Fund,	High	Moderate	County	Continuous and Ongoing 2020-2025 New action item

				Local Funds				
Reduce the county's risk from natural hazards	Provide generators with underground propane tanks for fire stations and community safe rooms in volunteer fire stations	All	BOE	HMGP; ADECA	High	Moderate	County	Continuous and Ongoing 2020-2025 New action item

*This action applies to the following projects in priority number: 1) Replacing bridge on CR 455; 2) Replacing bridge on CR151; 3) Replacing bridge on CR 46; 4) Road improvement on CR 109; 5) Road improvement on CR 231; 6) Bridge replacement on CR 251; 7) Bridge replacement on CR 354; 8) Road improvement on CR 173; and 9) Road improvement on CR 494.

** Replacing bridge on CR 151 – no action due to lack of funds; Replacing bridge on CR 46 – bridge has been replaced and height increased during a 2013 project; Road improvement on CR 109 – new pipes have been installed and road raised during a 2014 project; Road improvement on CR 231 – new pipe culvert has been installed and road raised and paved during a 2012 project; Bridge replacement on CR 251 – no action due to lack of funds; Bridge replacement on CR 354 – bridge has been replaced with pipe culvert during a 2010 project; Road improvement on CR 173 – no action due to lack of funds; Road improvement on CR 494 – replaced pipe culvert with larger culvert and added second culvert to help control flooding

Chilton County Mitigation Action Plan: Clanton Goals								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority -Status	Benefit/Cost Score	Jurisdiction	Status
Establish a comprehensive countywide hazard mitigation system.	Adopt and update a comprehensive plan, zoning regulations, subdivision regulations, floodplain management regulations, storm water management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future	Flood & Flash Floods	EMA, Flood Plain Manager/ Assistant County Engineer	HMGP	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 The city has a comprehensive plan, zoning ordinances, and a floodplain management plan. They plan to continue with this action.

	buildings, infrastructure and critical facilities.							
Establish a comprehensive countywide hazard mitigation system.	Continue to participate in the NFIP	Floods & Flash Floods	Flood Plain Manager/ Asst. County Engineer	HMGP	High	High	Clanton	Continuous and Ongoing 2020-2025 The City of Clanton is a participating member of the NFIP and plans to continue its membership; therefore, wants to keep this action in the plan.
Reduce the county's risk from natural hazards	Protect property by relocating the structure out of harm's way, acquiring and clearing the property, elevating the structure above flood levels, placing barriers between property and hazards (e.g., low	Floods & Flash Floods; Fires	Flood Plain Manager/ Asst. County Engineer; City Council	HMGP	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 The city plans to keep this action in their plan. They have been unable to complete this action due to lack of funds.

	floodwalls, firebreaks, and sewer backup valves), retrofitting a structure and carrying property insurance.							
Reduce the county's risk from natural hazards	Purchase emergency generators for post-disaster mitigation as needed	All	EMA	HMGP; ADECA	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 The city has not completed these items due to funding. They want to keep this action in the plan.
Reduce the county's risk from natural hazards	Purchase and install emergency warning sirens, as needed	All	EMA	HMGP; ADECA	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 The city has not purchased new sirens due to lack of funds for this project. They want to keep this action in their plan.

Reduce the county's risk from natural hazards	Continue to provide adequate safe rooms and community safe rooms. This includes all construction of fire stations must be built with a community safe rooms that will hold at least 98 people on-site.	Thunderstorms, Tornadoes, High & Strong Winds	EMA	HMGP; ADECA	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 During the past five years, the City of Clanton applied for and received funding for some community safe rooms. They are currently in the process of installing those safe rooms. They plan to continue to pursue grants for community safe rooms.
Reduce vulnerability of new and future development	Continue to provide structural projects such as wind retrofits, drainage improvements, reservoirs and retention or detention basins which store excess waters, levees and	Flood	County Engineer, Flood Plain Manager/ Assistant County Engineer, EMA	HMGP	High	Moderate	Clanton	Continuous and Ongoing 2020-2025 The city wants to keep this action in the plan. They have been unable to complete these projects, however they

	floodwalls which place barriers between the source of flooding and damage-prone properties, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or carry it faster, diversions that redirect high flows to another location and channel maintenance: keeping streams, ditches, and storage basins clear.							plan to do so in the near future.

Chilton County Mitigation Action Plan: Jemison Goals								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority -Status	Benefit/Cost Score	Jurisdiction	Status
Establish a comprehensive countywide hazard mitigation system.	Adopt and update a comprehensive plan, zoning regulations, subdivision regulations, floodplain management regulations, storm water management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future	Flood & Flash Floods	EMA, Flood Plain Manager/ Assistant County Engineer	HMGP	High	Moderate	Jemison	Continuous and Ongoing 2020-2025 The city has a comprehensive plan, zoning ordinances, and a floodplain management plan. They plan to continue with this action.

	buildings, infrastructure and critical facilities.							
Establish a comprehensive countywide hazard mitigation system.	Continue to participate in the NFIP	Floods & Flash Floods	Flood Plain Manager/ Asst. County Engineer	HMGP	High	High	Jemison	Continuous and Ongoing 2020-2025 The City of Jemison is a participating member of the NFIP and plans to continue its membership; therefore, wants to keep this action in the plan.
Foster public support and acceptance of hazard mitigation	Provide public involvement activities and publish public information brochures on natural hazards.	All	EMA	General Funds	Medium	High	Jemison	Continuous and Ongoing 2020-2025 The city did not have any public functions during the past five years; however, functions are being planned for the next five years and information will

								be available. The city wants this action to remain in the plan.
Reduce the county's vulnerability to natural hazards	Purchase emergency generators for post-disaster mitigation, as needed.	All	EMA	HMGP; ADECA	High	Moderate	Jemison	Continuous and Ongoing 2020-2025 The city did not purchase any generators during the past five years as none were needed. The sewer treatment plant is now in need of a generator. The city wants this action to remain.
Reduce the county's vulnerability to natural hazards	Continue to provide adequate community safe rooms. This includes a community safe room at the City Park in the City of Jemison.	Thunderstorms, Tornadoes, High & Strong Winds	EMA; City Council	HMGP; ADECA	High	Moderate	Jemison	Continuous and Ongoing 2020-2025 No action has been taken during the past five years due to lack of funds. The city wants this action to remain in plan.

Reduce vulnerability of new and future development	*Continue to provide structural projects such as wind retrofits, drainage improvements, reservoirs and retention or detention basins which stores excess waters, levees and floodwalls which place barriers between the source of flooding and damage-prone properties, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or carry it faster, diversions that redirect high flows to another	Floods & Flash Floods	County Engineer, Flood Plain Manager/ Assistant County Engineer	HMGP; ADECA	High	Moderate	Jemison	Continuous and Ongoing 2020-2025 No action has been taken during the past five years due to lack of funding. The city wants this action to remain in the plan. Further details on specific projects are listed below. **

	location and channel maintenance: keeping streams, ditches, and storage basins clear.							

*This action includes improvement to drainage ditches located on Patton Street, Sycamore Street, and Highway 31 in front of the City Hall, as well as, replacing bridge located on County Road 42 East.

**The county is now in process of replacing the bridge and culvert on County Road 42.

Chilton County Mitigation Action Plan: Maplesville Goals								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority -Status	Benefit/Cost Score	Jurisdiction	Status
Establish a comprehensive countywide hazard mitigation system.	Adopt and update a comprehensive plan, zoning regulations, subdivision regulations, floodplain management regulations, storm water management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future	Flood & Flash Floods	EMA, Flood Plain Manager/ Assistant County Engineer	HMGP	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 The Town has not been able to complete this action due to a lack of funding and plans to continue to pursue this action in the future if funding becomes available.

	buildings, infrastructure and critical facilities.							
Establish a comprehensive countywide hazard mitigation system.	Continue to participate in the NFIP	Floods & Flash Floods	Flood Plain Manager/ Asst. County Engineer	HMGP	High	High	Maplesville	Continuous and Ongoing 2020-2025 Maplesville is a participating member of the NFIP and plans to continue its membership; therefore, wants to keep this action in the plan.
Reduce the county's risk from natural hazards	Protect property by relocating the structure out of harm's way, acquiring and clearing the property, elevating the structure above flood levels, placing barriers between property and hazards (e.g., low floodwalls,	Floods & Flash Floods; Fires	Flood Plain Manager/ Asst. County Engineer; City Council	HMGP	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 The Town has been unable to complete this action due to lack of funding. They are still interested in completing this action should funding become available.

	firebreaks, and sewer backup valves), retrofitting a structure and carrying property insurance.							
Reduce the county's vulnerability to natural hazards	Purchase emergency generators for post-disaster mitigation, as needed. This includes a generator for the sewer treatment plant and a portable generator fixed to a trailer for emergency response use.	All	EMA	HMGP; ADECA	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 The Town has not been able to purchase generators due to funding issues. They plan to complete this action if funding becomes available.
Reduce the county's vulnerability to natural hazards	Purchase and install emergency warning sirens, as needed.	All	EMA	HMGP: ADECA	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 The Town has not completed this action and purchased warning sirens due to lack of funding. They

								wish to continue pursuing this action should funding become available in the future.
Reduce the county's vulnerability to natural hazards	Continue to provide adequate community safe rooms, to include generators. This includes the construction of a safe room at the Maplesville High School and a community safe room for the park area.	Thunderstorms, Tornadoes, High & Strong Winds	County Engineer, Flood Plain Manager/ Assistant County Engineer	HMGP; ADECA	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 Due to lack of funding this action has not been completed. The Town still has interest to complete the items if funding becomes available in the future.
Reduce vulnerability of new and future development	*Continue to provide structural projects such as wind retrofits, drainage improvements, reservoirs and retention or detention basins which store excess waters,	Floods & Flash Floods	County Engineer, Flood Plain Manager/ Assistant County Engineer	Town Council; EMA	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025 Due to budgetary constraints the Town has been unable to complete this action item.

	levees and floodwalls which place barriers between the source of flooding and damage-prone properties, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or care it faster, diversions that redirect high flows to another location and channel maintenance: keeping streams, ditches, and storage basins clear.							They would like to leave it in the plan as an action should they obtain the funding needed for this project
Public Education & Awareness	Construct a Fire Training Tower and a Firing Range for police use, in addition	All	EMA; Fire	HMGP; Fire Grants	High	Moderate	Maplesville	Continuous and Ongoing 2020-2025

	to pursuing grant funds for training in natural disaster response for fire and police departments.							The Town has not completed this action item. They plan to complete the projects should funding become available in the future.

* This action includes drainage work on Graham Avenue.

Chilton County Mitigation Action Plan: Thorsby Goals								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority -Status	Benefit/Cost Score	Jurisdiction	Status
Establish a comprehensive countywide hazard mitigation system.	Adopt and update a comprehensive plan, zoning regulations, subdivision regulations, floodplain management regulations, storm water management regulations, building-related codes, fire prevention codes, wetlands protection regulations, water quality regulations, stream-dumping regulations, and the preservation of open space as preventative measures that protect existing and future	Flood & Flash Floods	EMA, Flood Plain Manager/ Assistant County Engineer	HMGP	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 A comprehensive plan has been adopted for zoning regulations, subdivisions, building codes, fire prevention codes, and water quality regulations. Wetlands protection regulations, stream dumping, and preservation of open space measures have not been completed because of lack of funding; however, these are problems the town has not faced but could do so in the future. The town wants to continue this mitigation action.

	buildings, infrastructure and critical facilities.							
Establish a comprehensive countywide hazard mitigation system.	Continue to participate in the NFIP	Floods & Flash Floods	Flood Plain Manager/ Asst. County Engineer	HMGP	High	High	Thorsby	Continuous and Ongoing 2020-2025 Thorsby is a participating member of the NFIP and plans to continue its membership; therefore, wants to keep this action in the plan.
Reduce the county's risk from natural hazards	Protect property by relocating the structure out of harm's way, acquiring and clearing the property, elevating the structure above flood levels, placing barriers between property and hazards (e.g., low floodwalls, firebreaks, and sewer backup valves), retrofitting a	Floods & Flash Floods; Fires	Flood Plain Manager/ Asst. County Engineer; City Council	HMGP	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 The Town of Thorsby is insured for properties of which belongs to the town and has acquired and cleared property. In reference to elevating structures above flood levels, placing barriers between property, and hazards (e.g., low floodwalls, firebreaks, etc.) and retrofitting a structure, the town has not been faced with the need to implement these actions in addition to

	structure and carrying property insurance.							lack of funding to do so. The town wants to continue this action due to potential happenings in the future.
Reduce the county's risk from natural hazards	Purchase emergency generators for post-disaster mitigation, as needed.	All	EMA	HMGP; ADECA	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 The town has purchased emergency generators for post-disaster mitigation as needed. The town wishes to continue this action due to the fact that there may be a need for additional generators in the near future and currently, lack of funding has halted the purchases.
Reduce the county's risk from natural hazards	Continue to provide adequate safe rooms and community shelters. This includes all new construction of fire stations must be built with a community shelter that will hold at least 98 people on-site.	All	EMA	HMGP; ADECA	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 The town has received a hazard mitigation grant for a community safe room. This safe room is on school property and has been held up with the Alabama Building Commission for two years; hopefully, project will soon begin. The

								town wishes to add more community safe rooms in the future, to include one on Rebel Street.
Reduce the county's risk from natural hazards	Purchase and distribute NOAA Weather Radios to all Thorsby citizens and businesses	All	Local Police & Fire	HMGP; ADECA	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 This action is new to replace the purchase of outdoor warning sirens; no benchmark can be made.
Foster public support and acceptance of hazard mitigation	Provide public involvement activities and publish public information brochures on natural hazards.	All	EMA	HMGP; General Funds	Mediu m		Thorsby	Continuous and Ongoing 2020-2025 The Thorsby Police Department has hosted local events such as Safety Day at Richard Wood Park where Transcontinental Gas Company, Pipelines, County EMA, and others participated where disaster safety information was made available to the public. Brochures on natural disasters have not been provided at the Town Hall due to lack of support staff to maintain

								the inventory. The town will continue to invite various agencies and businesses to come and educate the public on issues involving public safety at all hosted events.
Reduce vulnerability of new and future development	*Continue to provide structural projects such as wind retrofits, drainage improvements, channeling modifications: widening, straightening, or removing bridge and culvert restrictions so the channel can convey more water or carry it faster, diversions that redirect high flows to another location and channel maintenance: keeping streams, ditches, and	Floods & Flash Floods	County Engineer, Flood Plain Manager/ Assistant County Engineer, EMA	HMGP	High	Moderate	Thorsby	Continuous and Ongoing 2020-2025 Completed this portion of the mitigation action during recent years; details included below. ** The town cleans and maintains ditches, streams, and storage basins as needed. Within the last two years the bridge on Medical Center Drive was replaced. The town has made drainage improvements. The state worked on US 31 and Cherokee; however, there are still drainage problems in this area as well as US 31 and Medical Center Drive. Lack of funding has

	storage basins clear.							prevented all issues of being resolved.

*This action includes additional drainage on U. S. Highway 31 at Medical Center Drive, both outside lanes going north and south bound and replacing drainpipe located under South Dakota Road at Thorsby Villa Apartments.

**Replacing the storm drain on U. S. Highway 31 at Oak Street that serves the outside northbound lane of U. S. Highway 31 with a larger drain.

Table 5.6: Mitigation Action Strategies for Tallapoosa County

Tallapoosa County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority /Status	Benefit/Cost Score	Jurisdiction	Status/ Time Frame
1	Complete a hydrology study to determine appropriate drainage pipe sizes.	Floods, Flash Floods	Flood Plain Manager, EMA	HMGP, Local	Low	Moderate	All of Tallapoosa County	Continuous and Ongoing 2020-2025
1	Make application and/or commit/continue to participate in the NFIP.	Floods, Flash Floods	Flood Plain Manager	HMGP, Local	High	High	All of Tallapoosa County	Continuous and Ongoing 2020-2025
4	Improve drainpipes on roads where pipes are undersized for the water flow	Floods, Flash Floods	Flood Plain Manager	HMGP, Local, DOT	High	Moderate	All of Tallapoosa County	Continuous and Ongoing 2020-2025
1	Complete an engineering study to determine appropriate	Floods, Flash Floods	EMA, Local Governments	HMGP, Local	High	Moderate	All of Tallapoosa County	Continuous and

	bridge elevation and lengthening.							Ongoing 2020-2025
5	Partner with local non-profits, the American Red Cross and private entities for the opening of warming centers, during periods of extremely cold temperatures, throughout the unincorporated areas of the county.	Winter Storms, Frost Freezes, Heavy Snows, Ice Storms, Winter Weather, Extreme Cold	EMA, Local Governments	HMGP, Local	High	High	All of Tallapoosa County	Continuous and Ongoing 2020-2025
4	Elevate and lengthen bridges that repeatedly flood.	Floods, Flash Floods	EMA, County Engineer	HMGP, Local	Medium	Low	All of Tallapoosa County	Continuous and Ongoing 2020-2025
3	Install a water storage tank to lessen the effects of drought in recent history.	Droughts	County Government and Public Works	HMGP, Local	High	Moderate	All of Tallapoosa County	Continuous and Ongoing 2020-2025
6	Promote mitigation and severe weather awareness through annual severe weather awareness events.	All	EMA	HMGP, Local	Medium	High	All of Tallapoosa County	Continuous and Ongoing 2020-2025
6	Promote the use of weather radios in households and businesses.	All	EMA	HMGP, Local	High	High	All of Tallapoosa County	Continuous and Ongoing 2020-2025
4	Construct/install individual storm shelters and	All	EMA	HMGP, ADECA	High	Moderate	All of Tallapoosa County	Continuous and

	community safe rooms.							Ongoing 2020-2025
5	Purchase and implement a mass notification system.	All	EMA	HMGP, Local	High	Low	All of Tallapoosa County	Continuous and Ongoing 2020-2025

Section 6 – Plan Maintenance Process

This section of the plan addresses requirements of Interim Final Rule (IFR) Section 201.6(C) (4).

Section Contents

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process
6.2 Hazard Mitigation Plan Incorporation
6.3 Public Awareness/Participation

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process

The Lee-Russell Council of Governments (LRCOG) will facilitate plan maintenance activities with assistance from the AEMA Division D Regional Coordinator, local EMA directors, and other regional planning agencies as their county plans are phased in through the five-year framework of the Hazard Mitigation Plan. Local EMA directors will serve as a liaison to participating jurisdictions with their respective counties through their local processes, such as Local Emergency Planning Committee (LEPC) or similar stakeholder groups. The plan monitoring review process shall be chaired by the elected AAEM representative, from AEMA Division D. Election of an AAEM representative occurs every summer on an annual basis. Periodic review and revision of the Hazard Mitigation Plan are important to ensure the plan's currency and compliance with applicable regulations and to assess the progress of local mitigation actions. Review and revision of the Hazard Mitigation Plan may occur through the following two procedures:

Annual Review Process

On at least an annual basis, each participating county EMA official shall facilitate a meeting in their respective county and include local jurisdictions and other stakeholders, such as the Local Emergency Planning Committee. The exact meeting process in each participating county will be slightly different. At a minimum, the scope of the annual county-level plan review meeting will be to review and evaluate completed mitigation actions for effectiveness, review status of high-priority or ongoing mitigation actions, discuss possible changes to hazard vulnerability or other elements of the risk assessment, assess any major land-use changes, and discuss any other relevant issue pertaining to the Hazard Mitigation Plan. The general public will be invited to attend this meeting through public outreach, as further described in Section 6.3 below, and encouraged to provide their input into the annual review.

Subsequently, area regional meeting between LRCOG, local EMA officials, AEMA Division D Coordinator, and regional stakeholders will be held to review information collected at the county-level meetings and revise the plan. It is viewed appropriately by the local EMA directors that this meeting shall normally coincide with and AEMA Division D quarterly meeting. Any major revision made to the Hazard Mitigation Plan that affects the region as a whole will be distributed to all jurisdictions for adoption in a public session. Otherwise, any project added to a specific Jurisdictional Mitigation Action Plan will be adopted by that specific jurisdiction in a public session.

Emergency Review Process

In certain instances, such as a disaster occurrence impacting a participation jurisdiction, the full Annual Review Process may not be timely enough to address unforeseen issues created by a particular event in these situations, a county EMA official may facilitate a county-level plan review meeting, similar to the process described above in the Annual Review Process, with the requisite public outreach. Once this meeting is completed, a local amendment may be adopted by a participating jurisdiction that only pertains to the revision of their specific Jurisdictional Mitigation Action Plan in a public session. After any local amendment, the local county EMA official shall submit documentation of the local amendment to the Chair of the plan monitoring and review process.

Five-Year Plan Update

Before the five-year expiration of the Hazard Mitigation Plan, a thorough review, beginning approximately 18 months prior to plan expiration, shall be held to determine any significant changes in the AEMA Division D planning area that may affect the region's vulnerability to hazard impacts, and an evaluation of the mitigation strategy and jurisdictional mitigation action plans developed as part of this process. The remaining AEMA Division D counties will be included in this Regional Plan in a phased process with the goal of having the initial full AEMA Division D plan completed by 2025. This plan update shall incorporate any changes to federal or state regulation

that may affect the Hazard Mitigation Plan contents. The plan update process will follow a local-driven, public process, similar to the plan review processes outlined above.

Initial steps will include:

- Attend City Council, Town Commission, and County Commission meetings to provide updates to the jurisdictions on the five-year update. Request their participation in the update process.
- Identify and contact key personnel to be a part of the Stakeholder and Technical Advisory Committee
- Conduct effective public engagement strategies.
- Schedule committee and public meetings

The five-year update will include:

- Document the planning process including who was involved and their role in the process.
- Review the hazard mitigation plan and regulations.
- Review current plans, policies, studies, ordinances, and development trends.
- Detail the hazards that could potentially impact all jurisdictions.
- Assess and assign risk value for all hazards.
- Identify all assets and critical facilities in the region.
- Estimate the potential losses.
- Construct strategies, objectives, actions, and goals to address each hazard.
- Review participation in the National Flood Insurance Program
- Continue to maintain and update the document.

In addition, multiple state, regional, and local partners will be consulted to provide data or comments in plan formation. These entities include the U.S. Army Corps of Engineers, Fort Benning, Electrical Cooperatives, Alabama Forestry Commission, Geological Survey of Alabama (GSA), Alabama Department of Public Health (ADPH), Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), Alabama Historical Commission (AHC), neighboring county EMA offices, regional academic providers, and private sector entities. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval.

6.2 Hazard Mitigation Plan Incorporation

Once Phase III-A Hazard Mitigation Plan is "approvable upon adoption" by FEMA, each jurisdiction shall proceed with adoption procedures. Each proposed action listed in the jurisdictional mitigation action plans is assigned to one or multiple lead agencies or departments in order to assign responsibility and accountability of action implementation to specific sources. In addition to the assigned local agency or department, each mitigation action plan also has a priority or status assigned that roughly coincides with an implementation timeline. The local jurisdictions in AEMA Division D will work to seek to provide operational funding to actions that are ongoing and seek outside funding for capital projects that are outside the realm of normal funding during both pre-disaster and post-disaster periods. In the past, all the jurisdictions in Chambers, Chilton, Coosa, and Tallapoosa counties have not incorporated the Hazard Mitigation Plan into existing plans, policies, or ordinances.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning organization will provide technical assistance for incorporation,

upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan and will not introduce additional hazard vulnerabilities to the local area and region at-large. Local EMA directors will incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including each county's Emergency Operation Plan and county THIRA. During county-level plan reviews, participation communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The Hazard Mitigation Plan will also be provided to other affected regional planning agencies for consistency with regional planning and economic development activities, as well as local economic development councils.

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

- City of Lafayette Master Plan
- City of Lafayette Rebuild Alabama Transportation Plan
- City of Lanett Zoning Ordinance
- City of Lanett Comprehensive Plan
- City Valley 2019 Comprehensive Plan
- City of Valley Zoning Ordinance
- Town Cusseta Zoning Regulations
- Town of Five Points Zoning Regulations
- Town of Waverly Zoning Regulations
- Tallapoosa County
- City of Alexander City Zoning Ordinance
- City of Dadeville Zoning Ordinance
- City of Dadeville Comprehensive Plan
- City of Tallassee Zoning Ordinance
- City of Tallassee 2040 Comprehensive Plan
- Town of Camp Hill Zoning Ordinance
- Town of Camp Hill Comprehensive Plan
- Town of Daviston Zoning Regulations
- Town of Jackson's Gap Zoning Ordinance
- Town of Jackson's Gap Comprehensive Plan
- Town of New Site Zoning Regulations

City of Lafayette Rebuild Alabama Transportation Plan is a written report that shall be presented to the Mayor and Council at the first meeting in January each year detailing the expenditures made from the fund during the previous fiscal year and include the status of all projects listed in the transportation plan. The report shall be entered into the minutes of the council meeting and made available for public inspection.

The East Alabama Regional Planning and Development Commission (EARPDC) contracted with the City of Lanett to create a comprehensive plan for Lanett in order to guide and direct land use and development in a logical manner, consistent with the goals and objectives of the city. To initiate the planning process, an initial public hearing was used to inform city council and the public on the nature, benefits, and processes involved in creating and using a comprehensive plan for future land use and development in the city. The meeting also was used to gather public

input about community strengths, weaknesses, opportunities, and threats in what is referred to as a SWOT Analysis. This information was recorded by staff for future use. After the initial public hearing, EARPDC staff conducted a series of working sessions with the Lanett Planning Commission (LPC) on a quarterly basis in order to keep LPC updated on the plans progress and for EARPDC staff to receive guidance and direction on the plan. Working sessions focused on analyzing and discussing information presented in the chapters of the plan and were also used to create goals, objectives, strategies and plans for land use and development within the City of Lanett. The EARPDC cartography staff provided mapping services for practical land use research and applications.

Overall, the planning process involved in the City of Valley Comprehensive Plan utilized five steps to gather necessary information and formulate goals, objectives, strategies, and projects in order to guide the future growth and development of the town in conjunction with community needs and aspirations. The steps are listed in chronological order as follows: 1. Inventory and Analysis—Collection of demographic information such as population, housing, and economy, as well as results from surveys, and a SWOT (Strengths, Weaknesses, Opportunities and Threats) Analysis. 2. Visioning—Development of vision and mission statements. State Law requires local zoning to be prepared in accordance with the comprehensive plan. However, this does not mean the zoning map and future land use map need to be identical. 8 3. Goals and Objectives—Listings of goals and objectives, and their respective strategies and projects. 4. Implementation—Listings of projects and strategies along with implementing agencies, potential partners and funding sources, and timeframes for completion. 5. Evaluation—Listings of projects and strategies and means for tracking progress toward completion.

The Town of Cusseta's planning process for the Town's comprehensive plan consists of reviewing and assessing community needs. The town council may adopt, by resolution, guidelines for conducting public hearings and for receiving input on matters of city planning business and development. It is the Council's duty to approve the planning commission's comprehensive plan. Public hearings shall be conducted for approval of any changes to the plan. An annual report should be submitted to the Town Council and Mayor.

Town of Five Points' Town Council is to adopt an ordinance requiring decision makers to compare impact of actions with an adopted comprehensive plan. The City Council and Planning Commission shall develop, adopt and enforce a stringent nuisance of ordinance to eliminate old and outdated plans. The City Council and Planning Commission encourage community involvement through public hearings.

The Town of Waverly's ordinances are adopted and approved by the Town Council. All council meetings are open to the public for input.

The Town of Fredonia does not have a comprehensive plan. All ordinances are adopted and approved by the Mayor and Town Council. All council meetings are open to the public for input.

Chilton County's County Commission meets twice a month to discuss Economic Development matters that pertain to community planning.

The City of Clanton does not have a comprehensive plan. All ordinances are adopted and approved by the Mayor and City Council. All council meetings are open to the public for input.

The City of Jemison's Planning Department members work to build strong relations with the construction community and to improve the quality of construction by helping to ensure that home and business owners receive the quality of service they desire, by educating the public, rather than simply enforcing regulations on them. Its

mission is to provide well-supported and specially trained public servants, charged with the protection of the common good; to protect life, limb, health, property and public welfare, by regulating and controlling the design, quality of materials, location, construction, use and occupancy and maintenance of buildings and structures in the City of Jemison. All plans and ordinances are adopted and approved by the city council.

The City of Dadeville's comprehensive plan is a part of an ongoing process. A great comprehensive plan is the result of a team effort, attributed to the involvement of community leaders, citizens, community stakeholders, and the planning commission. The plan must involve a mechanism through which community needs, issues, concerns, and solutions are address and thoroughly examined. Past and future public hearings will be used to gather public input about community strengths, weaknesses, opportunities, and threats in what is referred to as a SWOT analysis. This information, along with statistical data, was recorded by staff and used as a foundation for the plan to build upon. After the initial public hearing, EARPDC staff conducted a series of working sessions with the Dadeville Planning Commission on a tri-monthly and bi-monthly basis in order to keep the planning commission updated on the plan's progress and for EARPDC staff to receive guidance and direction in the planning process.

The Town Council of Maplesville meets on the 2nd Monday of each month at 6:00 PM in the Public Library at 9400 AL Hwy 22, Maplesville, AL. All meetings are open to the public. All plans and ordinances are adopted and approved by the town council. Anyone wishing to be placed on the agenda should contact Dawn Smitherman at 334-366-4211.

Thorsby's Planning & Zoning Board's regular schedule of meetings are for the first Tuesday of each month at 5:30 pm. The public is invited to attend. All ordinances are adopted and approved by the town council.

The Tallapoosa County Commission adopts and approves all plans concerning planning and development through regular meetings. These meetings are open to the public and the meeting agendas are posted on the commission's website for public viewing.

City of Alexander City's Planning Commission is responsible for making recommendations to the City Council concerning the Zoning of property and approving the subdividing of land. The commission drafts a master plan that is adopted and approved by the Mayor and City Council. All meetings regarding the master plan are open to the public for input.

The City of Dadeville's comprehensive plan is a part of an ongoing process. A great comprehensive plan is the result of a team effort, attributed to the involvement of community leaders, citizens, community stakeholders, and the planning commission. The plan must involve a mechanism through which community needs, issues, concerns, and solutions are address and thoroughly examined. Past and future public hearings will be used to gather public input about community strengths, weaknesses, opportunities, and threats in what is referred to as a SWOT analysis. This information, along with statistical data, was recorded by staff and used as a foundation for the plan to build upon. After the initial public hearing, EARPDC staff conducted a series of working sessions with the Dadeville Planning Commission on a tri-monthly and bi-monthly basis in order to keep the planning commission updated on the plan's progress and for EARPDC staff to receive guidance and direction in the planning process.

The Town of Daviston's ordinances are adopted and approved by the Town Council. All council meetings are open to the public for input.

The Town of New Site's governing body is comprised of a six-member group; Mayor and a five-member council. Its goal is to make the best choices for all the citizens of our community. The Town of New Site's ordinances are adopted and approved by the Town Council. All council meetings are open to the public for input.

The Town of Camp Hill's comprehensive plan is a part of an ongoing process. A great comprehensive plan is the result of a team effort, attributed to the involvement of community leaders, citizens, community stakeholders, and the planning commission. The plan must involve a mechanism through which community needs, issues, concerns, and solutions are address and thoroughly examined. The East Alabama Regional Planning and Development Commission (EARPDC) contracted with the Town of Camp Hill to create a comprehensive plan in order to guide and direct land use and development in a logical manner, consistent with city goals and objectives. To begin the planning process, an initial public hearing was called and conducted in the Town of Camp Hill Town Hall. The meeting was used as an introductory planning session to inform town council, the planning commission and the general public on the nature, benefits, and processes involved in creating and using a comprehensive plan for future land use and development in the town. The meeting also was used to gather public input about community strengths, weaknesses, opportunities, and threats in what is referred to as a SWOT analysis. This information, along with statistical data, was recorded by staff and used as a foundation for the plan to build upon. After the initial public hearing, EARPDC staff conducted a series of working sessions with the Camp Hill Planning Commission on a tri-monthly and bi-monthly basis in order to keep the planning commission updated on the plan's progress and for EARPDC staff to receive guidance and direction in the planning process.

The Town of Jackson's Gap's comprehensive plan is a part of an ongoing process. A great comprehensive plan is the result of a team effort, attributed to the involvement of community leaders, citizens, community stakeholders, and the planning commission. The plan must involve a mechanism through which community needs, issues, concerns, and solutions are address and thoroughly examined. The East Alabama Regional Planning and Development Commission (EARPDC) contracted with the Town of Jackson's Gap to create a comprehensive plan in order to guide and direct land use and development in a logical manner, consistent with town goals and objectives. To begin the planning process, an initial public hearing was called in the Town of Jackson's Gap Town Hall. The meeting was used as an introductory planning session to inform town council, the planning commission and the general public on the nature, benefits, and processes involved in creating and using a comprehensive plan for future land use and development in the town. The meeting also was used to gather public input about community strengths, weaknesses, opportunities, and threats in what is referred to as a SWOT analysis. This information, along with statistical data, was recorded by staff and used as a foundation for the plan to build upon. After the initial public hearing, EARPDC staff conducted a series of working sessions with the Jackson's Gap Planning Commission on a tri-monthly and bi-monthly basis in order to keep the planning commission updated on the plan's progress and for EARPDC staff to receive guidance and direction in the planning process. Location the Town of Jackson's Gap is located in the central portion of Tallapoosa County, approximately 55 miles north of Montgomery and 90 miles southeast of Birmingham. US Highway 280 connects Jackson's Gap with Auburn/ Opelika, 45 miles to the southeast and Alexander City, 10 miles to the northwest. Nearby Lake Martin, one of the south's largest and finest, is an attractive recreational amenity to the area.

Chambers, Chilton, and Tallapoosa counties planning process has included public involvement, a county assessment, drafting of a planning concept, vision, goals and recommendations, review and approval by the and County Commission in order to have the hazard mitigation incorporated.

6.3 Public Awareness/Participation

A critical part of maintaining an effective and relevant natural hazard mitigation plan is ongoing public review and comment. Public participation in the hazard mitigation planning process, including monitoring and review of the existing plan, and development and adoption of future plans, is a very important component. Efforts will continue to involve local, state and government agencies, businesses, academia and the general public in the ongoing mitigation planning process to the maximum extent possible.

As described in the Monitoring, Evaluation, and Update process, any significant changes, amendments, or updates to the Hazard Mitigation Plan shall be discussed in public meetings prior to any adoption procedures. Public meetings will be held when any plan modification or major revisions to the plan are required or when otherwise deemed necessary and will be adopted during a public session. The public will be informed prior to the public hearings and other Hazard Mitigation related meetings through a variety of media sources, including but not limited to local newspaper advertisements and notices, radio advertising, postings at high traffic community areas, booths at local Severe Weather Expo events, social media, websites, etc. It is important to ensure that the public has the opportunity to be involved with all updates and changes to the hazard mitigation plan as well as the opportunity to voice any comments, questions, and concerns. Consequently, LRCOG and local EMA Directors are dedicated to the direct involvement of its citizens in providing feedback and comments on the plan throughout the five-year implementation cycle. LRCOG and local EMA offices will keep public hard copies and provide hard copies of the Hazard Mitigation Plan to each County Commission office, seats of government in each municipality, and other appropriate public locations, i.e., library, senior citizens center. The plan will also be made available on appropriate websites such as County EMA and LRCOG. Press releases will be published via various media, such as local newspaper advertisements, radio advertising, postings at high traffic community areas, social media, and websites, to inform the general public and stakeholders that the Hazard Mitigation Plan is available for review, where to find the Hazard Mitigation Plan, and how the public can play a role in its creation and future revision. The public hearing will be held to present the final plan to the public before each jurisdiction adopts the plan. The public can voice additional comments and concerns outside of public hearings by emailing or call the staff at LRCOG Planning and Economic department until a better mechanism for recording the public input is created. In the future, workshops and/or lunch and learns will be hosted as a way to continue to engage and educate the public about natural hazard events. These types of events will be used to maintain public engagement, build a relationship with the public, collect information from the public, and inform the public about how to be involved in the next update.

Section 7 – Appendix

This section of the plan is dedicated to the Appendix.

Section Contents

7.1 Appendix A: Survey
7.2 Appendix B: Agendas and Documents
7.3 Appendix C: Briefs, Advertisement, Sign-in Sheets, and Newspapers
7.4 Appendix D: Hazard Events Tables

7.1 Appendix A: Surveys

Stakeholder Survey Questions

Figure 7.1: Stakeholder Survey Chambers County

Chambers County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Chamber County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Chambers County?

7. Any local information regrading landslides?

8. What is the probability of a dam failure?

- Very Low
- Low
- Medium
- High

9. What would be in the impact of dam failure?

- Minor
- Limited
- Critical
- Catastrophic

10. What is the probability of a drought?

- Very Low
- Low
- Medium
- High

11. What would be in the impact of a drought?

- Minor
- Limited
- Critical
- Catastrophic

12. What is the probability of an earthquake?

- Very Low
- Low
- Medium
- High

13. What would be in the impact of an earthquake?

- Minor
- Limited
- Critical
- Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- Very Low
- Low
- Medium
- High

15. What would be in the impact of extreme temperature (hot or cold)?

- Minor
- Limited
- Critical
- Catastrophic

16. What is the probability of flooding?

- Very Low
- Low
- Medium
- High

17. What would be in the impact of flooding?

- Minor
- Limited
- Critical
- Catastrophic

18. What is the probability of hail?

- Very Low
- Low
- Medium
- High

19. What would be in the impact of hail?

- Minor
- Limited
- Critical
- Catastrophic

20. What is the probability of high winds/ thunderstorms?

- Very Low
- Low
- Medium
- High

21. What would be in the impact of high winds/ thunderstorm?

- Minor
- Limited
- Critical
- Catastrophic

22. What is the probability of landslides?

- Very Low
- Low
- Medium
- High

23. What would be in the impact of landslides?

- Minor
- Limited
- Critical
- Catastrophic

24. What is the probability of lightning?

- Very Low
- Low
- Medium
- High

25. What would be in the impact of lightning?

- Minor
- Limited
- Critical
- Catastrophic

26. What is the probability of sinkholes?

- Very Low
- Low
- Medium
- High

27. What would be in the impact of sink holes?

- Minor
- Limited
- Critical
- Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- Very Low
- Low
- Medium
- High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- Minor
- Limited
- Critical
- Catastrophic

30. What is the probability of a tornado?

- Very Low
- Low
- Medium
- High

31. What would be in the impact of a tornado?

- Minor
- Limited
- Critical
- Catastrophic

32. What is the probability of a wildfire?

- Very Low
- Low
- Medium
- High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

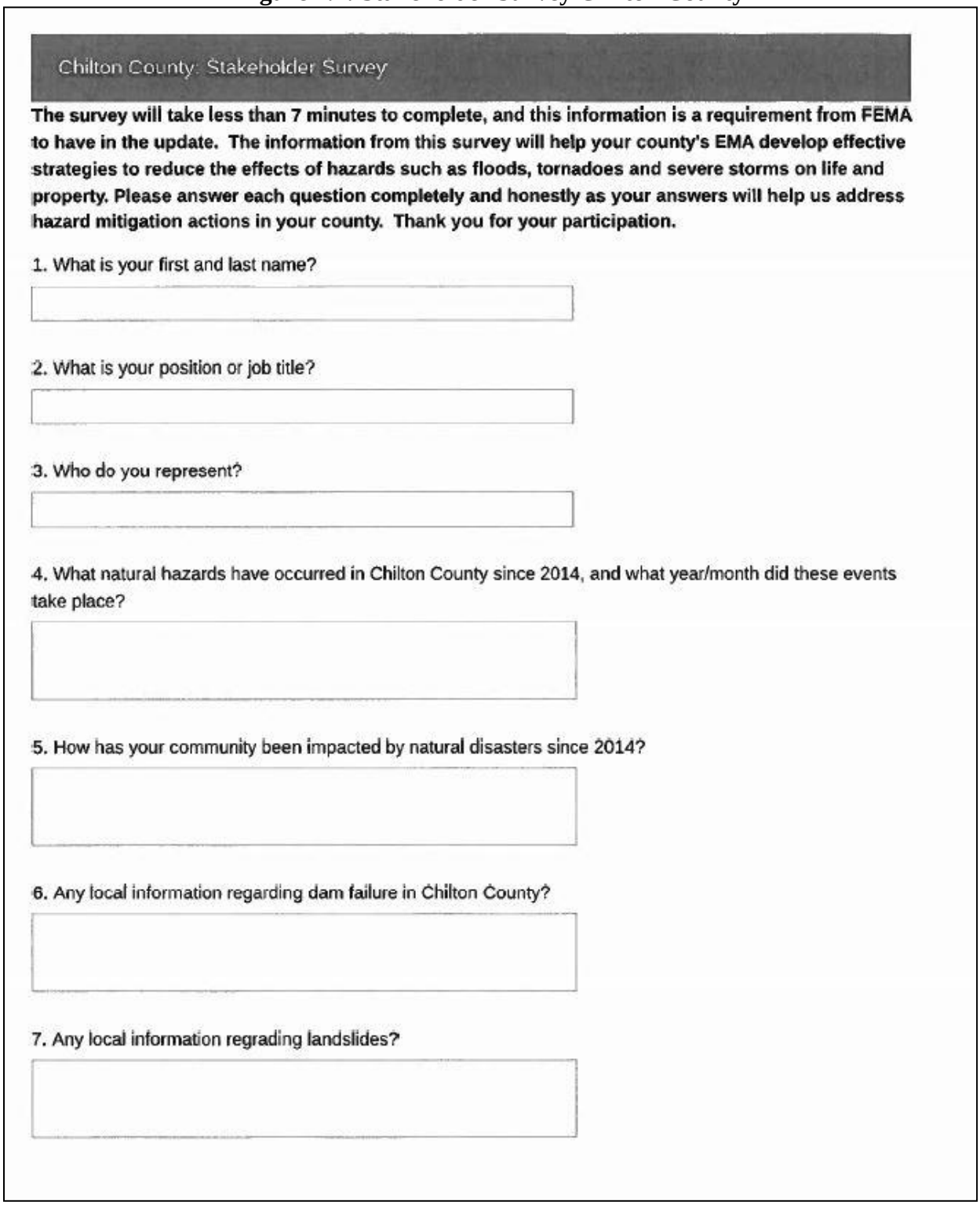
34. What is the probability of a winter storm?

- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

Figure 7.2: Stakeholder Survey Chilton County



Chilton County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Chilton County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Chilton County?

7. Any local information regrading landslides?

8. What is the probability of a dam failure?

- Very Low
- Low
- Medium
- High

9. What would be in the impact of dam failure?

- Minor
- Limited
- Critical
- Catastrophic

10. What is the probability of a drought?

- Very Low
- Low
- Medium
- High

11. What would be in the impact of a drought?

- Minor
- Limited
- Critical
- Catastrophic

12. What is the probability of an earthquake?

- Very Low
- Low
- Medium
- High

13. What would be in the impact of an earthquake?

- Minor
- Limited
- Critical
- Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- Very Low
- Low
- Medium
- High

15. What would be in the impact of extreme temperature (hot or cold)?

- Minor
- Limited
- Critical
- Catastrophic

16. What is the probability of flooding?

- Very Low
- Low
- Medium
- High

17. What would be in the impact of flooding?

- Minor
- Limited
- Critical
- Catastrophic

18. What is the probability of hail?

- Very Low
- Low
- Medium
- High

19. What would be in the impact of hail?

- Minor
- Limited
- Critical
- Catastrophic

20. What is the probability of high winds/ thunderstorms?

- Very Low
- Low
- Medium
- High

21. What would be in the impact of high winds/ thunderstorm?

- Minor
- Limited
- Critical
- Catastrophic

22. What is the probability of landslides?

- Very Low
- Low
- Medium
- High

23. What would be in the impact of landslides?

- Minor
- Limited
- Critical
- Catastrophic

24. What is the probability of lightning?

- Very Low
- Low
- Medium
- High

25. What would be in the impact of lightning?

- Minor
- Limited
- Critical
- Catastrophic

26. What is the probability of sinkholes?

- Very Low
- Low
- Medium
- High

27. What would be in the impact of sink holes?

- Minor
- Limited
- Critical
- Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- Very Low
- Low
- Medium
- High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- Minor
- Limited
- Critical
- Catastrophic

30. What is the probability of a tornado?

- Very Low
- Low
- Medium
- High

31. What would be in the impact of a tornado?

- Minor
- Limited
- Critical
- Catastrophic

32. What is the probability of a wildfire?

- Very Low
- Low
- Medium
- High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

34. What is the probability of a winter storm?

- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

Figure 7.3: Stakeholder Survey Tallapoosa County

2020 Hazard Mitigation Plan Update Tallapoosa County

2020 Hazard Mitigation Plan Update for Tallapoosa County

The survey will take less than 2 minutes to complete. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

* 1. Do you live or work in Tallapoosa County?

- Yes
- No

* 2. Please select which place you live or work in.

- Alexander City
- Dadeville
- Tallassee
- Camp Hill
- Daviston
- Goldville
- Tallapoosa County
- Jackson's Gap
- New Site

* 3. Do you live in a flood plain?

- Yes
- No
- I do not know

* 4. Do you have Nation Flood Insurance (NFIP)?

- Yes
- No
- I do not know

* 5. How prepared do you feel for natural hazard events such as tornadoes, floods, or severe storms?

- Very Prepared
- Prepared
- Neither Prepared nor Prepared
- Not Prepared
- Very Unprepared

8. What is the probability of a dam failure?

- Very Low
- Low
- Medium
- High

9. What would be in the impact of dam failure?

- Minor
- Limited
- Critical
- Catastrophic

10. What is the probability of a drought?

- Very Low
- Low
- Medium
- High

11. What would be in the impact of a drought?

- Minor
- Limited
- Critical
- Catastrophic

12. What is the probability of an earthquake?

- Very Low
- Low
- Medium
- High

13. What would be in the impact of an earthquake?

- Minor
- Limited
- Critical
- Catastrophic

14. What is the probability of a extreme temperature (hot or cold)?

- Very Low
- Low
- Medium
- High

15. What would be in the impact of extreme temperature (hot or cold)?

- Minor
- Limited
- Critical
- Catastrophic

16. What is the probability of flooding?

- Very Low
- Low
- Medium
- High

17. What would be in the impact of flooding?

- Minor
- Limited
- Critical
- Catastrophic

18. What is the probability of hail?

- Very Low
- Low
- Medium
- High

19. What would be in the impact of hail?

- Minor
- Limited
- Critical
- Catastrophic

20. What is the probability of high winds/ thunderstorms?

- Very Low
- Low
- Medium
- High

21. What would be in the impact of high winds/ thunderstorm?

- Minor
- Limited
- Critical
- Catastrophic

22. What is the probability of landslides?

- Very Low
- Low
- Medium
- High

23. What would be in the impact of landslides?

- Minor
- Limited
- Critical
- Catastrophic

24. What is the probability of lightning?

- Very Low
- Low
- Medium
- High

25. What would be in the impact of lightning?

- Minor
- Limited
- Critical
- Catastrophic

26. What is the probability of sinkholes?

- Very Low
- Low
- Medium
- High

27. What would be in the impact of sink holes?

- Minor
- Limited
- Critical
- Catastrophic

28. What is the probability of a tropical depression/ tropical storm/ hurricane?

- Very Low
- Low
- Medium
- High

29. What would be in the impact of a tropical depression/ tropical storm/ hurricane?

- Minor
- Limited
- Critical
- Catastrophic

30. What is the probability of a tornado?

- Very Low
- Low
- Medium
- High

31. What would be in the impact of a tornado?

- Minor
- Limited
- Critical
- Catastrophic

32. What is the probability of a wildfire?

- Very Low
- Low
- Medium
- High

33. What would be in the impact of a wildfire?

- Minor
- Limited
- Critical
- Catastrophic

34. What is the probability of a winter storm?

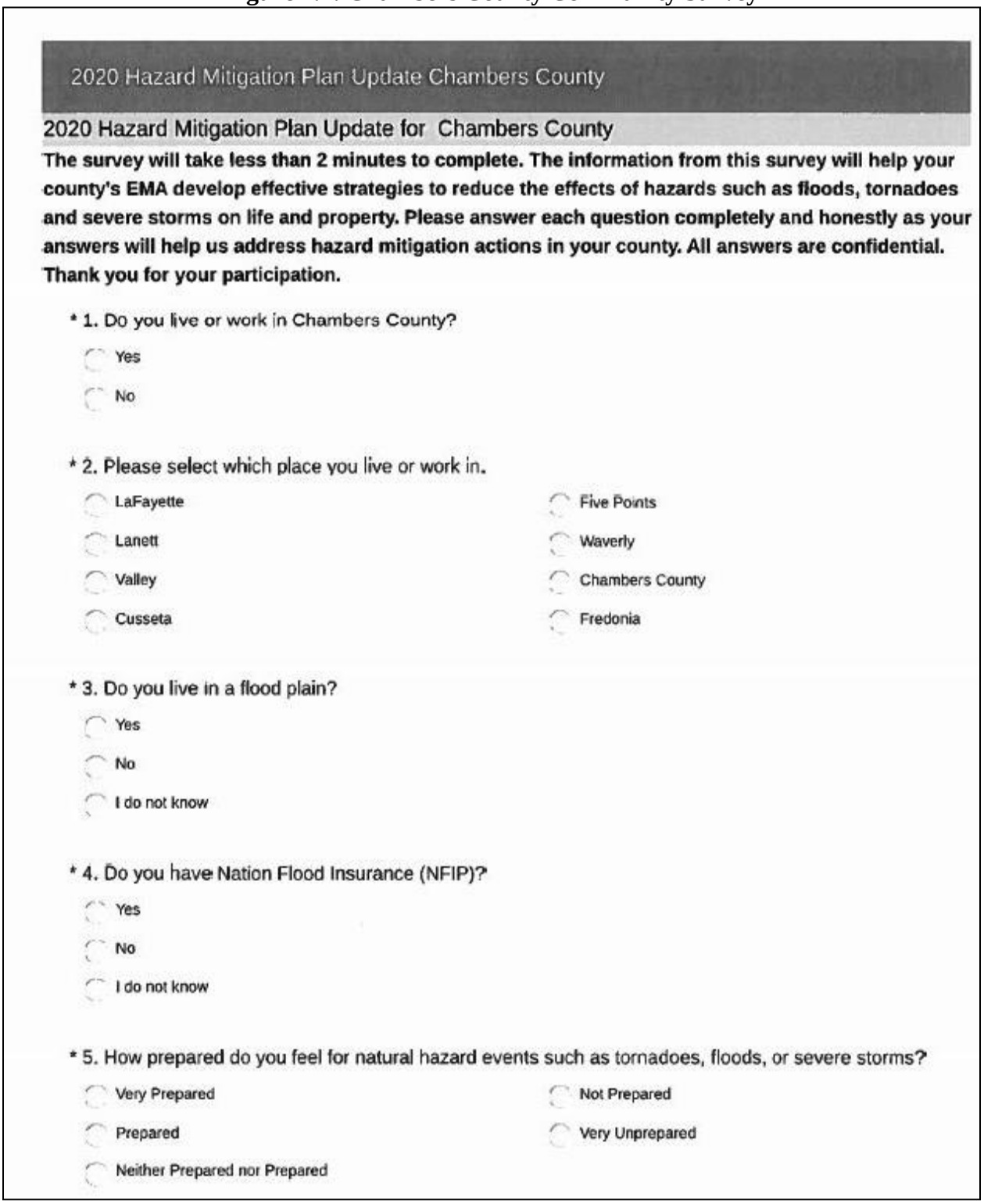
- Very Low
- Low
- Medium
- High

35. What would be in the impact of a winter storm?

- Minor
- Limited
- Critical
- Catastrophic

Community Survey Questions

Figure 7.4: Chambers County Community Survey



2020 Hazard Mitigation Plan Update Chambers County

2020 Hazard Mitigation Plan Update for Chambers County

The survey will take less than 2 minutes to complete. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

* 1. Do you live or work in Chambers County?

- Yes
- No

* 2. Please select which place you live or work in.

- LaFayette
- Lanett
- Valley
- Cusseta
- Five Points
- Waverly
- Chambers County
- Fredonia

* 3. Do you live in a flood plain?

- Yes
- No
- I do not know

* 4. Do you have Nation Flood Insurance (NFIP)?

- Yes
- No
- I do not know

* 5. How prepared do you feel for natural hazard events such as tornadoes, floods, or severe storms?

- Very Prepared
- Prepared
- Neither Prepared nor Prepared
- Not Prepared
- Very Unprepared

* 6. Please Select all that apply. Which resource makes you feel more prepared for a national hazard event?

- [ ] Educational Brochures
- [ ] Community Classes on Natural Hazards
- [ ] Access to Safe Rooms
- [ ] Relocating to a Safer Location
- [ ] Access to Community Shelters
- [ ] Readiness Kit
- [ ] Other (please specify)

* 7. Please select all that apply. Which of the following information sources are the most effective at warning you of approaching storms or natural hazards in your community?

- [ ] Cell Phone Alerts
- [ ] Outdoors Sirens
- [ ] Facebook Posts
- [ ] Telephone
- [ ] Websites
- [ ] Twitter Posts
- [ ] Newspaper
- [ ] Weather Alert Radio
- [ ] Radio
- [ ] TV Coverage
- [ ] Other (please specify)

* 8. Please indicate your personal level of concern about the effects of each natural hazard's potential impact on life and property in your county.

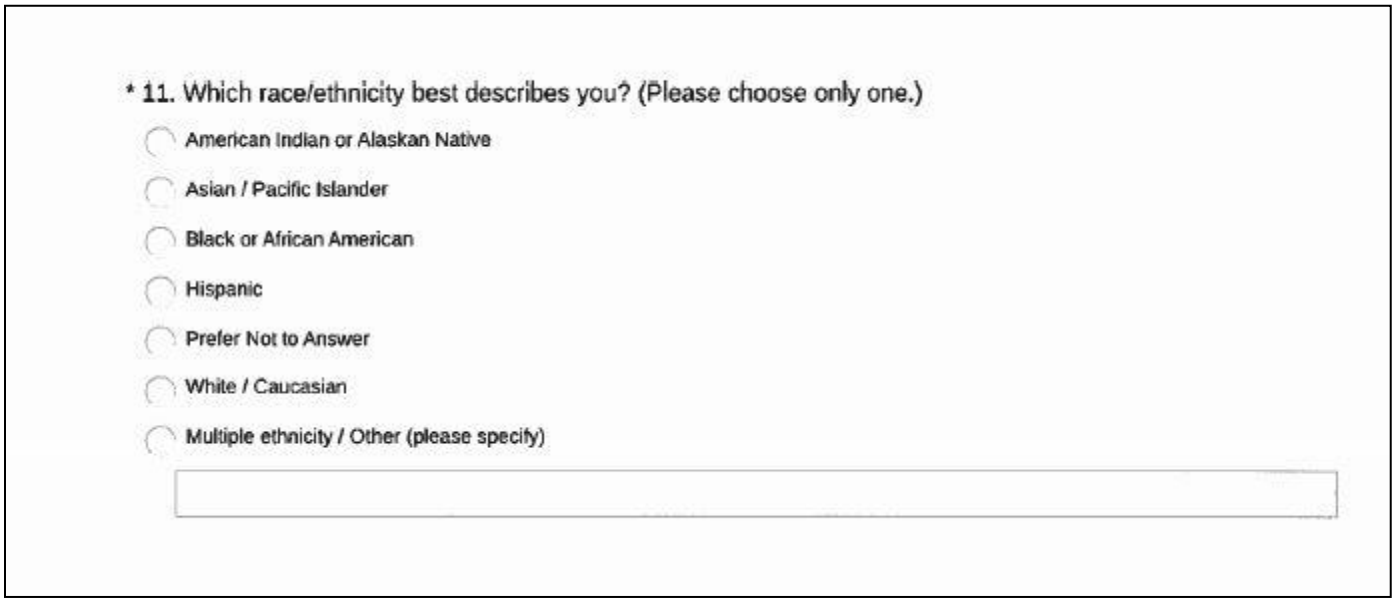
Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	○	○	○	○	○	○
Drought	○	○	○	○	○	○
Earthquakes	○	○	○	○	○	○
Extreme Temperature (Heat or Cold)	○	○	○	○	○	○
Flooding/ Flash Flooding	○	○	○	○	○	○
Hail	○	○	○	○	○	○
High Winds/ Thunderstorms	○	○	○	○	○	○
Landslides	○	○	○	○	○	○
Lightning	○	○	○	○	○	○
Sinkholes/ Land Subsidence	○	○	○	○	○	○
Tropical Depression/ Tropical Storm/ Hurricane	○	○	○	○	○	○
Wildfire	○	○	○	○	○	○
Tornado	○	○	○	○	○	○
Winter Storm	○	○	○	○	○	○

* 9. Do you have experience dealing with the effects of each natural hazard's potential impact on life and/or property in your county.

	Yes	No
Dam Faulire	◯	◯
Drought	◯	◯
Earthquakes	◯	◯
Extreme Temperature (Heat or Cold)	◯	◯
Flooding/ Flash Flooding	◯	◯
Hail	◯	◯
High Winds/ Thunderstorms	◯	◯
Landslides	◯	◯
Lightning	◯	◯
Sinkholes/ Land Subsidence	◯	◯
Tropical Depression/ Tropical Storm/ Hurricane	◯	◯
Wildfire	◯	◯
Tornado	◯	◯
Winter Storm	◯	◯

* 10. Please identify your age range.

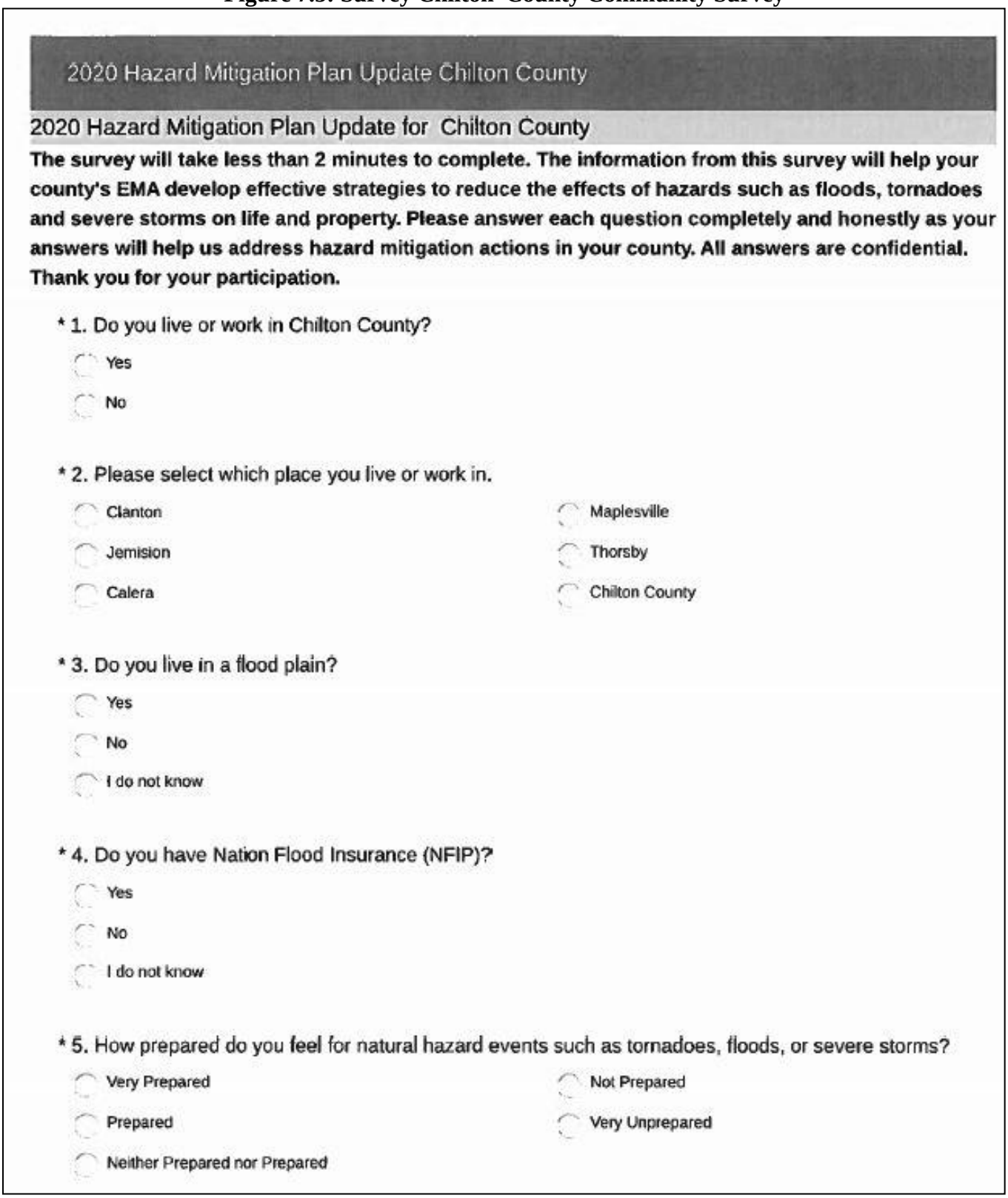
- ◯ 18-25
- ◯ 26-35
- ◯ 36-45
- ◯ 46-55
- ◯ 56-65
- ◯ 66-75
- ◯ 75 and Older



* 11. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- Prefer Not to Answer
- White / Caucasian
- Multiple ethnicity / Other (please specify)

Figure 7.5: Survey Chilton County Community Survey



2020 Hazard Mitigation Plan Update Chilton County

2020 Hazard Mitigation Plan Update for Chilton County

The survey will take less than 2 minutes to complete. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

* 1. Do you live or work in Chilton County?

- Yes
- No

* 2. Please select which place you live or work in.

- Clanton
- Jemision
- Calera
- Maplesville
- Thorsby
- Chilton County

* 3. Do you live in a flood plain?

- Yes
- No
- I do not know

* 4. Do you have Nation Flood Insurance (NFIP)?

- Yes
- No
- I do not know

* 5. How prepared do you feel for natural hazard events such as tornadoes, floods, or severe storms?

- Very Prepared
- Prepared
- Neither Prepared nor Prepared
- Not Prepared
- Very Unprepared

* 6. Please Select all that apply. Which resource makes you feel more prepared for a national hazard event?

- [ ] Educational Brochures
- [ ] Community Classes on Natural Hazards
- [ ] Access to Safe Rooms
- [ ] Relocating to a Safer Location
- [ ] Access to Community Shelters
- [ ] Readiness Kit
- [ ] Other (please specify)

* 7. Please select all that apply. Which of the following information sources are the most effective at warning you of approaching storms or natural hazards in your community?

- [ ] Cell Phone Alerts
- [ ] Outdoors Sirens
- [ ] Facebook Posts
- [ ] Telephone
- [ ] Websites
- [ ] Twitter Posts
- [ ] Newspaper
- [ ] Weather Alert Radio
- [ ] Radio
- [ ] TV Coverage
- [ ] Other (please specify)

* 8. Please indicate your personal level of concern about the effects of each natural hazard's potential impact on life and property in your county.

Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	○	○	○	○	○	○
Drought	○	○	○	○	○	○
Earthquakes	○	○	○	○	○	○
Extreme Temperature (Heat or Cold)	○	○	○	○	○	○
Flooding/ Flash Flooding	○	○	○	○	○	○
Hail	○	○	○	○	○	○
High Winds/ Thunderstorms	○	○	○	○	○	○
Landslides	○	○	○	○	○	○
Lightning	○	○	○	○	○	○
Sinkholes/ Land Subsidence	○	○	○	○	○	○
Tropical Depression/ Tropical Storm/ Hurricane	○	○	○	○	○	○
Wildfire	○	○	○	○	○	○
Tornado	○	○	○	○	○	○
Winter Storm	○	○	○	○	○	○

* 9. Do you have experience dealing with the effects of each natural hazard's potential impact on life and/or property in your county.

	Yes	No
Dam Faulire	◯	◯
Drought	◯	◯
Earthquakes	◯	◯
Extreme Temperature (Heat or Cold)	◯	◯
Flooding/ Flash Flooding	◯	◯
Hail	◯	◯
High Winds/ Thunderstorms	◯	◯
Landslides	◯	◯
Lightning	◯	◯
Sinkholes/ Land Subsidence	◯	◯
Tropical Depression/ Tropical Storm/ Hurricane	◯	◯
Wildfire	◯	◯
Tornado	◯	◯
Winter Storm	◯	◯

* 10. Please identify your age range.

- ◯ 18-25
- ◯ 26-35
- ◯ 36-45
- ◯ 46-55
- ◯ 56-65
- ◯ 66-75
- ◯ 75 and Older

* 11. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- Prefer Not to Answer
- White / Caucasian
- Multiple ethnicity / Other (please specify)

Figure 7.6: Tallapoosa County Community Survey

Tallapoosa County: Stakeholder Survey

The survey will take less than 7 minutes to complete, and this information is a requirement from FEMA to have in the update. The information from this survey will help your county's EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. Thank you for your participation.

1. What is your first and last name?

2. What is your position or job title?

3. Who do you represent?

4. What natural hazards have occurred in Tallapoosa County since 2014, and what year/month did these events take place?

5. How has your community been impacted by natural disasters since 2014?

6. Any local information regarding dam failure in Tallapoosa County?

7. Any local information regrading landslides?

* 6. Please Select all that apply. Which resource makes you feel more prepared for a national hazard event?

- [ ] Educational Brochures
- [ ] Community Classes on Natural Hazards
- [ ] Access to Safe Rooms
- [ ] Relocating to a Safer Location
- [ ] Access to Community Shelters
- [ ] Readiness Kit
- [ ] Other (please specify)

* 7. Please select all that apply. Which of the following information sources are the most effective at warning you of approaching storms or natural hazards in your community?

- [ ] Cell Phone Alerts
- [ ] Outdoors Sirens
- [ ] Facebook Posts
- [ ] Telephone
- [ ] Websites
- [ ] Twitter Posts
- [ ] Newspaper
- [ ] Weather Alert Radio
- [ ] Radio
- [ ] TV Coverage
- [ ] Other (please specify)

* 8. Please indicate your personal level of concern about the effects of each natural hazard's potential impact on life and property in your county.

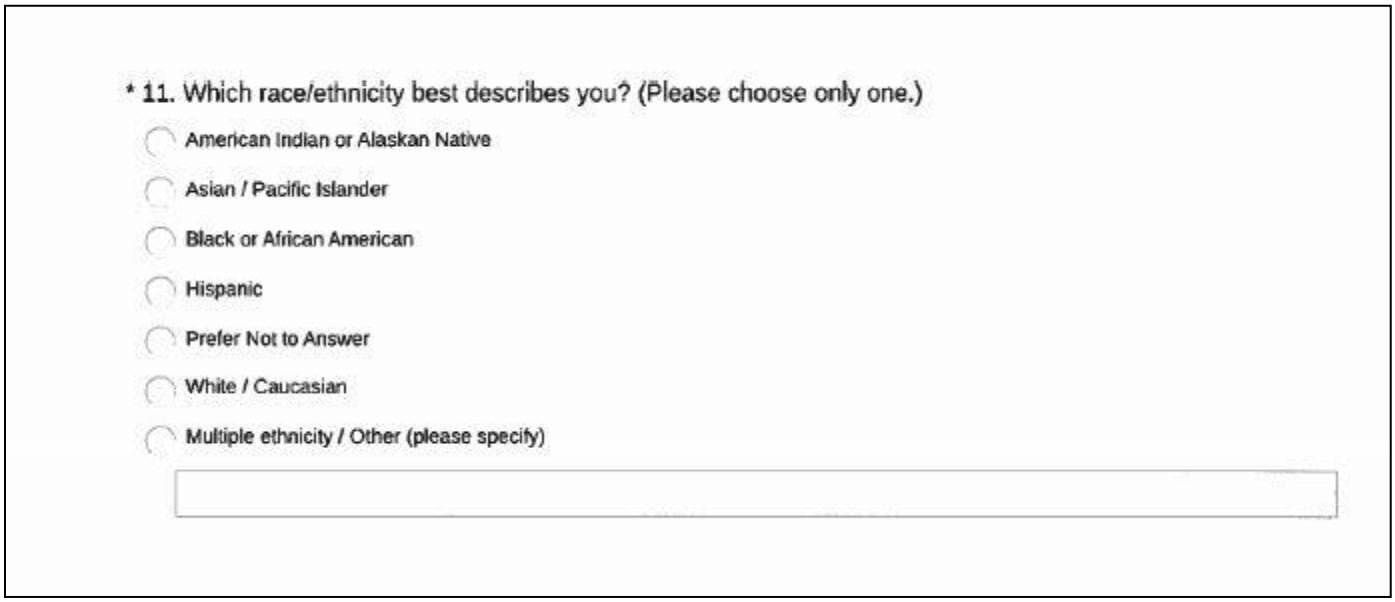
Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	○	○	○	○	○	○
Drought	○	○	○	○	○	○
Earthquakes	○	○	○	○	○	○
Extreme Temperature (Heat or Cold)	○	○	○	○	○	○
Flooding/ Flash Flooding	○	○	○	○	○	○
Hail	○	○	○	○	○	○
High Winds/ Thunderstorms	○	○	○	○	○	○
Landslides	○	○	○	○	○	○
Lightning	○	○	○	○	○	○
Sinkholes/ Land Subsidence	○	○	○	○	○	○
Tropical Depression/ Tropical Storm/ Hurricane	○	○	○	○	○	○
Wildfire	○	○	○	○	○	○
Tornado	○	○	○	○	○	○
Winter Storm	○	○	○	○	○	○

* 9. Do you have experience dealing with the effects of each natural hazard's potential impact on life and/or property in your county.

	Yes	No
Dam Faulire	◯	◯
Drought	◯	◯
Earthquakes	◯	◯
Extreme Temperature (Heat or Cold)	◯	◯
Flooding/ Flash Flooding	◯	◯
Hail	◯	◯
High Winds/ Thunderstorms	◯	◯
Landslides	◯	◯
Lightning	◯	◯
Sinkholes/ Land Subsidence	◯	◯
Tropical Depression/ Tropical Storm/ Hurricane	◯	◯
Wildfire	◯	◯
Tornado	◯	◯
Winter Storm	◯	◯

* 10. Please identify your age range.

- ◯ 18-25
- ◯ 26-35
- ◯ 36-45
- ◯ 46-55
- ◯ 56-65
- ◯ 66-75
- ◯ 75 and Older



* 11. Which race/ethnicity best describes you? (Please choose only one.)

- American Indian or Alaskan Native
- Asian / Pacific Islander
- Black or African American
- Hispanic
- Prefer Not to Answer
- White / Caucasian
- Multiple ethnicity / Other (please specify)

7.2 Appendix B: Agendas and Documents

Division D Multi-Jurisdictional Multi-hazard Mitigation Plan
Overview

Grant Update:

- Lee-Russell Council of Governments (LRCOG) submitted the PDM grant on 12/15/18.
- Lee-Russell Council of Governments submitted requested revisions by AEMA on 1/4/19.
- The PDM grant was submitted to FEMA by the AEMA for review on 1/9/19.
- Alabama Emergency Management Agency has projected notification of funding in fall 2019.

Counties Participating in Division D Multi-jurisdictional Multi-hazard Mitigation Plan:

- Autauga (Feb. 2021), Chambers (June 2022), Chilton (Oct. 2021), Coosa (March 2022), Elmore (2020), Lee (2020), Lowndes (June 2021), Macon (Aug. 2021), Montgomery (Jan. 2021), Russell (2020), and Tallapoosa (June 2021) counties and municipalities as well as other jurisdictions within these 11 counties.

check

check on due dates

Division D Hazard Mitigation Plan Team Members:

- Lee-Russell Council of Governments staff will act as the Lead Organization to manage and facilitate the planning process by working with the Core Planning Team. A LRCOG staff person will serve as the administrator of the PDM grant if funded and will lead the overall mitigation planning effort by working with the core planning team, local subcommittees and other stakeholders to develop and adopt the Divisional Plan. Once the committee meetings and public meetings/surveys are completed and all data collection is finalized, LRCOG staff would compile and consolidate collected information and updates into the draft Divisional Multi-jurisdictional Multi-Hazard Mitigation Plan.
- Hazard Mitigation Core Planning Team will include the Division D Coordinator, the 11 EMA Directors or their designee and LRCOG staff in the development and adoption of the Division D Multi-jurisdiction Multi-hazard Mitigation Plan. The Division D Hazard Mitigation Core Planning Team would also help establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.
- County-level Hazard Mitigation Planning Sub-committee will include but not limited to individuals from local emergency management, education, public safety, utilities, engineering, planning/zoning, GIS, administration, public works, building, or highway departments. The County Hazard Mitigation Planning Sub-Committee meetings would be convened in each county to review and document what changes/impacts/progress has occurred in the past 5 years for inclusion in the updated divisional plan.

Division D Hazard Mitigation Core Planning Team Responsibilities:

- Serving on the Core Planning Team with Division D Coordinator and the 11 EMA Directors or their designee.
- Approving the final Work Program and Schedule.
- Assisting in organizing and attending regular meetings of the Core Planning Team and county-level planning sub-committees. If unable to attend, sending a designee or make myself available to discuss the agenda through phone conversation or in-person meeting with designated LRCOG staff.
- Assisting in developing and conducting an outreach strategy to involve other county-level planning sub-committee members, stakeholders, and the public, as appropriate to represent the Jurisdiction.
- Identifying community resources available to support the planning effort, including meeting spaces, facilitators, and media outlets.
- Representing the jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Providing information and feedback on the jurisdictional and division risk assessment and mitigation strategies and select a course of action to be followed for the communities.
- Providing an assessment of prioritized projects that have been completed or are ongoing, or changes to prioritization.
- Submitting the draft plan to the county-level planning sub-committee for review.
- Working with the members of the Core Planning Team to incorporate all Jurisdiction's comments into the draft plan.

- Submitting the Division D Multi-jurisdiction Multi-hazard Mitigation Plan to the respective governing body for consideration and adoption.
- After adoption, assisting in the coordination process to monitor, evaluate, and work toward plan implementation.
- Assist in documenting the in-kind labor of Core Planning and Sub-committee members for the local match requirement of the grant.

Hazard Mitigation Plan Update Evaluation Process:

1. **Complete grant start up requirements** once funding notification is received.

2. **Review current Hazard Mitigation Plans for each county** -The review of the current approved plans will provide a starting point for identifying areas for improvement that may require more time and resources. Each of the eleven plans will be reviewed for consistency of information within the divisional plan. Additionally, FEMA's Local Mitigation Plan Review Tools from each of the 11 previous plans will be reviewed and recommendations for improvement will be incorporated into the planning process.

3. **Organize Resources and Convene Core Planning Team -** The core planning team will manage the overall plan activities, contribute to the decision making process, review the previous local hazard mitigation plans, finalize requirements for participation in the planning process, and establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.

4. **Organize the County Planning Sub-Committee** - The county-level Planning Sub-Committee would be organized in each county to review the community capabilities, hazard identification, risk assessments, mitigation and plan maintenance strategies of the existing local Hazard Mitigation Plan. During the review, the group would document what changes/impacts/progress has been made in each area for inclusion in the divisional plan.

5. **Create Outreach Strategy for Division D** – The Planning Process Section would be reviewed and evaluated to determine if the planning procedures were effective, was public outreach activities successful in gaining public participation, and is the current level of public support and/or decision maker priorities the same or has it changed related to hazard mitigation. Once reviewed, the planning team would identify any necessary changes or additional strategies that are needed in moving forward with the updated plan. Public outreach efforts will include but not limited to advertisement and invitation to all planning and community meetings, social media outreach, plan website, interactive surveys at stakeholder meetings (i.e. Pollev.com), online surveys (i.e. survey monkey), and phone interviews.

6. **Review Community Capabilities and Previously Approved Hazard Mitigation Plans – The** Capability Assessment Section would be reviewed to determine if community capabilities were documented sufficiently in the previous plans, were there any community capabilities that were missing in terms of administrative, human, technical, and financial resources and if the policies, plans, regulations, or reports listed in the plan were current and up to date.

7. **Conduct Risk Assessment – Hazard Identification, Assessing Risk, and Vulnerabilities** – Hazard Identification and Risks/Vulnerability Assessment would be evaluated to see if the listed hazards and hazard occurrences, probability of future occurrences and the impact on life, property and the community is sufficient or new data is available. Community assets, development trends, population changes, critical facilities, and local mitigation efforts will be updated by utilizing the technical expertise of planning committees, new data sources and existing local plans. Estimates of potential dollar losses and the methodology used to prepare the estimates will be updated from the previous plan.

8. **Identify Mitigation Goals, Action Plan, and Implementation Plan** - Mitigation Strategy Section would be evaluated to determine if the implementation of the community's mitigation strategy was effective and was the strategy revised following any disasters, if the existing mitigation actions were still relevant

and were there obstacles to successful implementation of these actions, if integration with other planning mechanisms occurred and if progress was made in implementing the mitigation action plan. Mitigation Strategy would evaluate each jurisdiction's mitigation strategy particularly in light of experiences gained from the implementation of the previous plan. The 5 year update will assess the previous stated goals and actions, evaluate progress in implementing the action plan, and adjust its actions to address current realities. The mitigation strategy will also be revised to add any new disasters to determine if recommended actions are still appropriate given the impacts of the event.

9. **Plan Maintenance Procedures** would be evaluated to determine how well the plan maintenance procedures established in the previously approved plan worked. An updated blueprint for monitoring, evaluating, updating the mitigation plan within the 5 year cycle, as well as the responsible parties, will be outlined. It will also include new and existing strategies for continued public involvement and incorporation into existing planning mechanisms in each jurisdiction.

10. **Develop and Review the Draft Plan** - The draft plan will be reviewed by Division D Core Planning Team, county subcommittees, other identified stakeholders, and the public during the draft process and prior to plan approval and adoption.

11. **Submission of Draft Plan by AEMA and FEMA for review and approval** - An approved draft plan will be submitted to AEMA/FEMA for their review and comment. All comments/revisions/suggestions received from AEMA/FEMA will be integrated into the final plan and would be in compliance with all current, applicable FEMA Local Planning Guidance and Policies.

12. **Adoption of the Division D Multi-jurisdictional Multi-hazard Mitigation Plan in each jurisdiction** - The final approved plan will be formally adopted by all participating local governments at a regularly scheduled commission/council meeting. Documentation of these approvals will be included in the final Division D Multi-Jurisdictional Hazard Mitigation Plan.

Next Steps:

1. Compile a list of potential members of the County Planning Sub-Committee from each County EMA Director.
2. Start reviewing existing data sources to include the following:
    a. Alabama State Hazard Mitigation Plan
    b. Local Hazard Mitigation Plans and the FEMA's Local Mitigation Plan Review Tools
    c. Emergency Operations Plans
    d. State and Federal Sources of Hazard Information
    e. Planning and Regulatory
    f. Changes in Development

Hazards Identitifed at Division D Meeting

Proposed Division D	Autauga/Chilton/Macon/ Montgomery/Tallapoosa	Lee/Russell	Elmore	Chambers	Coosa	Lowndes	State of Alabama
Dam Failure	Thunderstorm	Drought/Heat Wave	Thunderstorms/Severe Thunderstorms	Flooding	Tornadoes	Dam Failure	Dam Failure
Drought	Lightning	Earthquakes	Lightning	Tornadoes	Severe Storms (discusses high winds, lightning)	Drought	Drought
Earthquakes	Hail	Flood	Hail	Severe Storms-hail, lightning	Flooding	Extreme Temperatures	Earthquakes
Extreme Temperature	Tornado	Hail	Tornadoes and High Wind Events	Hurricanes	Winter Storms	Floods	Extreme Temperatures
Flooding	Flood/Flash Flood	Lightning	Flooding (includes Flash Flooding, River Flooding)	Winter Storms/Freezes	Hurricanes	Hail	Flooding
Hail	Drought/Extreme Heat	Sinkholes	Hurricanes and Tropical Storms	Landslides	Droughts	High Winds	Hail
High Winds	Winter Storm/Frost/Freeze/Heavy Snow/Ice Storm/Winter Weather/Extreme Cold	Thunderstorms (Includes Strong Winds)	Extreme Temperatures – Heat and Cold	Sink Holes (Land Subsidence)	Not included: Dam Failure	Landslides	High Winds
Landslides	Hurricane/Tropical Storm/Tropical Depression/High Wind/Strong Wind	Tropical Depression/Tropical Storms/Hurricanes	Winter Storms	Earthquakes	Earthquake	Sinkholes and Subsidence	Landslides
Lightning	Sinkhole/Expansive Soil	Tornadoes	Drought	Droughts/Heat Waves	Extreme Temperatures	Wildfire	Lightning
Sinkholes and Land Subsidence	Landslide	Wildfire	Wildfire	Dam/Levee Failures	Landslides	Winter/Ice Storms	Sea Level Rise and Coastal Land Change
Tropical Storms/Tropical Depressions/Hurricanes	Earthquake	Winter Storms (Includes Ice Storms, Heavy Snow)	Landslides	Does not include: Wildfire	Sinkholes and Land Subsidence	Thunderstorms and Lightning	Sinkholes and Land Subsidence
Tornadoes	Dam/Levee Failure	Not included: Dam Failure	Sinkholes and Land Subsidence		Wildfire	Tropical Storms and Hurricanes	Tsunamis
Wildfire	Wildfire	Landslides	Earthquakes			Not Included:	Wildfire
Winter Storms			Dam Failure			Earthquake	Winter Storms
			Dense Fog				
			Celestial Impact (Includes Space Weather)				
			Hazardous Materials				
			Transportation System Failures				
			Epidemiological/Public Health				
			Civil Unrest				
			Adversarial Threats				

Proposed Goals from Division D Meeting

Division 'D' Hazard Mitigation Plan – Proposed Goals:

1. **PREVENTION**: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.

2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.

3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.

4. **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.

5. **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.

6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

7.3 Appendix C: Advertisement

Wed 9/23/2020 10:56 AM

Deputy Director <deputy.director@chambers911ema.org>

FW: Hazard Mitigation Plan Community Engagement

To Taylor Esco

Cc Jessica Yeager

You replied to this message on 9/23/2020 11:33 AM.

From: Deputy Director <deputy.director@chambers911ema.org>
Sent: Wednesday, September 23, 2020 11:45 AM
Subject: Hazard Mitigation Plan Community Engagement

Good morning,

This is not relevant to current weather but it is relevant to the multitude of hazards that our county faces each year. This email group makes up a large part of our community partners and citizens.
We are updating our Hazard Mitigation Plan and developing a Regional Multi-Hazard Mitigation Plan.

We would like to ask each of you to please take a moment and participate by taking 2 minutes to answer the survey below. I apologize if you received it more than once.

Please click on the link (https://www.surveymonkey.com/r/MS567L8) to participate in the community engagement portion of the 2020 Hazard Mitigation Plan. The survey will take less than 2 minutes to complete. The information from this survey will help the Chambers County EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Your participation in the Hazard Mitigation Plan is vital to preparing the plan. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

Thank you so much!

Chambers
COUNTY
9-1-1/EMA
STRENGTH WOVEN IN

Kathy A Hornsby
Deputy Director, Planner, AISO
Chambers County EMA / E-911
Office: 334-576-0912 / Fax: 334-576-0913
Deputy.director@chambers911ema.org
www.ChambersCounty911EMA.org

"THE SOURCE OF OUR STRENGTH LIES IN OUR PEOPLE"

Tallapoosa County Weather Alerts
December 15, 2020 at 5:59 PM ·

The Tallapoosa County Emergency Management Agency needs your help. The update for our Hazard Mitigation Plan is ready for review.

Please take a minute to review the plan by clicking the following link:

https://lrcog-my.sharepoint.com/:w:/p/tesco/EUuAOAtOhfdKlDmJ5u0hKf0BG8FgQvYQyU5FKszH3dP93w?e=Yr0h7x

Thank you for helping Tallapoosa County EMA be better prepared for hazards we may face. This plan is still in the modification phase and your comments are welcome.

If you have any questions or comments please call the Tallapoosa County EMA office at 256-825-1078 and we will be glad to assist.

Thank you,
Jason Moran, Director
Tallapoosa County EMA

LRCOG-MY.SHAREPOINT.COM
lrcog-my.sharepoint.com



Tallapoosa County Weather Alerts

Oct 20, 2020 ·

The Tallapoosa County Emergency Management Agency needs your help.

Please take a few moments of your time and participate in a survey that will help us update our Hazard Mitigation Plan for 2021. While we can not prevent hazards from coming our way we can be as prepared as possible for those that do.

You will find the survey at this link - https://www.surveymonkey.com/r/T6RM3FT

Thank you for helping Tallapoosa County be better prepared for hazards that we may face. If you have any questions please call the Tallapoosa County EMA office at 256-825-1078 and we will be glad to assist.

Jason Moran, Director
Tallapoosa County EMA

County EMA, other disaster response planners seeking info via survey

By CLIFF WILLIAMS
Staff Writer

No one wants a disaster to happen but if one does, what is the plan?

Planning for disaster is the job of Tallapoosa County Emergency Management Agency director Jason Moran. Every five years Moran guides county leaders through the process via community input create a hazard mitigation plan for disaster response. Part of the process is in-person meetings on the various communities to see what residents might need in response to a disaster.

But this year is different.

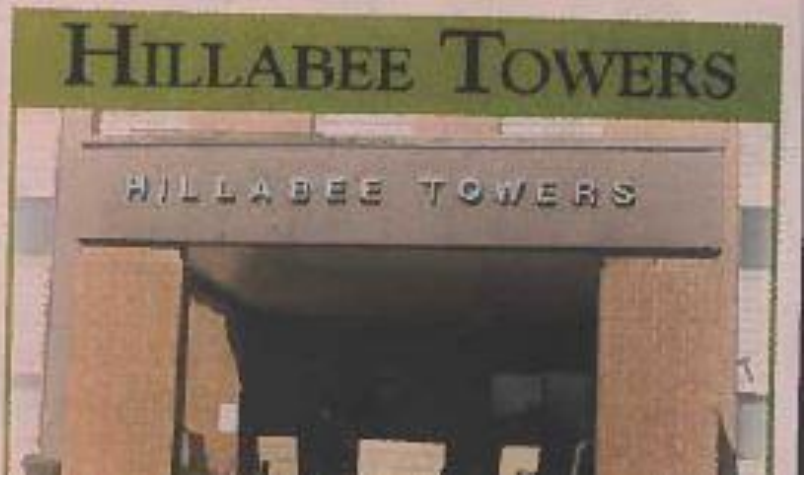
"Disasters can be man-made or natural," Moran said. "Disasters can also include pandemics. We plan for them all but hope we never have to put into action."

The COVID-19 pandemic has changed the way Moran and other disaster response planners are gathering information for the hazard mitigation plan. Instead of meeting in person, the Lee Russell Council of Governments has put together an online survey residents can take. The council is working with all of the counties of the District B response group including Tallapoosa, Coosa, Elmore, Macon, Lee and Russell counties.

"They are trying to solicit public input through Survey Monkey," Moran said. "Because of social distancing needs, there will be no in person meetings but we still need the information."

Moran said no personal information is required for the voluntary survey. The survey takes between two and three minutes. It can be found at www.surveymonkey.com/r/T6RM3FT.

Moran said respondents to the survey need to be completely honest in their answers and those answers are confidential. Moran said those with questions can call the Tallapoosa EMA office at 256-825-1078 or email jmoran@tallaco.



7.4 Appendix D: Hazard Events Tables

Table 7.1: Droughts

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/18/2006	7:00	CST	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/18/2006	7:00	CST	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/18/2006	7:00	CST	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	8/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	9/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	3/27/2007	6:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	4/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	5/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	5/22/2007	6:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	5/22/2007	6:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	6/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	6/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	8/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	10/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K

TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	1/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	2/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	2/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	3/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	3/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	3/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	4/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	4/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	4/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	5/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	5/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	5/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	6/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	6/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/22/2008	6:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHILTON (ZONE)	CHILTON (ZONE)	AL	8/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/30/2008	6:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/14/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/14/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	9/21/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/21/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/21/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K

TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	2/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	2/4/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/4/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	3/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	3/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	3/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	3/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	4/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	4/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K

TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	4/5/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	4/5/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	5/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	5/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	6/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHILTON (ZONE)	CHILTON (ZONE)	AL	8/2/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	9/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	10/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	2/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	3/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	3/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	4/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	4/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	5/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	5/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/3/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/20/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	1/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	2/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	2/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	10/18/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

CHILTON (ZONE)	CHILTON (ZONE)	AL	1/1/2017	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/1/2017	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/1/2017	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	9/24/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/24/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	10/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	10/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	10/8/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K

Table 7.2: Extreme Temperature

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								2	26	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/8/2007	12:00	CST-6	Heat		0	24	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	8/8/2007	12:00	CST-6	Heat		1	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/8/2007	12:00	CST-6	Heat		1	2	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/29/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	6/29/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	6/29/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	7/1/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/1/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	7/1/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/2/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	7/4/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/2/2012	11:00	CST-6	Heat		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	6/13/2013	15:00	CST-6	Heat		0	0	0.00K	0.00K

Table 7.3: Hail

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	32.00K	0.00K
STROUD	CHAMBERS CO.	AL	1/2/2006	15:44	CST	Hail	1.75 in.	0	0	2.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	3/20/2006	19:10	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	4/18/2006	17:13	CST	Hail	1.00 in.	0	0	0.00K	0.00K
STROUD	CHAMBERS CO.	AL	4/19/2006	15:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
LANETT	CHAMBERS CO.	AL	4/19/2006	15:40	CST	Hail	1.75 in.	0	0	0.00K	0.00K
LANETT	CHAMBERS CO.	AL	4/19/2006	15:45	CST	Hail	2.75 in.	0	0	0.00K	0.00K
LANETT	CHAMBERS CO.	AL	4/19/2006	15:52	CST	Hail	1.75 in.	0	0	0.00K	0.00K
CLANTON	CHILTON CO.	AL	4/19/2006	20:42	CST	Hail	1.75 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	4/19/2006	21:58	CST	Hail	0.88 in.	0	0	0.00K	0.00K

NEWSITE	TALLAPOOSA CO.	AL	5/13/2006	19:20	CST	Hail	0.88 in.	0	0	0.00K	0.00K
GOLDVILLE	TALLAPOOSA CO.	AL	5/13/2006	19:32	CST	Hail	0.88 in.	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	5/13/2006	19:32	CST	Hail	0.75 in.	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	5/13/2006	19:56	CST	Hail	1.75 in.	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	8/5/2006	13:42	CST	Hail	0.75 in.	0	0	0.00K	0.00K
WALNUT HILL	TALLAPOOSA CO.	AL	1/7/2007	16:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	4/11/2007	16:04	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	4/11/2007	16:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	4/11/2007	16:53	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CLANTON	CHILTON CO.	AL	4/11/2007	18:15	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
PENTON	CHAMBERS CO.	AL	6/5/2007	12:00	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K

EAST TALLASEE	TALLAPOOSA CO.	AL	6/12/2007	23:22	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ADAMS	CHAMBERS CO.	AL	6/29/2007	15:03	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
STURDIVANT	TALLAPOOSA CO.	AL	4/4/2008	13:51	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	4/4/2008	14:08	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	4/4/2008	14:17	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
COWPENS	TALLAPOOSA CO.	AL	4/4/2008	15:25	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	4/4/2008	15:25	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	4/4/2008	15:35	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ABANDA	CHAMBERS CO.	AL	4/4/2008	15:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	5/11/2008	2:25	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K

MINERAL SPGS	CHILTON CO.	AL	6/1/2008	13:23	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	6/1/2008	15:22	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
FAIRFAX	CHAMBERS CO.	AL	6/11/2008	14:30	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	7/12/2008	14:23	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FIVE PTS	CHAMBERS CO.	AL	7/22/2008	13:05	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
THORSBY	CHILTON CO.	AL	2/18/2009	19:43	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
THORSBY	CHILTON CO.	AL	4/10/2009	17:02	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	4/10/2009	17:45	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	4/10/2009	17:55	CST-6	Hail	2.75 in.	0	0	5.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	4/10/2009	17:58	CST-6	Hail	2.75 in.	0	0	5.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	4/10/2009	18:00	CST-6	Hail	1.75 in.	0	0	20.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	5/3/2009	13:20	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

STURKIE	CHAMBERS CO.	AL	5/10/2009	14:16	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
GLASS	CHAMBERS CO.	AL	5/10/2009	14:41	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	7/8/2009	12:43	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/12/2010	6:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HAMLET	TALLAPOOSA CO.	AL	5/28/2010	17:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	6/15/2010	13:25	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
MARTIN LAKE NORTH	TALLAPOOSA CO.	AL	6/25/2010	14:55	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	10/24/2010	17:55	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	10/24/2010	18:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/26/2011	12:53	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	3/26/2011	12:53	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K

CLANTON GRAGG ARPT	CHILTON CO.	AL	3/26/2011	12:55	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/26/2011	12:55	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	3/26/2011	13:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HACKNEYVILLE	TALLAPOOSA CO.	AL	3/26/2011	13:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
SESSIONS	TALLAPOOSA CO.	AL	3/26/2011	13:55	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
SESSIONS	TALLAPOOSA CO.	AL	3/26/2011	13:55	CST-6	Hail	3.00 in.	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	3/26/2011	14:07	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
MOOREFIELD	CHAMBERS CO.	AL	3/26/2011	14:40	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LANETT MUNI ARPT	CHAMBERS CO.	AL	3/26/2011	14:54	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	3/26/2011	15:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

FALAKTO	CHILTON CO.	AL	3/27/2011	9:06	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	3/27/2011	9:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	5/26/2011	13:34	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	6/5/2011	17:45	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/11/2011	13:36	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	8/21/2011	14:43	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	4/5/2012	17:47	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
MINERAL SPGS	CHILTON CO.	AL	4/5/2012	17:56	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HICKORY FLAT	CHAMBERS CO.	AL	5/6/2012	8:53	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	6/14/2012	14:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
PENTON	CHAMBERS CO.	AL	7/1/2012	14:54	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	7/1/2012	15:40	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K

FAIRVIEW	CHAMBERS CO.	AL	7/1/2012	15:47	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	7/5/2012	18:20	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	3/18/2013	14:48	CST-6	Hail	2.50 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/18/2013	14:50	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	3/18/2013	14:51	CST-6	Hail	3.00 in.	0	0	0.00K	0.00K
CAMP HILL	TALLAPOOSA CO.	AL	3/18/2013	15:13	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
SANDY CREEK	CHAMBERS CO.	AL	3/18/2013	15:20	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STURKIE	CHAMBERS CO.	AL	3/18/2013	15:21	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	3/18/2013	15:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	3/18/2013	15:53	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	3/18/2013	15:53	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K

BARNESVILLE	TALLAPOOSA CO.	AL	3/18/2013	16:13	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	3/18/2013	16:15	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	3/23/2013	19:20	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	3/23/2013	19:50	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	3/23/2013	21:54	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	3/23/2013	22:10	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/23/2013	22:21	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	6/28/2013	13:08	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	6/6/2014	16:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	7/3/2015	16:35	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	4/29/2016	18:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	1/21/2017	22:30	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

PENTON	CHAMBERS CO.	AL	4/5/2017	4:46	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FOSTER XRDS	CHAMBERS CO.	AL	4/5/2017	4:47	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	4/5/2017	16:55	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HUBBARD	CHILTON CO.	AL	3/14/2019	18:17	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
PLETCHER	CHILTON CO.	AL	3/25/2019	16:31	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	5/16/2019	18:47	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
Totals:								0	0	32.00K	0.00K

Table 7.4: Flooding

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	185.00K	0.00K
LANETT	CHAMBERS CO.	AL	7/30/2006	9:00	CST	Flash Flood		0	0	10.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	11/15/2006	10:30	CST-6	Flash Flood		0	0	0.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	11/15/2006	10:30	CST-6	Flash Flood		0	0	0.00K	0.00K
CAMP HILL	TALLAPOOSA CO.	AL	9/14/2009	10:30	CST-6	Flash Flood		0	0	5.00K	0.00K
HACKNEYVILLE	TALLAPOOSA CO.	AL	9/19/2009	8:25	CST-6	Flash Flood		0	0	5.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	9/19/2009	17:50	CST-6	Flash Flood		0	0	0.00K	0.00K
JUMBO	CHILTON CO.	AL	9/21/2009	12:00	CST-6	Flash Flood		0	0	50.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	1/24/2010	10:00	CST-6	Flash Flood		0	0	5.00K	0.00K
GOLDVILLE	TALLAPOOSA CO.	AL	5/3/2010	4:00	CST-6	Flash Flood		0	0	100.00K	0.00K

ALEXANDER CITY	TALLAPOOSA CO.	AL	7/20/2011	9:00	CST-6	Flash Flood		0	0	10.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	9/20/2011	18:45	CST-6	Flash Flood		0	0	0.00K	0.00K
EAST TALLASEE	TALLAPOOSA CO.	AL	12/22/2013	20:35	CST-6	Flood		0	0	0.00K	0.00K
GOLDVILLE	TALLAPOOSA CO.	AL	4/7/2014	6:00	CST-6	Flood		0	0	0.00K	0.00K
LANETT	CHAMBERS CO.	AL	4/7/2014	7:30	CST-6	Flash Flood		0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	6/23/2014	16:50	CST-6	Flash Flood		0	0	0.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	12/24/2015	8:30	CST-6	Flash Flood		0	0	0.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	10/9/2017	8:00	CST-6	Flash Flood		0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	5/30/2018	8:00	CST-6	Flash Flood		0	0	0.00K	0.00K

Table 7.5: Thunderstorm

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	1	1.020M	0.00K
CLANTON	CHILTON CO.	AL	4/19/2006	20:42	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	4/26/2006	17:40	CST	Thunderstorm Wind	60 kts. EG	0	0	10.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	6/21/2006	14:35	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	6/30/2006	20:25	CST	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	6/30/2006	20:25	CST	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
STROUD	CHAMBERS CO.	AL	8/15/2006	16:10	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	11/15/2006	11:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	1/7/2007	16:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	3/1/2007	20:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K

DADEVILLE	TALLAPOOSA CO.	AL	4/4/2007	1:45	CST-6	Thunderstorm Wind	39 kts. EG	0	0	50.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	6/11/2007	20:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/12/2007	23:05	CST-6	Thunderstorm Wind	55 kts. EG	0	0	30.00K	0.00K
VERBENA	CHILTON CO.	AL	6/15/2007	16:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	6/28/2007	16:30	CST-6	Thunderstorm Wind	55 kts. EG	0	0	315.00K	0.00K
CLANTON	CHILTON CO.	AL	8/24/2007	14:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
STURDIVANT	TALLAPOOSA CO.	AL	8/27/2007	15:02	CST-6	Thunderstorm Wind	55 kts. EG	0	0	25.00K	0.00K
KINCHEON	CHILTON CO.	AL	10/22/2007	23:38	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
PLEASANT GROVE	CHILTON CO.	AL	10/23/2007	0:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.50K	0.00K
CLANTON	CHILTON CO.	AL	1/10/2008	18:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K

KINCHEON	CHILTON CO.	AL	2/17/2008	12:58	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
VERBENA	CHILTON CO.	AL	2/17/2008	13:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
PLETCHER	CHILTON CO.	AL	4/4/2008	14:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
TALLAPOOSA CITY	TALLAPOOSA CO.	AL	4/4/2008	17:36	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	6/1/2008	15:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	6/11/2008	14:27	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	6/11/2008	14:27	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
CLANTON	CHILTON CO.	AL	6/17/2008	16:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	6/29/2008	17:01	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SHILOH	CHAMBERS CO.	AL	6/29/2008	17:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K

DADEVILLE	TALLAPOOSA CO.	AL	7/21/2008	22:00	CST-6	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	7/22/2008	17:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	4/19/2009	18:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	5/3/2009	13:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	5/3/2009	13:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
JEMISON	CHILTON CO.	AL	5/3/2009	13:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	60.00K	0.00K
THORSBY	CHILTON CO.	AL	5/3/2009	13:37	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	5/3/2009	14:46	CST-6	Thunderstorm Wind	50 kts. EG	0	0	50.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	5/3/2009	15:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	5/10/2009	14:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K

GLASS	CHAMBERS CO.	AL	5/10/2009	14:38	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
FAIRFAX	CHAMBERS CO.	AL	5/10/2009	14:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	6/12/2009	20:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	6/12/2009	20:00	CST-6	Thunderstorm Wind	60 kts. EG	0	0	25.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	6/12/2009	20:17	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	6/12/2009	20:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	6/14/2009	12:06	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	6/14/2009	12:14	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	6/14/2009	12:36	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	6/15/2009	22:31	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

JACKSONS GAP	TALLAPOOSA CO.	AL	6/15/2009	22:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/15/2009	22:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	6/15/2009	22:52	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CAMP HILL	TALLAPOOSA CO.	AL	6/28/2009	16:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
HUBBARD	CHILTON CO.	AL	6/28/2009	16:11	CST-6	Thunderstorm Wind	45 kts. EG	0	0	0.50K	0.00K
EAST TALLASEE	TALLAPOOSA CO.	AL	7/5/2009	17:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	7/5/2009	17:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAMLET	TALLAPOOSA CO.	AL	7/5/2009	17:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	7/5/2009	18:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
FALAKTO	CHILTON CO.	AL	7/8/2009	12:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

EAST TALLASEE	TALLAPOOSA CO.	AL	7/26/2009	13:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MINERAL SPGS	CHILTON CO.	AL	12/9/2009	1:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	12/9/2009	1:06	CST-6	Thunderstorm Wind	65 kts. MG	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	12/9/2009	1:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LOMAX	CHILTON CO.	AL	1/21/2010	5:41	CST-6	Thunderstorm Wind	39 kts. EG	0	0	5.00K	0.00K
ROLLINS	CHAMBERS CO.	AL	1/21/2010	7:09	CST-6	Thunderstorm Wind	39 kts. EG	0	0	5.00K	0.00K
FALAKTO	CHILTON CO.	AL	1/24/2010	9:56	CST-6	Thunderstorm Wind	61 kts. MG	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	1/24/2010	14:01	CST-6	Thunderstorm Wind	55 kts. EG	0	0	15.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	3/12/2010	5:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	5/3/2010	2:54	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

OAK BOWERY	CHAMBERS CO.	AL	5/3/2010	3:24	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	5/20/2010	19:44	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
CARRVILLE	TALLAPOOSA CO.	AL	5/28/2010	17:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	6/4/2010	13:48	CST-6	Thunderstorm Wind	40 kts. EG	0	0	1.00K	0.00K
CAMP HILL	TALLAPOOSA CO.	AL	6/15/2010	13:09	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
HAMLET	TALLAPOOSA CO.	AL	6/19/2010	13:25	CST-6	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
BETHLEHEM	TALLAPOOSA CO.	AL	6/19/2010	13:32	CST-6	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	6/25/2010	13:44	CST-6	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	7/9/2010	14:50	CST-6	Thunderstorm Wind	55 kts. EG	0	0	4.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	7/9/2010	18:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K

BEVELLE	TALLAPOOSA CO.	AL	8/2/2010	14:17	CST-6	Thunderstorm Wind	60 kts. EG	0	0	3.00K	0.00K
CLANTON	CHILTON CO.	AL	4/4/2011	19:53	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	4/4/2011	21:41	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
WESSINGTON	CHILTON CO.	AL	4/11/2011	18:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	4/11/2011	20:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
ABANDA	CHAMBERS CO.	AL	4/11/2011	20:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MOUNTAIN CREEK	CHILTON CO.	AL	5/26/2011	13:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CLANTON WARE IS ARPT	CHILTON CO.	AL	5/26/2011	13:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
HACKNEYVILLE	TALLAPOOSA CO.	AL	5/26/2011	14:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
DENTON	CHAMBERS CO.	AL	5/26/2011	14:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

LAFAYETTE	CHAMBERS CO.	AL	5/26/2011	14:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
FIVE PTS	CHAMBERS CO.	AL	5/26/2011	14:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	6/10/2011	15:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	6/22/2011	14:57	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	6/24/2011	17:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	6/26/2011	16:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
JUDSON	CHAMBERS CO.	AL	7/1/2011	15:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
WALNUT HILL	TALLAPOOSA CO.	AL	8/11/2011	17:47	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
KINCHEON	CHILTON CO.	AL	8/21/2011	14:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	12.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	8/21/2011	14:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K

REELTOWN	TALLAPOOSA CO.	AL	11/16/2011	11:39	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	1/23/2012	7:39	CST-6	Thunderstorm Wind	78 kts. EG	0	1	0.00K	0.00K
HAMLET	TALLAPOOSA CO.	AL	1/23/2012	8:04	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
FAIRVIEW	CHAMBERS CO.	AL	2/24/2012	7:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MINOOKA	CHILTON CO.	AL	5/29/2012	22:34	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	5/29/2012	22:43	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
RUSSEL MILLS	TALLAPOOSA CO.	AL	6/3/2012	16:49	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	6/11/2012	20:06	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	7/10/2012	15:27	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COOPER	CHILTON CO.	AL	7/31/2012	2:07	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

MAPLESVILLE	CHILTON CO.	AL	7/31/2012	4:42	CST-6	Thunderstorm Wind	43 kts. EG	0	0	4.00K	0.00K
CLANTON GRAGG ARPT	CHILTON CO.	AL	1/30/2013	7:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	1/30/2013	11:07	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	1/30/2013	11:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FALAKTO	CHILTON CO.	AL	3/5/2013	14:14	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COOPER	CHILTON CO.	AL	3/5/2013	14:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	3/5/2013	14:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	3/5/2013	14:57	CST-6	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
LANETT MUNI ARPT	CHAMBERS CO.	AL	3/18/2013	15:37	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
COOPER	CHILTON CO.	AL	3/23/2013	22:27	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K

CLANTON WARE IS ARPT	CHILTON CO.	AL	3/23/2013	22:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
EAST TALLASEE	TALLAPOOSA CO.	AL	6/27/2013	17:49	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	6/28/2013	12:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	7/23/2013	15:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	7/24/2013	11:52	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HAMLET	TALLAPOOSA CO.	AL	7/24/2013	11:55	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	7/24/2013	11:59	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
TRAMMEL XRDS	CHAMBERS CO.	AL	7/24/2013	12:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	7/24/2013	12:27	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	7/24/2013	12:45	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K

ALEXANDER CITY	TALLAPOOSA CO.	AL	1/11/2014	6:45	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	1/11/2014	6:55	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	1/11/2014	7:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	1/11/2014	7:07	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
TALLAPOOSA CITY	TALLAPOOSA CO.	AL	1/11/2014	7:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	5/14/2014	13:26	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	6/6/2014	15:28	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CARRVILLE	TALLAPOOSA CO.	AL	6/6/2014	15:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
RUSSEL MILLS	TALLAPOOSA CO.	AL	6/6/2014	17:05	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	6/7/2014	23:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

BARNESVILLE	TALLAPOOSA CO.	AL	6/7/2014	23:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	6/8/2014	18:36	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	6/8/2014	18:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CAMP HILL	TALLAPOOSA CO.	AL	6/8/2014	18:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CARRVILLE	TALLAPOOSA CO.	AL	6/22/2014	11:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
TRUETT	CHAMBERS CO.	AL	6/30/2014	16:06	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	6/30/2014	16:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	6/30/2014	16:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CLANTON WARE IS ARPT	CHILTON CO.	AL	10/13/2014	13:28	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	12/23/2014	18:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

FALAKTO	CHILTON CO.	AL	12/23/2014	18:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	5/24/2015	15:53	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	5/27/2015	16:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MC GINTY	CHAMBERS CO.	AL	6/24/2015	17:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	6/24/2015	18:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	6/24/2015	19:43	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	7/3/2015	20:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SESSIONS	TALLAPOOSA CO.	AL	7/3/2015	23:05	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MINOOKA	CHILTON CO.	AL	7/14/2015	19:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	7/15/2015	15:58	CST-6	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K

OUR TOWN	TALLAPOOSA CO.	AL	7/21/2015	18:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PERRYVILLE	TALLAPOOSA CO.	AL	7/22/2015	15:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MINERAL SPGS	CHILTON CO.	AL	6/17/2016	15:03	CST-6	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
PLEASANT GROVE	CHILTON CO.	AL	6/17/2016	15:05	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	6/17/2016	15:40	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LANETT MUNI ARPT	CHAMBERS CO.	AL	6/17/2016	15:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/17/2016	16:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
TOHOPEKA	TALLAPOOSA CO.	AL	1/22/2017	13:55	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	3/1/2017	17:44	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
NEWSITE	TALLAPOOSA CO.	AL	4/5/2017	15:50	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K

TALLAPOOSA CITY	TALLAPOOSA CO.	AL	5/20/2017	18:05	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/15/2017	16:20	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DAVISTON	TALLAPOOSA CO.	AL	6/15/2017	16:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	7/17/2017	15:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/22/2018	15:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MARCOOT	CHAMBERS CO.	AL	6/22/2018	16:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CHAPEL HILL	CHAMBERS CO.	AL	6/28/2018	14:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/28/2018	14:29	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	6/28/2018	14:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	6/28/2018	14:32	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

MAPLESVILLE	CHILTON CO.	AL	6/28/2018	15:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LANGDALE	CHAMBERS CO.	AL	2/12/2019	12:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CLANTON	CHILTON CO.	AL	3/25/2019	16:09	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	3/25/2019	16:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CHURCH HILL	TALLAPOOSA CO.	AL	3/25/2019	17:13	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	4/14/2019	10:58	CST-6	High Wind	50 kts. EG	0	0	0.00K	0.00K
JACKSONS GAP	TALLAPOOSA CO.	AL	5/16/2019	17:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
TOHOPEKA	TALLAPOOSA CO.	AL	6/22/2019	15:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
TRAMMEL XRDS	CHAMBERS CO.	AL	6/22/2019	16:10	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	6/22/2019	16:26	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

DADEVILLE	TALLAPOOSA CO.	AL	6/22/2019	16:37	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	6/22/2019	16:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	7/19/2019	12:02	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
MOUNTAIN CREEK	CHILTON CO.	AL	9/19/2019	14:19	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	12/16/2019	21:54	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	12/16/2019	22:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SESSIONS	TALLAPOOSA CO.	AL	12/16/2019	23:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	1/11/2020	13:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CLANTON	CHILTON CO.	AL	1/11/2020	13:44	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
EAST TALLASEE	TALLAPOOSA CO.	AL	1/11/2020	15:01	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

DADEVILLE	TALLAPOOSA CO.	AL	1/11/2020	15:14	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BESWORTH	CHAMBERS CO.	AL	1/11/2020	15:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ABANDA	CHAMBERS CO.	AL	1/11/2020	15:39	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

Table 7.6: Hurricanes/Tornadoes/Tropical Storm

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	16.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	8/23/2008	12:00	CST-6	Tropical Depression		0	0	5.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	8/23/2008	12:00	CST-6	Tropical Depression		0	0	5.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	8/23/2008	12:00	CST-6	Tropical Depression		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	11/9/2009	14:00	CST-6	Tropical Depression		0	0	2.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	11/9/2009	14:00	CST-6	Tropical Depression		0	0	2.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	11/9/2009	14:00	CST-6	Tropical Depression		0	0	2.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	9/11/2017	12:00	CST-6	Tropical Storm		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	9/11/2017	12:00	CST-6	Tropical Storm		0	0	0.00K	0.00K

CHILTON (ZONE)	CHILTON (ZONE)	AL	10/8/2017	5:00	CST-6	Tropical Storm		0	0	0.00K	0.00K

Table 7.7: Tornadoes

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								2	15	117.684M	0.00K
REELTOWN	TALLAPOOSA CO.	AL	11/15/2006	11:11	CST-6	Tornado	F0	0	0	15.00K	0.00K
LAFAYETTE	CHAMBERS CO.	AL	11/15/2006	12:02	CST-6	Tornado	F0	0	0	50.00K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	1/7/2007	16:10	CST-6	Tornado	F1	0	0	100.00K	0.00K
HUBBARD	CHILTON CO.	AL	4/11/2007	14:49	CST-6	Tornado	EF0	0	0	1.00K	0.00K
DADEVILLE	TALLAPOOSA CO.	AL	4/11/2007	16:18	CST-6	Tornado	EF1	0	0	20.00K	0.00K
FALAKTO	CHILTON CO.	AL	2/17/2008	13:05	CST-6	Tornado	EF1	0	0	150.00K	0.00K
HACKNEYVILLE	TALLAPOOSA CO.	AL	2/17/2008	13:47	CST-6	Tornado	EF0	0	0	10.00K	0.00K
HACKNEYVILLE	TALLAPOOSA CO.	AL	2/17/2008	13:48	CST-6	Tornado	EF0	0	0	5.00K	0.00K

EAST TALLASEE	TALLAPOOSA CO.	AL	2/28/2009	7:40	CST-6	Tornado	EF0	0	0	10.00K	0.00K
CHURCH HILL	TALLAPOOSA CO.	AL	4/10/2009	18:12	CST-6	Tornado	EF1	0	0	50.00K	0.00K
REELTOWN	TALLAPOOSA CO.	AL	4/10/2009	19:26	CST-6	Tornado	EF0	0	0	5.00K	0.00K
LOMAX	CHILTON CO.	AL	9/16/2009	9:58	CST-6	Tornado	EF0	0	0	10.00K	0.00K
CLANTON	CHILTON CO.	AL	3/25/2010	18:59	CST-6	Tornado	EF1	0	0	35.00K	0.00K
WHITE PLAINS	CHAMBERS CO.	AL	2/28/2011	17:28	CST-6	Tornado	EF0	0	0	45.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	4/15/2011	22:34	CST-6	Tornado	EF1	0	0	10.00K	0.00K
MARTIN LAKE NORTH	TALLAPOOSA CO.	AL	4/15/2011	22:43	CST-6	Tornado	EF1	0	0	45.80K	0.00K
BARNESVILLE	TALLAPOOSA CO.	AL	4/27/2011	19:36	CST-6	Tornado	EF4	1	10	115.000M	0.00K
JUDSON	CHAMBERS CO.	AL	4/27/2011	20:01	CST-6	Tornado	EF3	0	0	2.000M	0.00K
BUFFALO	CHAMBERS CO.	AL	4/27/2011	20:19	CST-6	Tornado	EF1	0	0	5.00K	0.00K

FIVE PTS	CHAMBERS CO.	AL	4/27/2011	20:29	CST-6	Tornado	EF1	0	0	10.00K	0.00K
COOPER	CHILTON CO.	AL	4/27/2011	20:48	CST-6	Tornado	EF0	0	1	102.00K	0.00K
ALEXANDER CITY	TALLAPOOSA CO.	AL	12/22/2011	14:51	CST-6	Tornado	EF0	0	0	5.00K	0.00K
STANTON	CHILTON CO.	AL	1/23/2012	4:57	CST-6	Tornado	EF2	0	0	0.00K	0.00K
KINCHEON	CHILTON CO.	AL	1/23/2012	6:36	CST-6	Tornado	EF1	0	0	0.00K	0.00K
VERBENA	CHILTON CO.	AL	3/2/2012	22:01	CST-6	Tornado	EF2	0	0	0.00K	0.00K
OUR TOWN	TALLAPOOSA CO.	AL	3/2/2012	22:40	CST-6	Tornado	EF2	1	2	0.00K	0.00K
FORDYCE	CHAMBERS CO.	AL	3/2/2012	23:06	CST-6	Tornado	EF2	0	2	0.00K	0.00K
BEVELLE	TALLAPOOSA CO.	AL	5/14/2014	13:21	CST-6	Tornado	EF0	0	0	0.00K	0.00K
WAVERLY	CHAMBERS CO.	AL	11/30/2016	12:39	CST-6	Tornado	EF1	0	0	0.00K	0.00K
BESWORTH	CHAMBERS CO.	AL	4/5/2017	19:39	CST-6	Tornado	EF1	0	0	0.00K	0.00K
PLETCHER	CHILTON CO.	AL	10/7/2017	19:20	CST-6	Tornado	EF0	0	0	0.00K	0.00K

HUBBARD	CHILTON CO.	AL	10/7/2017	19:47	CST-6	Tornado	EF1	0	0	0.00K	0.00K
JEMISON	CHILTON CO.	AL	2/7/2018	6:03	CST-6	Tornado	EF0	0	0	0.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	11/1/2018	11:12	CST-6	Tornado	EF0	0	0	0.00K	0.00K
CUSSETA	CHAMBERS CO.	AL	11/1/2018	11:14	CST-6	Tornado	EF0	0	0	0.00K	0.00K
MAPLESVILLE	CHILTON CO.	AL	3/14/2019	17:56	CST-6	Tornado	EF0	0	0	0.00K	0.00K
JUMBO	CHILTON CO.	AL	3/14/2019	18:39	CST-6	Tornado	EF0	0	0	0.00K	0.00K

Table 7.8: Wildfire

Status	Number of Fires	Total Acres
Controlled	278	2,368.60

Fire #	County	Acres	Reported On	Contained On	Controlled On
20191004-29	Chambers	1	10/4/2019 17:01	10/4/2019 18:12	10/4/2019 18:12
20190929-7	Chambers	15	9/29/2019 14:53	9/29/2019 17:08	9/29/2019 17:09
20190927-20	Chambers	2	9/27/2019 19:26	9/27/2019 20:20	9/27/2019 20:20
20190924-29	Chambers	0.1	9/24/2019 23:47	9/24/2019 23:48	9/24/2019 23:48
20190924-26	Chambers	0.1	9/24/2019 17:30	9/24/2019 23:47	9/25/2019 10:17
20190920-29	Chambers	4	9/20/2019 19:08	9/20/2019 20:36	9/20/2019 20:36
20190920-8	Chambers	3	9/20/2019 13:05	9/20/2019 14:26	9/20/2019 14:26
20190916-12	Chambers	10	9/16/2019 14:52	9/16/2019 16:16	9/16/2019 16:51
20190823-2	Chambers	1	8/23/2019 17:14	8/23/2019 18:22	8/23/2019 18:22
20190822-1	Chambers	10	8/22/2019 12:58	8/22/2019 14:34	8/22/2019 14:34
20190813-3	Chambers	3	8/13/2019 18:09	8/14/2019 7:41	8/14/2019 7:41
20190717-1	Chambers	1	7/17/2019 16:00	7/17/2019 16:27	7/17/2019 16:27
20190601-3	Chambers	5	6/1/2019 14:02	6/4/2019 8:07	6/4/2019 8:07
20190508-4	Chambers	30	5/8/2019 21:52	5/8/2019 23:49	5/9/2019 0:35

20190330-7	Chambers	35	3/30/2019 13:15	3/30/2019 16:02	3/30/2019 16:02
20190329-23	Chambers	15	3/29/2019 18:33	3/29/2019 20:15	3/29/2019 20:15
20190323-6	Chambers	1	3/23/2019 12:10	3/23/2019 13:24	3/23/2019 13:34
20190210-1	Chambers	3	2/10/2019 4:40	2/10/2019 4:55	2/10/2019 4:55
20180923-4	Chambers	1	9/23/2018 14:14	9/23/2018 16:09	9/23/2018 16:09
20180923-3	Chambers	5	9/23/2018 13:40	9/23/2018 16:08	9/23/2018 16:08
20180712-1	Chambers	10	7/12/2018 14:51	7/12/2018 16:57	7/12/2018 16:57
20180608-2	Chambers	2	6/8/2018 15:51	6/8/2018 16:56	6/8/2018 16:56
20180510-3	Chambers	20	5/10/2018 14:24	5/10/2018 15:56	5/10/2018 15:56
20180505-3	Chambers	20	5/5/2018 16:26	5/5/2018 17:44	5/5/2018 17:44
20180417-1	Chambers	1	4/17/2018 10:28	4/17/2018 11:50	4/17/2018 11:50
20180324-14	Chambers	15	3/24/2018 18:48	3/24/2018 22:19	3/29/2018 15:12
20180324-12	Chambers	1.5	3/24/2018 16:49	3/24/2018 18:48	3/29/2018 15:12
20180310-9	Chambers	10	3/10/2018 12:59	3/10/2018 13:45	3/10/2018 13:45
20180131-8	Chambers	1	1/31/2018 12:52	1/31/2018 13:10	1/31/2018 13:10
20180131-3	Chambers	2	1/31/2018 11:07	1/31/2018 11:29	1/31/2018 11:48
20180124-3	Chambers	1	1/24/2018 12:26	1/24/2018 15:17	1/24/2018 15:17

20180113-1	Chambers	1	1/13/2018 6:12	1/13/2018 10:23	1/13/2018 10:23
20171128-2	Chambers	10	############	11/28/2017 15:19	11/28/2017 15:19
20170823-2	Chambers	0.5	8/23/2017 14:03	8/23/2017 14:12	8/24/2017 9:39
20170516-6	Chambers	30	5/16/2017 15:50	5/16/2017 17:58	5/16/2017 17:58
20170425-2	Chambers	0.5	4/25/2017 11:25	4/25/2017 11:56	4/25/2017 11:56
20170422-14	Chambers	10	4/22/2017 21:48	4/22/2017 23:36	4/22/2017 23:37
20170415-15	Chambers	5	4/15/2017 19:46	4/15/2017 20:52	4/15/2017 20:52
20170412-5	Chambers	1.3	4/12/2017 17:01	4/12/2017 18:20	4/12/2017 18:20
20170406-1	Chambers	10	4/6/2017 13:56	4/6/2017 15:43	4/6/2017 15:43
20170330-2	Chambers	10	3/30/2017 12:54	3/30/2017 14:40	3/30/2017 14:40
20170325-12	Chambers	56	3/25/2017 14:35	3/25/2017 17:00	3/25/2017 17:39
20170323-24	Chambers	10	3/23/2017 15:09	3/23/2017 17:21	3/25/2017 18:14
20170323-19	Chambers	5	3/23/2017 14:03	3/23/2017 15:05	3/23/2017 15:05
20170322-11	Chambers	5	3/22/2017 13:49	3/22/2017 15:09	3/22/2017 15:09
20170322-2	Chambers	39	3/22/2017 10:18	3/22/2017 12:04	3/22/2017 13:42
20170321-22	Chambers	3	3/21/2017 15:59	3/21/2017 16:50	3/21/2017 16:50
20170303-8	Chambers	10	3/3/2017 13:43	3/3/2017 15:01	3/3/2017 15:01

20170301-2	Chambers	1	3/1/2017 12:21	3/1/2017 12:35	3/1/2017 12:35
20170226-25	Chambers	1.5	2/26/2017 18:50	2/26/2017 20:10	2/26/2017 20:10
20170225-21	Chambers	1	2/25/2017 16:33	2/25/2017 17:51	2/25/2017 17:51
20170220-24	Chambers	25	2/20/2017 18:27	2/20/2017 19:53	2/20/2017 20:14
20170220-20	Chambers	2	2/20/2017 15:49	2/20/2017 16:50	2/20/2017 16:50
20170220-3	Chambers	5	2/20/2017 11:52	2/20/2017 13:48	2/20/2017 13:48
20170220-2	Chambers	5	2/20/2017 11:44	2/20/2017 12:23	2/20/2017 12:23
20170201-7	Chambers	0.5	2/1/2017 16:00	2/1/2017 17:14	2/1/2017 17:15
20161229-1	Chambers	3	12/29/2016 6:17	12/29/2016 13:32	1/3/2017 7:15
20161224-7	Chambers	2	############	12/24/2016 15:05	12/24/2016 15:05
20161110-6	Chambers	0.1	11/10/2016 5:18	11/10/2016 6:45	11/11/2016 1:49
20161102-28	Chambers	1.5	11/2/2016 17:28	11/2/2016 18:48	11/2/2016 18:49
20161101-27	Chambers	5	11/1/2016 14:04	11/1/2016 17:54	11/1/2016 17:54
20161028-31	Chambers	2	############	10/28/2016 20:34	10/28/2016 20:34
20161025-48	Chambers	15	############	10/26/2016 7:26	10/26/2016 7:59

20161024-15	Chambers	1.5	############	10/24/2016 11:28	10/24/2016 11:51
20161024-10	Chambers	0.5	10/24/2016 9:45	10/24/2016 10:36	10/24/2016 10:36
20161021-45	Chambers	3	############	10/21/2016 17:12	10/24/2016 6:35
20161021-30	Chambers	3	############	10/21/2016 14:36	10/21/2016 14:36
20161021-4	Chambers	0.25	10/21/2016 8:01	10/21/2016 10:34	10/21/2016 10:34
20161016-20	Chambers	0.25	############	10/16/2016 21:18	10/16/2016 21:18
20161012-14	Chambers	2	############	10/12/2016 15:25	10/12/2016 15:25
20161009-30	Chambers	0.25	10/9/2016 13:36	10/9/2016 14:03	10/9/2016 14:03
20161005-1	Chambers	1	10/5/2016 7:05	10/5/2016 7:19	10/5/2016 7:19
20160927-14	Chambers	2	9/27/2016 16:53	9/27/2016 18:01	9/27/2016 18:26
20160925-15	Chambers	0.25	9/25/2016 16:07	9/25/2016 16:18	9/25/2016 16:18
20160925-8	Chambers	20	9/25/2016 13:52	9/25/2016 15:19	9/25/2016 15:19

20160924-21	Chambers	50	9/24/2016 18:03	9/24/2016 21:01	9/25/2016 19:45
20160923-19	Chambers	8	9/23/2016 18:38	9/23/2016 20:02	9/23/2016 20:19
20160916-12	Chambers	1	9/16/2016 14:46	9/16/2016 16:09	9/16/2016 16:09
20160916-5	Chambers	0.5	9/16/2016 13:48	9/16/2016 14:22	9/16/2016 14:22
20160910-24	Chambers	5	9/10/2016 22:52	9/11/2016 0:19	9/11/2016 0:22
20160816-2	Chambers	5	8/16/2016 17:03	8/16/2016 19:35	8/16/2016 19:35
20160730-1	Chambers	5	7/30/2016 14:48	7/30/2016 16:30	7/30/2016 16:30
20160701-21	Chambers	1	7/1/2016 21:51	7/1/2016 21:53	7/1/2016 21:54
20160701-2	Chambers	1.5	7/1/2016 10:45	7/1/2016 11:44	7/1/2016 11:44
20160627-6	Chambers	1	6/27/2016 12:44	6/27/2016 14:06	6/27/2016 14:06
20160620-4	Chambers	1.5	6/20/2016 16:20	6/20/2016 17:14	6/20/2016 17:14
20160609-13	Chambers	2	6/9/2016 20:17	6/9/2016 20:48	6/10/2016 0:57

20160609-4	Chambers	5	6/9/2016 12:04	6/9/2016 13:02	6/9/2016 13:02
20160608-9	Chambers	2	6/8/2016 15:27	6/8/2016 16:29	6/8/2016 16:49
20160604-1	Chambers	1	6/4/2016 5:24	6/4/2016 6:17	6/4/2016 6:18
20160508-3	Chambers	75	5/8/2016 15:24	5/8/2016 17:39	5/8/2016 17:50
20160505-1	Chambers	5	5/5/2016 15:19	5/5/2016 16:47	5/5/2016 16:48
20160330-13	Chambers	35	3/30/2016 19:56	3/30/2016 22:29	3/30/2016 22:29
20160322-19	Chambers	20	3/22/2016 16:21	3/23/2016 12:30	3/23/2016 13:19
20160317-12	Chambers	2	3/17/2016 18:35	3/17/2016 19:35	3/17/2016 19:35
20160317-7	Chambers	20	3/17/2016 15:27	3/17/2016 16:50	3/17/2016 17:18
20160315-19	Chambers	10	3/15/2016 17:19	3/15/2016 19:32	3/16/2016 7:43
20160228-7	Chambers	1.5	2/28/2016 13:15	2/28/2016 16:54	2/28/2016 16:54
20160214-7	Chambers	2	2/14/2016 12:12	2/14/2016 13:50	2/14/2016 13:50

20160213-3	Chambers	1	2/13/2016 9:42	2/13/2016 10:12	2/13/2016 10:12
ECR-20150317-001	Chambers	1	3/17/2015 9:35		3/17/2015 10:05
ECR-20150315-001	Chambers	2	3/15/2015 15:02		3/15/2015 15:58
ECR-20150309-001	Chambers	30	3/9/2015 3:02		3/9/2015 4:17
ECR-20150308-004	Chambers	2	3/8/2015 14:40		3/8/2015 15:54
ECR-20150221-007	Chambers	2	2/21/2015 18:36		2/21/2015 19:28
ECR-20150214-009	Chambers	1	2/14/2015 14:53		2/14/2015 15:15
ECR-20150214-003	Chambers	5	2/14/2015 13:06		2/14/2015 14:53
ECR-20150207-002	Chambers	1	2/7/2015 12:23		2/7/2015 13:19
ECR-20150131-002	Chambers	2	1/31/2015 14:05		1/31/2015 14:35
ECR-20150110-001	Chambers	1	1/10/2015 12:33		1/10/2015 13:06
ECR-20141213-002	Chambers	11	############		12/13/2014 14:07

ECR-20141209-002	Chambers	12	12/9/2014 13:13		12/9/2014 14:34
ECR-20141202-001	Chambers	2	12/2/2014 14:04		12/2/2014 14:56
ECR-20141126-001	Chambers	1	############		11/26/2014 13:58
ECR-20141110-003	Chambers	1	############		11/10/2014 18:59
ECR-20141103-002	Chambers	1	11/3/2014 16:47		11/3/2014 18:13
ECR-20141019-001	Chambers	1	############		10/19/2014 17:29
ECR-20141010-003	Chambers	2	############		10/10/2014 16:40
ECR-20141010-001	Chambers	1	############		10/10/2014 14:45
ECR-20140506-001	Chambers	20	5/6/2014 19:28		5/6/2014 22:05
ECR-20140401-002	Chambers	25	4/1/2014 15:28		4/1/2014 17:28
ECR-20140327-001	Chambers	2	3/27/2014 12:29		3/27/2014 14:18
ECR-20140325-001	Chambers	2	3/25/2014 11:45		3/25/2014 12:30

ECR-20140321-001	Chambers	5	3/21/2014 22:09		3/21/2014 23:07
ECR-20140314-005	Chambers	60	3/14/2014 16:33		3/14/2014 18:02
ECR-20140314-004	Chambers	15	3/14/2014 14:13		3/14/2014 16:35
ECR-20140302-001	Chambers	6	3/2/2014 12:23		3/2/2014 13:28
ECR-20140126-002	Chambers	5	1/26/2014 13:23		1/26/2014 14:49
ECR-20140125-013	Chambers	6	1/25/2014 14:00		1/25/2014 15:30
ECR-20140123-002	Chambers	10	1/23/2014 17:26		1/23/2014 19:29
ECR-20140117-001	Chambers	2	1/17/2014 12:40		1/17/2014 13:44
ECR-20131120-002	Chambers	5	############		11/20/2013 23:15
ECR-20131114-003	Chambers	5	############		11/14/2013 15:36
ECR-20131113-001	Chambers	2	############		11/13/2013 14:56
ECR-20131105-001	Chambers	1	11/5/2013 8:47		11/5/2013 9:33

ECR-20131031-001	Chambers	5	############		10/31/2013 21:22
ECR-20130911-001	Chambers	2	9/11/2013 11:37		9/11/2013 13:22
ECR-20130909-001	Chambers	1	9/9/2013 9:32		9/9/2013 11:28
ECR-20130524-001	Chambers	5	5/24/2013 15:09		5/24/2013 16:41
ECR-20130427-005	Chambers	2	4/27/2013 12:24		4/27/2013 13:22
ECR-20130408-003	Chambers	20	4/8/2013 16:48		4/8/2013 17:51
ECR-20130330-003	Chambers	5	3/30/2013 15:30		3/30/2013 16:46
ECR-20130321-002	Chambers	5	3/21/2013 15:04		3/21/2013 16:02
ECR-20130316-021	Chambers	0	3/16/2013 20:57		3/16/2013 21:39
ECR-20130316-015	Chambers	162	3/16/2013 16:59		3/16/2013 18:14
ECR-20130316-008	Chambers	10	3/16/2013 15:32		3/16/2013 18:14
ECR-20130311-002	Chambers	30	3/11/2013 10:45		3/11/2013 12:35

ECR-20130310-014	Chambers	1	3/10/2013 19:15		3/10/2013 19:39
ECR-20130310-011	Chambers	10	3/10/2013 17:39		3/10/2013 19:15
ECR-20130310-006	Chambers	20	3/10/2013 14:33		3/10/2013 15:57
ECR-20130310-004	Chambers	20	3/10/2013 13:21		3/10/2013 14:33
ECR-20130310-002	Chambers	60	3/10/2013 11:24		3/10/2013 13:21
ECR-20130309-003	Chambers	15	3/9/2013 11:38		3/9/2013 13:27
ECR-20130129-005	Chambers	10	1/29/2013 14:34		1/22/2013 16:15
ECR-20121203-007	Chambers	2	12/3/2012 14:31		12/3/2012 15:49
ECR-20121202-002	Chambers	3	12/2/2012 13:01		12/2/2012 13:31
ECR-20121129-001	Chambers	2	############		11/29/2012 23:44
ECR-20121125-001	Chambers	5	############		11/25/2012 13:17
ECR-20121124-003	Chambers	20	############		11/24/2012 15:06

ECR-20121123-002	Chambers	20	############		11/23/2012 16:21
ECR-20121102-003	Chambers	6	11/2/2012 14:21		11/2/2012 16:34
ECR-20121031-002	Chambers	2	############		10/31/2012 15:43
ECR-20121031-001	Chambers	30	10/31/2012 9:51		10/31/2012 12:30
ECR-20121030-006	Chambers	0	############		10/30/2012 17:31
ECR-20121030-005	Chambers	2	############		10/30/2012 15:18
ECR-20121030-002	Chambers	25	############		10/30/2012 14:13
ECR-20121029-005	Chambers	10	############		10/29/2012 19:26
ECR-20121020-001	Chambers	6	############		10/20/2012 15:34
ECR-20120926-003	Chambers	80	9/26/2012 11:45		9/26/2012 16:29
ECR-20120912-002	Chambers	25	9/12/2012 14:12		9/12/2012 15:57
ECR-20120825-001	Chambers	1	8/25/2012 17:37		8/25/2012 18:22

ECR-20120802-001	Chambers	0	8/2/2012 14:00		8/2/2012 14:15
ECR-20120802-002	Chambers	0	8/2/2012 14:00		8/2/2012 14:30
ECR-20120730-003	Chambers	2	7/30/2012 14:53		7/30/2012 16:44
ECR-20120726-003	Chambers	1	7/26/2012 16:21		7/26/2012 17:50
ECR-20120723-001	Chambers	40	7/23/2012 10:39		7/25/2012 9:31
ECR-20120722-002	Chambers	1	7/22/2012 20:33		7/22/2012 22:11
ECR-20120722-001	Chambers	1	7/22/2012 15:13		7/22/2012 16:55
ECR-20120630-001	Chambers	2	6/30/2012 23:54		7/1/2012 0:50
ECR-20120527-001	Chambers	2	5/27/2012 14:11		5/27/2012 16:12
ECR-20120320-007	Chambers	2	3/20/2012 18:51		3/20/2012 19:10
ECR-20120224-001	Chambers	0	2/24/2012 14:10		2/24/2012 15:19
ECR-20120223-002	Chambers	2	2/23/2012 14:49		2/23/2012 15:58

ECR-20120207-001	Chambers	0	2/7/2012 14:41		2/7/2012 15:00
ECR-20120130-002	Chambers	5	1/30/2012 13:48		1/30/2012 14:41
ECR-20120106-001	Chambers	1	1/6/2012 13:17		1/6/2012 13:32
ECR-20120102-001	Chambers	3	1/2/2012 17:24		1/2/2012 18:19
ECR-20111102-002	Chambers	1	11/2/2011 21:40		11/2/2011 22:10
ECR-20111025-001	Chambers	5	############		10/25/2011 13:04
ECR-20110902-004	Chambers	1	9/2/2011 13:26		9/2/2011 13:55
ECR-20110902-002	Chambers	2	9/2/2011 12:10		9/2/2011 13:09
ECR-20110829-002	Chambers	30	8/29/2011 16:19		8/29/2011 18:30
ECR-20110828-008	Chambers	47	8/28/2011 19:45		8/28/2011 22:13
ECR-20110806-001	Chambers	1	8/6/2011 14:48		8/6/2011 15:40
ECR-20110805-001	Chambers	3	8/5/2011 14:22		8/5/2011 15:39

ECR-20110802-001	Chambers	1	8/2/2011 15:44		8/2/2011 16:42
ECR-20110718-001	Chambers	5	7/18/2011 12:46		7/18/2011 15:41
ECR-20110708-002	Chambers	1	7/8/2011 13:12		7/8/2011 14:22
ECR-20110707-002	Chambers	87	7/7/2011 14:04		7/7/2011 21:09
ECR-20110701-004	Chambers	5	7/1/2011 18:00		7/1/2011 20:16
ECR-20110701-003	Chambers	1	7/1/2011 16:32		7/1/2011 17:06
ECR-20110627-001	Chambers	6	6/27/2011 12:34		6/27/2011 14:39
ECR-20110626-001	Chambers	1	6/26/2011 19:25		6/26/2011 20:31
ECR-20110624-001	Chambers	6	6/24/2011 20:15		6/24/2011 21:47
ECR-20110616-009	Chambers	1	6/16/2011 15:54		6/16/2011 16:30
ECR-20110616-006	Chambers	1	6/16/2011 13:48		6/16/2011 14:52
ECR-20110616-003	Chambers	6	6/16/2011 12:38		6/16/2011 13:58

ECR-20110615-009	Chambers	1	6/15/2011 23:00		6/16/2011 8:00
ECR-20110615-008	Chambers	10	6/15/2011 18:21		6/15/2011 21:28
ECR-20110613-001	Chambers	1	6/13/2011 10:33		6/13/2011 12:55
ECR-20110608-004	Chambers	0	6/8/2011 21:21		6/8/2011 23:43
ECR-20110607-003	Chambers	3	6/7/2011 16:05		6/7/2011 17:44
ECR-20110530-001	Chambers	1	5/30/2011 13:01		5/30/2011 14:28
ECR-20110414-001	Chambers	5	4/14/2011 16:36		4/14/2011 17:23
ECR-20110321-004	Chambers	20	3/21/2011 17:07		3/21/2011 19:40
ECR-20110320-005	Chambers	20	3/20/2011 16:16		3/20/2011 19:45
ECR-20110318-006	Chambers	0	3/18/2011 19:02		3/18/2011 19:30
ECR-20110318-001	Chambers	15	3/18/2011 6:39		3/18/2011 7:55
ECR-20110317-001	Chambers	1	3/17/2011 13:11		3/17/2011 14:27

ECR-20110303-001	Chambers	10	3/3/2011 10:35		3/3/2011 12:00
ECR-20110224-006	Chambers	1	2/24/2011 11:35		2/24/2011 12:18
ECR-20110223-007	Chambers	1	2/23/2011 13:47		2/23/2011 14:50
ECR-20110221-001	Chambers	15	2/21/2011 13:33		2/21/2011 15:20
ECR-20110217-014	Chambers	2	2/17/2011 16:12		2/17/2011 17:34
ECR-20110217-016	Chambers	16	2/17/2011 12:37		2/17/2011 15:00
ECR-20110217-004	Chambers	5	2/17/2011 12:09		2/17/2011 14:45
ECR-20110217-002	Chambers	2	2/17/2011 11:41		2/17/2011 12:25
ECR-20110216-002	Chambers	21	2/16/2011 11:46		2/16/2011 13:02
ECR-20110214-004	Chambers	2	2/14/2011 18:02		2/14/2011 19:36
ECR-20110130-001	Chambers	7	1/30/2011 16:38		1/30/2011 17:30
ECR-20101229-003	Chambers	2	############		12/29/2010 15:32

ECR-20101224-002	Chambers	2	############		12/24/2010 16:44
ECR-20101022-003	Chambers	20	############		10/22/2010 16:20
ECR-20101017-001	Chambers	3	############		10/17/2010 13:53
ECR-20101011-002	Chambers	1	############		10/11/2010 16:06
ECR-20101010-002	Chambers	3	############		10/10/2010 14:43
ECR-20101005-001	Chambers	1	10/5/2010 14:15		10/5/2010 16:04
ECR-20100922-006	Chambers	1	9/22/2010 20:14		9/22/2010 21:40
ECR-20100922-007	Chambers	1	9/22/2010 19:50		9/22/2010 22:20
ECR-20100920-007	Chambers	2	9/20/2010 20:59		9/20/2010 21:56
ECR-20100920-006	Chambers	1	9/20/2010 19:48		9/20/2010 20:59
ECR-20100920-004	Chambers	15	9/20/2010 15:04		9/20/2010 16:47
ECR-20100916-008	Chambers	3	9/16/2010 17:16		9/16/2010 18:37

ECR-20100916-007	Chambers	0	9/16/2010 17:14		9/16/2010 17:16
ECR-20100916-003	Chambers	1	9/16/2010 14:25		9/16/2010 15:35
ECR-20100811-007	Chambers	1	8/11/2010 19:07		8/11/2010 21:09
ECR-20100811-003	Chambers	4	8/11/2010 14:15		8/11/2010 16:07
ECR-20100703-001	Chambers	6	7/3/2010 13:10		7/3/2010 14:45
ECR-20100620-001	Chambers	1	6/20/2010 7:55		6/20/2010 8:37
ECR-20100618-001	Chambers	1	6/18/2010 17:24		6/18/2010 19:42
ECR-20100502-002	Chambers	5	5/2/2010 16:36		5/2/2010 17:20
ECR-20100406-011	Chambers	3	4/6/2010 14:00		4/6/2010 16:20
ECR-20100406-001	Chambers	3	4/6/2010 11:13		4/6/2010 12:25
ECR-20100402-002	Chambers	3	4/2/2010 12:55		4/2/2010 14:21
ECR-20100329-003	Chambers	3	3/29/2010 20:58		3/29/2010 22:50

ECR-20100329-001	Chambers	1	3/29/2010 15:56		3/29/2010 16:30
ECR-20100306-001	Chambers	2	3/6/2010 11:20		3/6/2010 13:13
ECR-20100311-001	Chambers	0	3/5/2010 12:00		3/5/2010 12:10
ECR-20100304-002	Chambers	1	3/4/2010 12:43		3/4/2010 14:09
ECR-20100128-001	Chambers	22	1/28/2010 11:20		1/28/2010 14:00
ECR-20090815-002	Chambers	2	8/15/2009 20:33		8/15/2009 22:40
ECR-20090809-002	Chambers	1	8/9/2009 16:38		8/9/2009 18:00
ECR-20090727-002	Chambers	1	7/27/2009 17:00		7/27/2009 18:08
ECR-20090630-005	Chambers	3	6/30/2009 16:24		6/30/2009 17:56
ECR-20090630-001	Chambers	2	6/30/2009 1:05		6/30/2009 3:07
ECR-20090601-001	Chambers	3	6/1/2009 13:00		6/1/2009 14:30
ECR-20090503-001	Chambers	5	5/3/2009 12:50		5/3/2009 15:39

ECR-20090416-001	Chambers	2	4/16/2009 17:52		4/16/2009 19:42
ECR-20090410-002	Chambers	25	4/10/2009 18:05		4/10/2009 19:01
ECR-20090312-001	Chambers	2	3/12/2009 12:06		3/12/2009 13:10
ECR-20090310-007	Chambers	1	3/10/2009 21:34		3/10/2009 23:14
ECR-20090225-002	Chambers	15	2/25/2009 14:05		2/25/2009 16:10
ECR-20090224-006	Chambers	13	2/24/2009 16:25		2/24/2009 16:25
ECR-20090224-001	Chambers	18	2/24/2009 7:57		2/24/2009 9:00
ECR-20090220-001	Chambers	52	2/20/2009 16:37		2/20/2009 18:30
ECR-20090216-001	Chambers	1	2/16/2009 10:40		2/16/2009 11:54
ECR-20090210-001	Chambers	5	2/10/2009 13:49		2/10/2009 15:38
ECR-20090207-003	Chambers	2	2/7/2009 16:00		2/7/2009 16:55

Status	Number of Fires	Total Acres

	Controlled	501	3,545.32

Fire #	County	Acres	Reported On	Contained On	Controlled On
20191205-5	Chilton	6	12/5/2019 16:04	12/6/2019 10:33	12/8/2019 15:37
20191205-4	Chilton	2	12/5/2019 14:19	12/5/2019 14:47	12/5/2019 23:57
20191204-12	Chilton	5	12/4/2019 17:01	12/6/2019 10:33	12/8/2019 15:35
20191125-2	Chilton	2	11/25/2019 15:26	11/25/2019 17:21	11/25/2019 17:21
20191122-2	Chilton	3	11/22/2019 11:49	11/22/2019 13:16	11/22/2019 13:18
20191029-1	Chilton	2	10/29/2019 5:21	10/29/2019 6:59	10/30/2019 15:41
20191027-1	Chilton	0.5	10/27/2019 22:09	10/27/2019 23:14	10/27/2019 23:14
20191015-2	Chilton	1	10/15/2019 7:20	10/22/2019 15:29	10/23/2019 7:47
20191011-9	Chilton	1	10/11/2019 12:57	10/15/2019 8:26	10/15/2019 8:26
20191011-6	Chilton	2	10/11/2019 10:20	10/11/2019 13:00	10/15/2019 8:56
20191008-2	Chilton	2	10/8/2019 12:41	10/8/2019 14:26	10/8/2019 14:26
20191007-4	Chilton	2	10/7/2019 13:05	10/22/2019 15:29	10/23/2019 7:47
20191004-8	Chilton	10	10/4/2019 13:32	10/4/2019 14:48	10/4/2019 14:48
20191002-28	Chilton	1	10/2/2019 18:45	10/15/2019 8:27	10/15/2019 8:27
20190929-6	Chilton	0.25	9/29/2019 13:34	9/29/2019 14:08	9/29/2019 14:08

20190926-14	Chilton	0.5	9/26/2019 15:28	9/26/2019 18:12	9/28/2019 14:28
20190926-12	Chilton	26.8	9/26/2019 15:12	9/28/2019 14:27	9/28/2019 14:27
20190925-8	Chilton	35	9/25/2019 13:20	9/26/2019 16:54	9/28/2019 14:27
20190925-1	Chilton	0.25	9/25/2019 8:21	9/25/2019 10:02	9/25/2019 15:20
20190923-21	Chilton	2	9/23/2019 20:37	9/23/2019 22:19	9/24/2019 10:25
20190920-26	Chilton	1	9/20/2019 16:57	9/20/2019 18:55	9/20/2019 18:57
20190920-15	Chilton	3	9/20/2019 14:34	9/20/2019 16:54	9/20/2019 16:54
20190919-13	Chilton	1	9/19/2019 12:53	9/19/2019 20:00	9/24/2019 10:25
20190918-8	Chilton	2	9/18/2019 12:42	9/18/2019 13:49	9/18/2019 13:49
20190917-21	Chilton	1	9/17/2019 18:54	9/17/2019 20:49	9/17/2019 20:49
20190911-5	Chilton	46	9/11/2019 15:47	9/13/2019 10:09	9/13/2019 10:09
20190910-5	Chilton	15	9/10/2019 15:10	9/10/2019 17:11	9/10/2019 17:11
20190906-18	Chilton	1	9/6/2019 17:41	9/6/2019 18:57	9/9/2019 17:41
20190906-6	Chilton	13	9/6/2019 13:21	9/6/2019 14:04	9/6/2019 14:04
20190830-4	Chilton	0.5	8/30/2019 17:58	8/30/2019 19:23	9/3/2019 13:01
20190819-8	Chilton	1	8/19/2019 15:50	8/19/2019 17:07	8/19/2019 17:07
20190819-2	Chilton	2	8/19/2019 13:02	8/19/2019 13:49	8/19/2019 13:49

20190817-6	Chilton	5	8/17/2019 14:38	8/17/2019 15:50	8/20/2019 12:00
20190815-3	Chilton	16	8/15/2019 14:36	8/16/2019 18:01	8/19/2019 12:08
20190802-3	Chilton	2	8/2/2019 15:48	8/2/2019 17:29	8/2/2019 17:29
20190729-12	Chilton	1	7/29/2019 22:15	7/30/2019 17:37	8/5/2019 17:56
20190728-2	Chilton	3	7/28/2019 20:52	7/28/2019 22:55	7/28/2019 22:55
20190727-1	Chilton	25	7/27/2019 15:25	7/27/2019 17:04	7/27/2019 17:05
20190725-1	Chilton	4	7/25/2019 20:24	7/26/2019 9:38	7/26/2019 10:30
20190724-1	Chilton	4	7/24/2019 11:26	7/24/2019 16:03	7/25/2019 14:21
20190718-2	Chilton	1.5	7/18/2019 15:54	7/18/2019 17:42	7/18/2019 17:43
20190708-7	Chilton	2	7/8/2019 21:41	7/8/2019 22:34	7/8/2019 22:34
20190604-12	Chilton	8	6/4/2019 17:19	6/4/2019 18:46	6/5/2019 22:52
20190521-5	Chilton	4	5/21/2019 12:57	5/21/2019 15:20	5/28/2019 8:42
20190413-5	Chilton	20	4/13/2019 21:56	4/14/2019 0:30	4/15/2019 10:40
20190411-5	Chilton	3	4/11/2019 16:53	4/11/2019 18:12	4/14/2019 0:33
20190403-19	Chilton	3	4/3/2019 17:23	4/3/2019 18:36	4/3/2019 18:36
20190402-11	Chilton	404	4/2/2019 17:01	4/2/2019 21:18	4/3/2019 15:16
20190330-8	Chilton	6	3/30/2019 13:19	3/30/2019 18:12	4/2/2019 21:19

20190325-4	Chilton	1	3/25/2019 14:49	3/25/2019 15:59	3/25/2019 15:59
20190322-13	Chilton	8	3/22/2019 15:17	3/22/2019 18:15	3/24/2019 19:59
20190314-1	Chilton	2	3/14/2019 7:07	3/14/2019 8:25	3/14/2019 8:25
20190210-7	Chilton	10	2/10/2019 19:29	2/10/2019 21:09	2/10/2019 21:10
20190203-1	Chilton	8	2/3/2019 13:02	2/3/2019 15:06	2/3/2019 15:06
20180919-2	Chilton	0.25	9/19/2018 9:51	9/19/2018 9:55	9/19/2018 10:01
20180919-1	Chilton	0.25	9/19/2018 9:51	9/19/2018 9:55	9/19/2018 10:00
20180918-6	Chilton	3	9/18/2018 20:40	9/19/2018 9:52	9/19/2018 9:52
20180918-5	Chilton	2	9/18/2018 18:56	9/18/2018 20:43	9/18/2018 20:43
20180731-1	Chilton	12	7/31/2018 8:31	7/31/2018 10:13	7/31/2018 10:13
20180730-4	Chilton	5	7/30/2018 17:54	7/30/2018 19:33	7/30/2018 19:33
20180728-3	Chilton	15	7/28/2018 16:00	7/28/2018 18:23	7/28/2018 20:29
20180324-1	Chilton	0.5	3/24/2018 12:23	3/24/2018 14:05	3/27/2018 15:08
20180321-3	Chilton	1	3/21/2018 16:04	3/21/2018 16:20	3/21/2018 16:20

20180315-6	Chilton	15	3/15/2018 14:11	3/15/2018 17:23	3/18/2018 14:46
20180309-1	Chilton	8	3/9/2018 11:51	3/9/2018 12:48	3/10/2018 0:13
20180131-25	Chilton	5	1/31/2018 16:27	1/31/2018 18:02	1/31/2018 19:24
20180124-5	Chilton	36	1/24/2018 13:16	1/24/2018 16:34	1/24/2018 17:43
20180123-6	Chilton	8	1/23/2018 14:21	1/23/2018 15:20	1/23/2018 15:20
20180106-13	Chilton	4	1/6/2018 15:31	1/6/2018 16:18	1/6/2018 16:18
20180108-1	Chilton	18	1/5/2018 14:28	1/5/2018 15:56	1/5/2018 15:56
20180103-2	Chilton	6	1/3/2018 13:04	1/3/2018 15:12	1/3/2018 15:12
20171127-5	Chilton	4	11/27/2017 13:35	11/27/2017 16:32	11/27/2017 16:32
20171123-1	Chilton	17.26	11/23/2017 11:01	11/23/2017 12:33	11/23/2017 13:57
20170801-3	Chilton	0.1	8/1/2017 23:02	8/2/2017 0:32	8/3/2017 15:55
20170613-1	Chilton	0.5	6/13/2017 13:06	6/13/2017 13:28	6/13/2017 13:28

20170517-7	Chilton	5	5/17/2017 20:45	5/17/2017 22:13	5/18/2017 7:57
20170510-5	Chilton	5	5/10/2017 13:20	5/10/2017 15:38	5/10/2017 15:38
20170422-6	Chilton	6.4	4/22/2017 15:01	4/22/2017 16:29	4/22/2017 16:29
20170416-9	Chilton	208.6	4/16/2017 18:37	4/17/2017 15:31	4/18/2017 8:50
20170416-2	Chilton	8	4/16/2017 12:49	4/16/2017 16:12	4/16/2017 16:12
20170415-3	Chilton	2	4/15/2017 11:30	4/15/2017 12:27	4/15/2017 12:27
20170414-2	Chilton	155.9	4/14/2017 13:44	4/17/2017 15:29	4/17/2017 22:49
20170412-3	Chilton	0.2	4/12/2017 15:33	4/12/2017 16:21	4/12/2017 16:21
20170410-10	Chilton	4	4/10/2017 15:19	4/10/2017 17:40	4/10/2017 17:41
20170409-22	Chilton	51.5	4/9/2017 20:09	4/10/2017 12:07	4/10/2017 17:41
20170331-3	Chilton	0.5	3/31/2017 18:01	3/31/2017 19:39	4/3/2017 8:43
20170324-11	Chilton	12	3/24/2017 12:35	3/24/2017 14:40	3/27/2017 11:32

20170323-41	Chilton	4	3/23/2017 21:48	3/27/2017 11:33	3/27/2017 11:33
20170323-27	Chilton	0.5	3/23/2017 15:38	3/23/2017 16:13	3/24/2017 9:40
20170322-21	Chilton	0.25	3/22/2017 16:29	3/22/2017 18:53	3/22/2017 18:53
20170317-2	Chilton	2	3/17/2017 10:53	3/17/2017 12:41	3/20/2017 15:21
20170220-11	Chilton	40	2/20/2017 13:08	2/20/2017 17:58	2/24/2017 9:15
20170213-3	Chilton	3	2/13/2017 12:56	2/13/2017 15:53	2/13/2017 15:53
20170131-20	Chilton	8	1/31/2017 13:58	1/31/2017 15:23	1/31/2017 15:23
20170116-10	Chilton	1	1/16/2017 13:50	1/16/2017 15:34	1/16/2017 15:34
20161227-1	Chilton	5	12/27/2016 12:59	12/27/2016 13:32	12/27/2016 13:32
20161225-8	Chilton	3.5	12/25/2016 14:03	12/25/2016 15:01	12/25/2016 15:02
20161128-132	Chilton	0.01	11/28/2016 22:30	11/28/2016 23:18	11/28/2016 23:18
20161123-15	Chilton	1	11/23/2016 11:30	11/23/2016 12:40	11/23/2016 12:40

20161122-20	Chilton	2	11/22/2016 11:28	11/23/2016 11:53	11/28/2016 9:57
20161121-34	Chilton	1	11/21/2016 15:22	11/21/2016 16:14	11/21/2016 16:14
20161120-31	Chilton	2	11/20/2016 18:43	11/20/2016 19:43	11/20/2016 19:43
20161118-33	Chilton	0.3	11/18/2016 17:53	11/18/2016 18:14	11/18/2016 18:14
20161118-26	Chilton	0.1	11/18/2016 14:06	11/18/2016 14:40	11/18/2016 14:40
20161118-20	Chilton	0.1	11/18/2016 13:00	11/18/2016 14:06	11/18/2016 14:10
20161118-10	Chilton	3	11/18/2016 11:49	11/18/2016 12:58	11/18/2016 14:06
20161116-22	Chilton	3	11/16/2016 15:27	11/16/2016 17:08	11/16/2016 17:08
20161112-1	Chilton	3	11/12/2016 0:33	11/12/2016 3:17	11/12/2016 11:30
20161111-40	Chilton	0.25	11/11/2016 23:42	11/12/2016 11:10	11/12/2016 11:30
20161111-39	Chilton	5	11/11/2016 23:09	11/12/2016 9:53	11/12/2016 11:10
20161111-22	Chilton	0.1	11/11/2016 13:47	11/11/2016 14:45	11/11/2016 14:45

20161111-2	Chilton	3	11/11/2016 0:08	11/11/2016 8:26	11/11/2016 9:02
20161111-1	Chilton	3	11/11/2016 0:05	11/14/2016 9:12	11/14/2016 9:12
20161110-34	Chilton	0.5	11/10/2016 14:42	11/10/2016 15:29	11/10/2016 15:29
20161109-25	Chilton	5	11/9/2016 13:58	11/12/2016 11:14	11/14/2016 9:01
20161108-6	Chilton	1	11/8/2016 5:19	11/8/2016 5:36	11/8/2016 5:36
20161108-2	Chilton	2	11/8/2016 1:21	11/8/2016 11:21	11/8/2016 11:21
20161107-45	Chilton	2	11/7/2016 18:29	11/8/2016 15:29	11/8/2016 15:29
20161107-33	Chilton	1	11/7/2016 15:31	11/8/2016 13:10	11/8/2016 13:10
20161106-44	Chilton	0.1	11/6/2016 17:24	11/8/2016 18:00	11/9/2016 12:14
20161106-42	Chilton	0.1	11/6/2016 17:00	11/8/2016 17:55	11/9/2016 11:54
20161106-21	Chilton	3	11/6/2016 12:26	11/6/2016 14:52	11/6/2016 14:52
20161105-43	Chilton	2	11/5/2016 15:50	11/5/2016 16:56	11/5/2016 16:56

20161102-13	Chilton	0.1	11/2/2016 12:45	11/2/2016 13:59	11/2/2016 13:59
20161030-27	Chilton	0.1	10/30/2016 15:28	10/30/2016 16:37	10/30/2016 16:37
20161030-20	Chilton	2.9	10/30/2016 14:33	10/31/2016 11:21	10/31/2016 11:38
20161030-10	Chilton	1	10/30/2016 12:38	10/30/2016 14:27	10/30/2016 14:27
20161028-5	Chilton	0.5	10/28/2016 11:45	10/28/2016 12:23	10/29/2016 13:02
20161028-4	Chilton	1	10/28/2016 11:00	10/28/2016 13:25	10/29/2016 13:09
20161027-48	Chilton	1	10/27/2016 17:24	10/27/2016 18:23	10/29/2016 12:38
20161027-43	Chilton	2	10/27/2016 15:33	10/27/2016 17:19	10/27/2016 18:00
20161027-22	Chilton	2	10/27/2016 12:38	10/27/2016 12:48	10/29/2016 12:48
20161027-20	Chilton	2	10/27/2016 12:37	10/27/2016 13:39	10/29/2016 13:16
20161027-17	Chilton	3	10/27/2016 12:32	10/27/2016 17:18	10/29/2016 12:48
20161027-19	Chilton	1	10/27/2016 12:27	10/27/2016 12:52	10/29/2016 12:37

20161027-16	Chilton	1	10/27/2016 11:47	10/27/2016 14:28	10/29/2016 13:16
20161027-15	Chilton	2	10/27/2016 11:46	10/27/2016 12:26	10/29/2016 13:33
20161027-12	Chilton	0.25	10/27/2016 10:53	10/27/2016 15:29	10/27/2016 15:29
20161026-49	Chilton	0.5	10/26/2016 21:25	10/26/2016 21:58	10/29/2016 13:33
20161026-47	Chilton	0.5	10/26/2016 20:03	10/27/2016 12:22	10/29/2016 12:38
20161025-29	Chilton	0.1	10/25/2016 14:54	10/25/2016 15:08	10/25/2016 16:08
20161022-12	Chilton	2	10/22/2016 11:03	10/22/2016 11:35	10/22/2016 11:35
20161022-11	Chilton	0.5	10/22/2016 10:53	10/22/2016 11:26	10/22/2016 11:34
20161022-6	Chilton	147	10/22/2016 8:01	10/26/2016 13:33	10/26/2016 13:33
20161022-4	Chilton	20	10/22/2016 6:32	10/22/2016 10:54	10/22/2016 10:54
20161022-2	Chilton	0.5	10/22/2016 1:46	10/22/2016 3:03	10/22/2016 3:03
20161021-52	Chilton	2	10/21/2016 17:00	10/21/2016 18:46	10/21/2016 18:46

20161018-13	Chilton	9	10/18/2016 13:24	10/18/2016 14:50	10/19/2016 11:32
20161014-41	Chilton	6	10/14/2016 15:42	10/14/2016 18:19	10/14/2016 18:21
20161013-54	Chilton	0.1	10/13/2016 19:49	10/13/2016 20:36	10/13/2016 20:36
20161012-33	Chilton	0.5	10/12/2016 15:40	10/12/2016 16:35	10/12/2016 16:35
20161012-16	Chilton	0.5	10/12/2016 13:33	10/12/2016 15:39	10/13/2016 10:00
20161012-11	Chilton	0.5	10/12/2016 12:46	10/12/2016 14:25	10/13/2016 9:59
20161011-42	Chilton	0.5	10/11/2016 16:20	10/11/2016 17:35	10/11/2016 17:35
20161009-20	Chilton	10	10/9/2016 12:05	10/9/2016 14:00	10/9/2016 14:42
20161008-53	Chilton	1.5	10/8/2016 20:26	10/8/2016 21:12	10/9/2016 8:23
20161008-26	Chilton	3	10/8/2016 14:10	10/8/2016 15:15	10/8/2016 15:16
20161008-23	Chilton	1.5	10/8/2016 13:39	10/8/2016 14:40	10/12/2016 15:43
20161005-22	Chilton	1	10/5/2016 13:48	10/5/2016 17:28	10/5/2016 17:30

20161002-21	Chilton	4	10/2/2016 16:14	10/2/2016 17:13	10/2/2016 17:13
20160929-22	Chilton	8	9/29/2016 14:07	9/29/2016 15:39	9/29/2016 15:39
20160928-33	Chilton	3	9/28/2016 16:39	9/28/2016 19:12	9/28/2016 19:12
20160926-12	Chilton	0.75	9/26/2016 15:34	9/26/2016 17:20	9/26/2016 17:27
20160923-7	Chilton	2	9/23/2016 13:53	9/23/2016 14:25	9/23/2016 14:25
20160804-4	Chilton	6	8/4/2016 15:37	8/4/2016 17:07	8/4/2016 17:07
20160708-9	Chilton	1	7/8/2016 16:46	7/8/2016 17:01	7/8/2016 17:01
20160705-7	Chilton	0.1	7/5/2016 19:25	7/5/2016 19:48	7/5/2016 20:01
20160702-7	Chilton	5	7/2/2016 15:57	7/2/2016 17:37	7/2/2016 17:37
20160622-7	Chilton	2	6/22/2016 18:05	6/22/2016 19:51	6/22/2016 20:12
20160409-6	Chilton	0.25	4/9/2016 14:13	4/9/2016 16:49	4/9/2016 16:57
20160405-11	Chilton	25	4/5/2016 16:57	4/5/2016 18:32	4/5/2016 18:53

20160404-4	Chilton	0.1	4/4/2016 13:49	4/4/2016 14:07	4/4/2016 14:07
20160322-12	Chilton	3	3/22/2016 14:56	3/22/2016 16:54	3/22/2016 16:56
20160322-18	Chilton	15	3/22/2016 14:50	3/22/2016 18:22	3/22/2016 18:22
20160315-21	Chilton	1	3/15/2016 17:33	3/15/2016 18:36	3/15/2016 19:04
20160229-1	Chilton	6	2/29/2016 10:48	2/29/2016 12:36	2/29/2016 12:39
20160219-32	Chilton	3	2/19/2016 19:46	2/19/2016 20:59	2/19/2016 21:05
20160217-1	Chilton	8	2/17/2016 12:27	2/17/2016 13:45	2/17/2016 13:45
20160214-15	Chilton	1	2/14/2016 14:01	2/14/2016 15:19	2/14/2016 15:34
20160213-12	Chilton	25	2/13/2016 13:25	2/13/2016 15:58	2/13/2016 16:29
20160209-13	Chilton	4	2/9/2016 18:07	2/9/2016 21:38	2/9/2016 21:38
ECR-20151213-001	Chilton	5	12/13/2015 13:13		12/13/2015 20:01
ECR-20151205-001	Chilton	2	12/5/2015 14:24		12/5/2015 17:04

ECR-20151118-001	Chilton	2	11/18/2015 1:42		11/18/2015 4:42
ECR-20151023-001	Chilton	51	10/23/2015 11:59		10/23/2015 15:00
ECR-20151021-001	Chilton	8	10/21/2015 11:50		10/21/2015 14:14
ECR-20151016-001	Chilton	13	10/16/2015 11:50		10/16/2015 20:35
ECR-20151008-001	Chilton	5	10/8/2015 20:07		10/8/2015 22:59
ECR-20150803-001	Chilton	0	8/3/2015 13:50		8/3/2015 15:39
ECR-20150801-001	Chilton	5	8/1/2015 15:07		8/1/2015 17:36
ECR-20150713-001	Chilton	0	7/13/2015 15:37		7/13/2015 18:30
ECR-20150713-002	Chilton	0	7/13/2015 15:37		7/13/2015 18:30
ECR-20150713-003	Chilton	3	7/13/2015 15:37		7/13/2015 18:30
ECR-20150713-004	Chilton	0	7/13/2015 15:37		7/13/2015 18:30
ECR-20150624-001	Chilton	0	6/24/2015 14:50		6/24/2015 16:06

ECR-20150523-001	Chilton	6	5/23/2015 15:01		5/23/2015 17:02
ECR-20150515-001	Chilton	1	5/15/2015 14:57		5/15/2015 15:49
ECR-20150514-001	Chilton	5	5/14/2015 13:19		5/14/2015 14:57
ECR-20150403-003	Chilton	4	4/3/2015 15:03		4/3/2015 16:02
ECR-20150212-004	Chilton	2	2/12/2015 18:47		2/12/2015 20:19
ECR-20150208-004	Chilton	4	2/8/2015 16:31		2/8/2015 18:27
ECR-20150208-001	Chilton	10	2/8/2015 0:04		2/8/2015 1:04
ECR-20150207-011	Chilton	4	2/7/2015 17:18		2/7/2015 19:01
ECR-20150129-002	Chilton	2	1/29/2015 16:15		1/29/2015 17:29
ECR-20150121-004	Chilton	1	1/21/2015 14:10		1/21/2015 14:28
ECR-20150119-008	Chilton	2	1/19/2015 16:18		1/19/2015 17:09
ECR-20141212-005	Chilton	0	12/12/2014 20:10		12/12/2014 22:35

ECR-20141212-006	Chilton	1	12/12/2014 20:10		12/12/2014 22:35
ECR-20141212-008	Chilton	3	12/12/2014 20:10		12/13/2014 14:56
ECR-20141202-003	Chilton	3	12/2/2014 20:25		12/2/2014 23:20
ECR-20141130-001	Chilton	2	11/30/2014 14:28		11/30/2014 15:27
ECR-20141128-001	Chilton	1	11/28/2014 12:31		11/28/2014 13:36
ECR-20141109-002	Chilton	6	11/9/2014 13:34		11/9/2014 15:45
ECR-20141104-004	Chilton	5	11/4/2014 17:56		11/4/2014 19:41
ECR-20141105-001	Chilton	0	11/4/2014 14:10		11/4/2014 15:13
ECR-20141023-001	Chilton	20	10/23/2014 5:48		10/23/2014 8:45
ECR-20141012-001	Chilton	0	10/12/2014 7:27		10/12/2014 8:30
ECR-20140927-001	Chilton	10	9/27/2014 15:08		9/27/2014 16:19
ECR-20140906-001	Chilton	10	9/6/2014 11:58		9/6/2014 14:58

ECR-20140826-002	Chilton	0	8/26/2014 16:35		8/26/2014 17:14
ECR-20140826-001	Chilton	3	8/26/2014 14:52		8/26/2014 15:18
ECR-20140824-001	Chilton	0	8/24/2014 21:42		8/24/2014 23:12
ECR-20140818-001	Chilton	0	8/18/2014 15:20		8/18/2014 16:49
ECR-20140815-001	Chilton	12	8/15/2014 11:49		8/15/2014 14:11
ECR-20140704-001	Chilton	1	7/4/2014 19:22		7/4/2014 21:01
ECR-20140620-001	Chilton	0	6/20/2014 15:09		6/20/2014 16:45
ECR-20140528-002	Chilton	1	5/28/2014 5:23		5/28/2014 7:33
ECR-20140528-001	Chilton	3	5/28/2014 2:12		5/28/2014 4:40
ECR-20140521-001	Chilton	1	5/21/2014 15:52		5/21/2014 16:51
ECR-20140507-001	Chilton	8	5/7/2014 21:34		5/8/2014 0:17
ECR-20140412-001	Chilton	14	4/12/2014 11:20		4/12/2014 14:37

ECR-20140327-004	Chilton	6	3/27/2014 14:32		3/27/2014 16:41
ECR-20140326-002	Chilton	13	3/26/2014 14:41		3/26/2014 15:30
ECR-20140325-007	Chilton	15	3/25/2014 18:04		3/25/2014 20:06
ECR-20140302-010	Chilton	4	3/2/2014 17:56		3/2/2014 19:28
ECR-20140223-001	Chilton	10	2/22/2014 14:52		2/22/2014 15:38
ECR-20140209-003	Chilton	3	2/9/2014 16:04		2/9/2014 17:19
ECR-20140208-002	Chilton	4	2/8/2014 13:19		2/8/2014 14:35
ECR-20140202-001	Chilton	15	2/2/2014 15:36		2/2/2014 18:24
ECR-20140127-002	Chilton	11	1/27/2014 13:49		1/27/2014 15:16
ECR-20140126-005	Chilton	2	1/26/2014 13:30		1/26/2014 15:12
ECR-20140126-004	Chilton	2	1/26/2014 13:13		1/26/2014 13:30
ECR-20140126-001	Chilton	2	1/26/2014 12:36		1/26/2014 13:48

ECR-20140125-011	Chilton	5	1/25/2014 13:34		1/25/2014 15:01
ECR-20140123-001	Chilton	2	1/23/2014 14:32		1/23/2014 16:28
ECR-20140119-004	Chilton	2	1/19/2014 13:40		1/19/2014 15:02
ECR-20131130-001	Chilton	3	11/30/2013 10:20		11/30/2013 11:11
ECR-20131114-005	Chilton	2	11/14/2013 15:00		11/14/2013 15:54
ECR-20131011-001	Chilton	0	10/11/2013 14:02		10/11/2013 15:07
ECR-20130918-001	Chilton	1	9/18/2013 8:23		9/18/2013 10:23
ECR-20130916-001	Chilton	2	9/16/2013 14:24		9/16/2013 16:09
ECR-20130915-001	Chilton	1	9/15/2013 18:28		9/15/2013 19:45
ECR-20130907-001	Chilton	1	9/7/2013 16:31		9/7/2013 18:05
ECR-20130529-001	Chilton	0	5/29/2013 13:23		5/29/2013 14:29
ECR-20130526-001	Chilton	2	5/26/2013 16:10		5/26/2013 22:52

ECR-20130427-009	Chilton	60	4/27/2013 17:45		4/27/2013 23:36
ECR-20130427-008	Chilton	25	4/27/2013 16:56		4/27/2013 19:10
ECR-20130426-010	Chilton	3	4/26/2013 23:05		4/27/2013 1:06
ECR-20130427-001	Chilton	2	4/26/2013 23:05		4/27/2013 1:06
ECR-20130427-002	Chilton	2	4/26/2013 23:05		4/27/2013 1:06
ECR-20130427-003	Chilton	3	4/26/2013 23:05		4/27/2013 1:06
ECR-20130427-004	Chilton	1	4/26/2013 23:05		4/27/2013 1:06
ECR-20130425-001	Chilton	1	4/25/2013 14:22		4/25/2013 15:08
ECR-20130411-001	Chilton	0	4/11/2013 13:37		4/11/2013 14:23
ECR-20130410-001	Chilton	3	4/10/2013 9:56		4/10/2013 11:35
ECR-20130319-001	Chilton	0	3/19/2013 15:25		3/19/2013 15:25
ECR-20130317-002	Chilton	3	3/17/2013 15:09		3/17/2013 17:41

ECR-20130316-018	Chilton	15	3/16/2013 18:50		3/16/2013 20:35
ECR-20130316-013	Chilton	14	3/16/2013 16:49		3/16/2013 18:50
ECR-20130316-009	Chilton	15	3/16/2013 15:49		3/16/2013 17:29
ECR-20130316-006	Chilton	3	3/16/2013 15:07		
ECR-20130316-011	Chilton	2	3/16/2013 13:44		3/16/2013 14:55
ECR-20130316-007	Chilton	14	3/16/2013 12:30		3/16/2013 14:18
ECR-20130315-008	Chilton	15	3/15/2013 20:40		3/15/2013 23:43
ECR-20130316-001	Chilton	5	3/15/2013 20:40		3/15/2013 22:05
ECR-20130313-003	Chilton	0	3/13/2013 14:22		3/13/2013 14:56
ECR-20130313-001	Chilton	0	3/13/2013 12:19		3/13/2013 13:33
ECR-20130312-001	Chilton	2	3/12/2013 18:48		3/12/2013 19:45
ECR-20130310-005	Chilton	3	3/10/2013 14:30		3/10/2013 15:34

ECR-20130309-011	Chilton	5	3/9/2013 16:33		3/9/2013 17:14
ECR-20130307-001	Chilton	1	3/7/2013 13:33		3/7/2013 14:52
ECR-20130221-001	Chilton	4	2/21/2013 13:29		2/21/2013 14:41
ECR-20130217-004	Chilton	2	2/17/2013 16:02		2/17/2013 18:03
ECR-20130206-002	Chilton	1	2/6/2013 14:15		2/6/2013 14:54
ECR-20130203-001	Chilton	3	2/2/2013 12:41		2/2/2013 15:19
ECR-20130125-002	Chilton	3	1/25/2013 11:12		1/25/2013 13:45
ECR-20130123-001	Chilton	10	1/23/2013 15:15		1/23/2013 16:04
ECR-20130107-002	Chilton	0	1/7/2013 14:45		1/7/2013 14:57
ECR-20121209-001	Chilton	6	12/9/2012 12:36		12/9/2012 14:48
ECR-20121206-003	Chilton	0	12/6/2012 14:36		12/6/2012 15:29
ECR-20121203-002	Chilton	0	12/3/2012 12:28		12/3/2012 13:55

ECR-20121201-001	Chilton	5	12/1/2012 12:19		12/1/2012 14:16
ECR-20121125-006	Chilton	0	11/25/2012 14:11		11/25/2012 15:32
ECR-20121125-002	Chilton	2	11/25/2012 12:46		11/25/2012 14:59
ECR-20121124-006	Chilton	0	11/24/2012 19:00		11/24/2012 20:16
ECR-20121122-001	Chilton	0	11/22/2012 15:41		11/22/2012 18:50
ECR-20121120-002	Chilton	1	11/20/2012 17:27		11/21/2012 0:12
ECR-20121110-004	Chilton	1	11/10/2012 15:45		11/10/2012 19:14
ECR-20121110-003	Chilton	2	11/10/2012 15:41		11/10/2012 17:20
ECR-20121103-001	Chilton	5	11/3/2012 9:30		11/3/2012 12:02
ECR-20121102-002	Chilton	5	11/2/2012 13:59		11/2/2012 16:47
ECR-20121101-005	Chilton	6	11/1/2012 15:11		11/1/2012 16:55
ECR-20121029-002	Chilton	7	10/29/2012 14:01		10/29/2012 15:24

ECR-20121025-003	Chilton	3	10/25/2012 14:38		10/25/2012 15:49
ECR-20121023-001	Chilton	5	10/23/2012 15:51		10/23/2012 18:03
ECR-20120916-001	Chilton	0	9/16/2012 16:37		9/16/2012 20:33
ECR-20120814-001	Chilton	0	8/14/2012 6:51		8/14/2012 8:45
ECR-20120726-002	Chilton	4	7/26/2012 16:08		7/26/2012 17:16
ECR-20120709-003	Chilton	0	7/9/2012 16:13		7/9/2012 17:13
ECR-20120709-001	Chilton	200	7/9/2012 13:22		7/9/2012 19:30
ECR-20120703-003	Chilton	0	7/3/2012 14:30		7/3/2012 14:52
ECR-20120701-003	Chilton	8	7/1/2012 17:28		7/1/2012 19:30
ECR-20120628-005	Chilton	0	6/28/2012 16:30		6/28/2012 17:36
ECR-20120628-003	Chilton	1	6/28/2012 15:39		6/28/2012 17:46
ECR-20120627-001	Chilton	0	6/27/2012 12:46		6/27/2012 13:37

ECR-20120625-004	Chilton	18	6/25/2012 16:23		6/25/2012 19:58
ECR-20120625-006	Chilton	0	6/25/2012 16:23		6/25/2012 19:58
ECR-20120625-007	Chilton	2	6/25/2012 16:23		6/25/2012 19:58
ECR-20120621-001	Chilton	7	6/21/2012 13:39		6/21/2012 19:09
ECR-20120607-001	Chilton	0	6/7/2012 15:57		6/7/2012 16:33
ECR-20120530-001	Chilton	0	5/30/2012 13:20		5/30/2012 15:07
ECR-20120524-002	Chilton	2	5/24/2012 13:39		5/24/2012 14:16
ECR-20120524-001	Chilton	0	5/24/2012 10:53		5/24/2012 11:42
ECR-20120423-002	Chilton	3	4/23/2012 16:15		4/23/2012 18:32
ECR-20120321-001	Chilton	1	3/21/2012 12:11		3/21/2012 13:15
ECR-20120318-006	Chilton	4	3/18/2012 18:33		3/18/2012 20:50
ECR-20120215-001	Chilton	2	2/15/2012 13:58		2/15/2012 14:43

ECR-20120206-001	Chilton	4	2/6/2012 15:27		2/6/2012 16:51
ECR-20120101-001	Chilton	15	1/1/2012 13:38		1/1/2012 15:55
ECR-20111112-001	Chilton	5	11/12/2011 12:32		11/12/2011 13:25
ECR-20111106-002	Chilton	1	11/6/2011 16:20		11/6/2011 18:20
ECR-20111106-003	Chilton	3	11/6/2011 16:20		11/6/2011 18:25
ECR-20111103-001	Chilton	1	11/3/2011 11:28		11/3/2011 12:35
ECR-20111025-005	Chilton	2	10/25/2011 20:00		10/25/2011 21:28
ECR-20111021-002	Chilton	0	10/21/2011 17:29		10/21/2011 19:20
ECR-20111004-001	Chilton	18	10/4/2011 16:09		10/4/2011 18:00
ECR-20111004-002	Chilton	0	10/4/2011 16:09		10/4/2011 17:49
ECR-20110918-001	Chilton	1	9/18/2011 13:19		9/18/2011 14:35
ECR-20110912-004	Chilton	1	9/12/2011 16:14		9/12/2011 17:39

ECR-20110910-001	Chilton	2	9/10/2011 15:25		9/10/2011 18:51
ECR-20110903-003	Chilton	20	9/3/2011 16:09		9/3/2011 20:30
ECR-20110903-002	Chilton	6	9/3/2011 13:20		9/3/2011 16:56
ECR-20110902-001	Chilton	0	9/2/2011 8:51		9/2/2011 10:58
ECR-20110901-005	Chilton	4	9/1/2011 17:20		9/1/2011 18:16
ECR-20110901-002	Chilton	2	9/1/2011 13:51		9/1/2011 15:25
ECR-20110901-004	Chilton	6	9/1/2011 13:45		9/1/2011 15:25
ECR-20110828-004	Chilton	1	8/28/2011 14:00		8/28/2011 14:47
ECR-20110825-002	Chilton	1	8/25/2011 15:25		8/25/2011 16:21
ECR-20110823-003	Chilton	0	8/23/2011 17:41		8/23/2011 17:45
ECR-20110822-004	Chilton	0	8/22/2011 18:49		8/22/2011 20:47
ECR-20110822-003	Chilton	2	8/22/2011 15:47		8/22/2011 17:02

ECR-20110822-002	Chilton	3	8/22/2011 14:03		8/22/2011 15:47
ECR-20110821-001	Chilton	2	8/21/2011 12:01		8/21/2011 13:12
ECR-20110803-002	Chilton	2	8/3/2011 14:08		8/3/2011 16:00
ECR-20110620-002	Chilton	2	6/20/2011 15:07		6/20/2011 17:10
ECR-20110620-003	Chilton	5	6/20/2011 15:07		6/20/2011 18:15
ECR-20110620-005	Chilton	1	6/20/2011 15:07		6/20/2011 19:13
ECR-20110618-001	Chilton	6	6/18/2011 17:05		6/18/2011 19:54
ECR-20110616-001	Chilton	3	6/16/2011 9:35		6/16/2011 9:45
ECR-20110614-001	Chilton	0	6/14/2011 14:56		6/14/2011 15:53
ECR-20110613-003	Chilton	10	6/13/2011 14:11		6/13/2011 17:00
ECR-20110610-001	Chilton	17	6/10/2011 15:07		6/10/2011 17:23
ECR-20110609-002	Chilton	11	6/9/2011 14:52		6/9/2011 17:31

ECR-20110606-004	Chilton	1	6/6/2011 17:49		6/6/2011 19:17
ECR-20110606-001	Chilton	1	6/6/2011 10:58		6/6/2011 12:15
ECR-20110601-002	Chilton	1	6/1/2011 13:01		6/1/2011 13:52
ECR-20110601-001	Chilton	0	6/1/2011 10:53		6/1/2011 12:49
ECR-20110530-003	Chilton	10	5/30/2011 17:54		5/30/2011 19:37
ECR-20110530-002	Chilton	5	5/30/2011 16:22		5/30/2011 20:27
ECR-20110529-001	Chilton	0	5/29/2011 20:30		5/29/2011 22:07
ECR-20110521-003	Chilton	2	5/21/2011 18:09		5/21/2011 20:15
ECR-20110411-001	Chilton	2	4/11/2011 15:23		4/11/2011 15:37
ECR-20110402-002	Chilton	0	4/2/2011 21:07		4/2/2011 21:16
ECR-20110325-009	Chilton	6	3/25/2011 16:24		3/25/2011 19:15
ECR-20110325-002	Chilton	0	3/25/2011 12:35		3/25/2011 14:06

ECR-20110320-006	Chilton	3	3/20/2011 17:22		3/20/2011 17:48
ECR-20110320-003	Chilton	6	3/20/2011 15:03		3/20/2011 16:56
ECR-20110303-004	Chilton	5	3/3/2011 14:00		3/3/2011 15:47
ECR-20110227-003	Chilton	3	2/27/2011 16:09		2/20/2011 18:31
ECR-20110224-016	Chilton	1	2/24/2011 23:17		2/25/2011 0:05
ECR-20110224-011	Chilton	71	2/24/2011 14:10		2/24/2011 16:12
ECR-20110224-001	Chilton	7	2/23/2011 15:40		2/23/2011 17:08
ECR-20110222-017	Chilton	7	2/22/2011 18:39		2/22/2011 20:34
ECR-20110222-013	Chilton	1	2/22/2011 16:12		2/22/2011 17:50
ECR-20110222-014	Chilton	10	2/22/2011 15:06		2/22/2011 18:17
ECR-20110220-008	Chilton	0	2/20/2011 19:37		2/20/2011 21:31
ECR-20110220-005	Chilton	7	2/20/2011 16:10		2/20/2011 17:44

ECR-20110217-015	Chilton	65	2/17/2011 21:08		2/17/2011 23:48
ECR-20110217-011	Chilton	5	2/17/2011 14:38		2/17/2011 15:38
ECR-20110216-004	Chilton	1	2/16/2011 13:07		2/16/2011 14:18
ECR-20110215-003	Chilton	20	2/15/2011 14:03		2/15/2011 16:41
ECR-20110213-004	Chilton	0	2/13/2011 14:12		2/13/2011 15:12
ECR-20110212-002	Chilton	3	2/12/2011 14:07		2/12/2011 15:31
ECR-20110211-001	Chilton	10	2/11/2011 14:30		2/11/2011 15:00
ECR-20110129-007	Chilton	5	1/29/2011 14:15		1/29/2011 16:21
ECR-20110107-003	Chilton	2	1/7/2011 14:27		1/7/2011 15:09
ECR-20101231-003	Chilton	20	12/31/2010 14:07		12/31/2010 16:15
ECR-20101231-001	Chilton	5	12/31/2010 13:08		12/31/2010 14:27
ECR-20101229-004	Chilton	2	12/29/2010 16:05		12/29/2010 18:09

ECR-20101229-001	Chilton	0	12/29/2010 12:01		12/29/2010 12:52
ECR-20101228-001	Chilton	0	12/28/2010 14:57		12/28/2010 15:09
ECR-20101223-003	Chilton	7	12/23/2010 15:06		12/23/2010 16:29
ECR-20101211-002	Chilton	0	12/11/2010 19:25		12/11/2010 21:24
ECR-20101211-001	Chilton	2	12/11/2010 13:40		12/11/2010 14:34
ECR-20101120-003	Chilton	10	11/20/2010 14:59		11/20/2010 16:59
ECR-20101029-001	Chilton	2	10/29/2010 0:26		10/29/2010 1:38
ECR-20101023-001	Chilton	0	10/23/2010 5:09		10/23/2010 6:31
ECR-20101015-002	Chilton	5	10/15/2010 13:04		10/15/2010 14:55
ECR-20101010-007	Chilton	0	10/10/2010 16:57		10/10/2010 18:04
ECR-20101010-004	Chilton	0	10/10/2010 14:45		10/10/2010 15:44
ECR-20101010-001	Chilton	0	10/10/2010 13:26		10/10/2010 14:25

ECR-20101009-004	Chilton	1	10/9/2010 14:43		10/9/2010 15:56
ECR-20101009-005	Chilton	0	10/9/2010 13:50		10/9/2010 15:52
ECR-20101009-002	Chilton	4	10/9/2010 12:44		10/9/2010 14:43
ECR-20101008-005	Chilton	2	10/8/2010 19:04		10/8/2010 20:16
ECR-20101003-001	Chilton	5	10/3/2010 12:54		10/3/2010 14:38
ECR-20101002-003	Chilton	1	10/2/2010 14:55		10/2/2010 15:55
ECR-20100925-005	Chilton	2	9/25/2010 16:13		9/25/2010 17:30
ECR-20100924-004	Chilton	0	9/24/2010 16:02		9/24/2010 18:05
ECR-20100924-003	Chilton	0	9/24/2010 15:53		9/24/2010 17:03
ECR-20100923-003	Chilton	5	9/23/2010 14:17		9/23/2010 16:35
ECR-20100920-005	Chilton	1	9/20/2010 16:34		9/20/2010 17:20
ECR-20100918-003	Chilton	3	9/18/2010 14:31		9/18/2010 15:12

ECR-20100916-009	Chilton	15	9/16/2010 19:22		9/16/2010 20:53
ECR-20100916-006	Chilton	3	9/16/2010 16:11		9/16/2010 16:47
ECR-20100916-005	Chilton	1	9/16/2010 15:34		9/16/2010 16:59
ECR-20100913-003	Chilton	1	9/13/2010 20:33		9/13/2010 22:40
ECR-20100904-003	Chilton	0	9/4/2010 14:02		9/4/2010 14:46
ECR-20100904-002	Chilton	1	9/4/2010 13:27		9/4/2010 14:02
ECR-20100826-001	Chilton	0	8/26/2010 13:48		8/26/2010 14:35
ECR-20100812-003	Chilton	3	8/12/2010 14:21		8/12/2010 15:29
ECR-20100812-001	Chilton	0	8/12/2010 13:18		8/12/2010 13:45
ECR-20100811-001	Chilton	4	8/11/2010 12:20		8/11/2010 13:54
ECR-20100810-001	Chilton	2	8/10/2010 13:11		8/10/2010 13:53
ECR-20100809-003	Chilton	4	8/9/2010 15:34		8/9/2010 16:33

ECR-20100714-003	Chilton	3	7/14/2010 21:21		7/14/2010 23:16
ECR-20100712-001	Chilton	1	7/12/2010 11:56		7/12/2010 13:20
ECR-20100710-001	Chilton	3	7/10/2010 19:45		7/10/2010 22:51
ECR-20100708-001	Chilton	1	7/8/2010 13:25		7/15/2010 14:21
ECR-20100706-001	Chilton	1	7/6/2010 11:56		7/6/2010 12:35
ECR-20100628-001	Chilton	0	6/28/2010 16:57		6/28/2010 17:48
ECR-20100621-001	Chilton	30	6/21/2010 14:59		6/21/2010 18:34
ECR-20100615-001	Chilton	0	6/15/2010 11:06		6/15/2010 12:32
ECR-20100519-001	Chilton	1	5/19/2010 11:16		5/19/2010 12:39
ECR-20100429-001	Chilton	10	4/29/2010 16:06		4/29/2010 16:39
ECR-20100422-003	Chilton	30	4/22/2010 14:25		4/22/2010 15:17
ECR-20100422-002	Chilton	0	4/22/2010 13:49		4/22/2010 14:25

ECR-20100419-001	Chilton	1	4/19/2010 11:19		4/19/2010 12:21
ECR-20100417-001	Chilton	0	4/17/2010 14:43		4/17/2010 15:17
ECR-20100416-002	Chilton	20	4/16/2010 16:34		4/16/2010 18:00
ECR-20100406-002	Chilton	4	4/6/2010 12:24		4/6/2010 16:12
ECR-20100331-005	Chilton	5	3/31/2010 16:15		3/31/2010 17:50
ECR-20100330-001	Chilton	1	3/30/2010 12:54		3/30/2010 13:17
ECR-20100320-001	Chilton	4	3/20/2010 12:50		3/20/2010 14:14
ECR-20100307-003	Chilton	1	3/7/2010 15:04		3/7/2010 15:57
ECR-20100227-002	Chilton	0	2/27/2010 21:38		2/27/2010 23:49
ECR-20100226-003	Chilton	3	2/26/2010 15:15		2/26/2010 16:32
ECR-20100221-007	Chilton	60	2/21/2010 14:07		2/21/2010 17:30
ECR-20100219-001	Chilton	0	2/19/2010 14:00		2/19/2010 14:30

ECR-20100218-002	Chilton	1	2/18/2010 15:29		2/18/2010 16:27
ECR-20100208-001	Chilton	10	2/8/2010 15:00		2/8/2010 15:45
ECR-20100105-001	Chilton	10	1/5/2010 13:58		1/5/2010 14:59
ECR-20090913-001	Chilton	1	9/13/2009 15:51		9/13/2009 19:21
ECR-20090704-008	Chilton	0	7/4/2009 20:50		7/4/2009 22:10
ECR-20090628-001	Chilton	3	6/28/2009 20:40		6/28/2009 22:45
ECR-20090429-001	Chilton	2	4/29/2009 5:52		4/29/2009 7:35
ECR-20090425-001	Chilton	5	4/25/2009 16:19		4/25/2009 18:44
ECR-20090408-001	Chilton	3	4/8/2009 14:54		4/8/2009 16:18
ECR-20090321-001	Chilton	0	3/21/2009 13:13		3/21/2009 14:59
ECR-20090319-001	Chilton	0	3/19/2009 16:07		3/19/2009 16:47
ECR-20090311-001	Chilton	0	3/11/2009 13:16		3/11/2009 13:55

ECR-20090307-001	Chilton	1	3/7/2009 15:55		3/7/2009 17:17
ECR-20090307-003	Chilton	1	3/7/2009 15:21		3/7/2009 18:04
ECR-20090306-001	Chilton	26	3/6/2009 14:26		3/6/2009 16:03
ECR-20090305-003	Chilton	2	3/5/2009 14:02		3/5/2009 14:02
ECR-20090305-002	Chilton	24	3/5/2009 12:16		3/5/2009 15:25
ECR-20090226-002	Chilton	0	2/26/2009 15:53		2/24/2009 16:44
ECR-20090224-011	Chilton	1	2/24/2009 18:25		2/24/2009 18:45
ECR-20090224-010	Chilton	4	2/24/2009 18:00		2/24/2009 18:25
ECR-20090224-012	Chilton	5	2/24/2009 17:40		2/24/2009 18:00
ECR-20090224-013	Chilton	0	2/24/2009 17:23		2/24/2009 17:40
ECR-20090224-009	Chilton	1	2/24/2009 16:49		2/24/2009 19:15
ECR-20090226-007	Chilton	0	2/24/2009 16:44		2/24/2009 17:00

ECR-20090224-015	Chilton	0	2/24/2009 16:15		2/24/2009 17:23
ECR-20090224-008	Chilton	0	2/24/2009 16:14		2/24/2009 18:21
ECR-20090226-004	Chilton	0	2/24/2009 16:14		2/24/2009 16:45
ECR-20090226-005	Chilton	0	2/24/2009 16:14		2/24/2009 16:45
ECR-20090226-006	Chilton	0	2/24/2009 16:14		2/24/2009 16:45
ECR-20090226-003	Chilton	0	2/24/2009 15:53		2/24/2009 16:44
ECR-20090224-014	Chilton	0	2/24/2009 15:50		2/24/2009 16:15
ECR-20090224-017	Chilton	0	2/24/2009 15:40		2/24/2009 17:09
ECR-20090226-001	Chilton	0	2/24/2009 15:40		2/24/2009 17:09
ECR-20090224-016	Chilton	0	2/24/2009 15:25		2/24/2009 15:55
ECR-20090221-002	Chilton	10	2/21/2009 14:37		2/21/2009 16:15
ECR-20090212-008	Chilton	2	2/12/2009 19:36		2/12/2009 21:09

ECR-20090212-002	Chilton	35	2/12/2009 13:42		2/12/2009 15:22
ECR-20090209-005	Chilton	1	2/9/2009 20:56		2/9/2009 22:18
ECR-20090126-001	Chilton	1	1/26/2009 13:40		1/26/2009 14:10
ECR-20090123-004	Chilton	0	1/23/2009 15:45		1/23/2009 16:40
ECR-20090119-001	Chilton	10	1/19/2009 11:34		1/19/2009 12:55
ECR-20090116-001	Chilton	0	1/16/2009 15:10		1/16/2009 16:05

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Fire #	County	Acres	Reported On	Contained On	Controlled On
20200810-4	Tallapoosa	5	8/10/2020 15:22	8/10/2020 17:36	8/10/2020 17:38
20200507-14	Tallapoosa	1	5/7/2020 20:25	5/8/2020 8:26	5/8/2020 8:26
20200506-18	Tallapoosa	60	5/6/2020 15:04	5/7/2020 9:58	5/7/2020 9:58
20200401-5	Tallapoosa	1	4/1/2020 21:06	4/1/2020 22:26	4/2/2020 17:31
20200325-1	Tallapoosa	1	3/25/2020 14:49	3/25/2020 16:18	3/25/2020 16:18
20200228-14	Tallapoosa	50	2/28/2020 21:30	2/29/2020 14:33	2/29/2020 14:34

20191205-2	Tallapoosa	3	12/5/2019 12:30	12/5/2019 13:52	12/5/2019 13:52
20191017-1	Tallapoosa	0.1	10/17/2019 8:19	10/17/2019 9:32	10/17/2019 9:32
20191013-2	Tallapoosa	1	10/13/2019 8:37	10/13/2019 10:58	10/13/2019 10:58
20191010-4	Tallapoosa	0.25	10/10/2019 10:54	10/10/2019 11:44	10/13/2019 10:59
20190921-3	Tallapoosa	2	9/21/2019 8:53	9/21/2019 11:45	9/21/2019 11:45
20190919-21	Tallapoosa	4	9/19/2019 14:47	9/19/2019 16:26	9/19/2019 16:26
20190917-26	Tallapoosa	0.25	9/17/2019 22:29	9/17/2019 23:16	9/17/2019 23:35
20190913-9	Tallapoosa	0.25	9/13/2019 16:36	9/16/2019 18:02	9/17/2019 9:08
20190912-8	Tallapoosa	5	9/12/2019 15:05	9/12/2019 16:59	9/12/2019 16:59
20190909-1	Tallapoosa	0.25	9/9/2019 5:28	9/9/2019 6:40	9/9/2019 6:40
20190908-7	Tallapoosa	2	9/8/2019 15:49	9/8/2019 17:17	9/8/2019 17:17
20190904-1	Tallapoosa	0.15	9/4/2019 11:21	9/4/2019 12:28	9/4/2019 12:28
20190831-2	Tallapoosa	1	8/31/2019 19:19	9/1/2019 8:44	9/1/2019 8:44
20190818-2	Tallapoosa	11	8/18/2019 13:14	8/18/2019 15:21	8/18/2019 15:21
20190726-4	Tallapoosa	1.5	7/26/2019 15:28	7/26/2019 16:56	7/26/2019 16:56
20190429-2	Tallapoosa	5	4/29/2019 14:36	4/29/2019 16:48	4/29/2019 16:48
20190324-7	Tallapoosa	1	3/24/2019 13:10	3/24/2019 14:20	3/24/2019 14:20

20190322-7	Tallapoosa	0.25	3/22/2019 14:01	3/22/2019 14:30	3/22/2019 14:30
20190321-14	Tallapoosa	8	3/21/2019 17:12	3/21/2019 19:38	3/21/2019 19:38
20190320-9	Tallapoosa	3	3/20/2019 15:04	3/20/2019 17:06	3/20/2019 17:06
20190319-12	Tallapoosa	0.25	3/19/2019 17:10	3/19/2019 17:25	3/19/2019 17:25
20190319-7	Tallapoosa	134	3/19/2019 14:45	3/20/2019 9:15	3/21/2019 10:41
20190318-4	Tallapoosa	38	3/18/2019 15:39	3/18/2019 18:45	3/18/2019 18:45
20190109-5	Tallapoosa	30	1/9/2019 17:07	1/9/2019 19:29	1/9/2019 19:29
20180924-2	Tallapoosa	1	9/24/2018 14:17	9/24/2018 15:30	9/24/2018 15:30
20180706-1	Tallapoosa	3	7/6/2018 15:23	7/6/2018 16:44	7/6/2018 16:44
20180514-7	Tallapoosa	10	5/14/2018 14:57	5/14/2018 17:01	5/14/2018 17:01
20180511-10	Tallapoosa	1.5	5/11/2018 18:02	5/11/2018 19:13	5/11/2018 19:13
20180413-2	Tallapoosa	2	4/13/2018 14:22	4/13/2018 16:25	4/13/2018 16:25
20180314-5	Tallapoosa	10	3/14/2018 15:51	3/14/2018 18:31	3/14/2018 18:31
20180309-13	Tallapoosa	6	3/9/2018 16:57	3/9/2018 17:30	3/9/2018 17:30
20180223-3	Tallapoosa	10	2/23/2018 12:38	2/23/2018 14:04	2/23/2018 14:04
20171018-4	Tallapoosa	0.25	10/18/2017 15:03	10/18/2017 15:27	10/18/2017 15:27
20171018-3	Tallapoosa	0.25	10/18/2017 14:21	10/18/2017 15:06	10/18/2017 15:06

20170918-1	Tallapoosa	2	9/18/2017 7:38	9/18/2017 9:11	9/19/2017 8:39
20170822-1	Tallapoosa	1.25	8/22/2017 13:04	8/22/2017 13:52	8/22/2017 13:52
20170820-1	Tallapoosa	1	8/20/2017 12:09	8/20/2017 13:36	8/20/2017 13:36
20170612-2	Tallapoosa	2	6/12/2017 14:52	6/12/2017 16:25	6/12/2017 16:26
20170517-5	Tallapoosa	3	5/17/2017 14:07	5/17/2017 15:44	5/17/2017 15:44
20170515-2	Tallapoosa	3	5/15/2017 16:37	5/15/2017 18:13	5/15/2017 18:13
20170411-7	Tallapoosa	80	4/11/2017 15:07	4/11/2017 17:49	4/11/2017 18:05
20170409-15	Tallapoosa	4	4/9/2017 16:33	4/9/2017 18:05	4/9/2017 18:05
20170408-11	Tallapoosa	20	4/8/2017 21:27	4/8/2017 23:30	4/8/2017 23:32
20170401-1	Tallapoosa	2	4/1/2017 13:46	4/1/2017 15:12	4/1/2017 15:12
20170328-1	Tallapoosa	3	3/28/2017 14:12	3/28/2017 16:06	3/28/2017 17:46
20170321-9	Tallapoosa	2	3/21/2017 14:05	3/21/2017 15:19	3/21/2017 15:19
20170320-29	Tallapoosa	3	3/20/2017 17:18	3/20/2017 19:18	3/20/2017 19:18
20170319-24	Tallapoosa	3	3/19/2017 17:49	3/19/2017 19:15	3/19/2017 19:15
20170309-14	Tallapoosa	5	3/9/2017 18:32	3/9/2017 20:37	3/9/2017 20:37
20170309-2	Tallapoosa	10	3/9/2017 13:00	3/9/2017 14:55	3/9/2017 14:56
20170306-17	Tallapoosa	0.5	3/6/2017 14:06	3/6/2017 14:56	3/7/2017 8:13

20170304-22	Tallapoosa	1	3/4/2017 13:52	3/4/2017 15:26	3/4/2017 15:26
20170303-7	Tallapoosa	15	3/3/2017 13:32	3/3/2017 16:03	3/3/2017 16:03
20170226-13	Tallapoosa	0.5	2/26/2017 14:15	2/26/2017 15:38	2/26/2017 15:38
20170226-8	Tallapoosa	6	2/26/2017 13:04	2/26/2017 14:33	2/27/2017 14:39
20170225-1	Tallapoosa	2	2/25/2017 7:50	2/25/2017 9:24	2/25/2017 9:24
20170220-22	Tallapoosa	3	2/20/2017 16:28	2/20/2017 18:02	2/20/2017 18:02
20170220-14	Tallapoosa	1	2/20/2017 14:14	2/20/2017 15:13	2/20/2017 15:13
20170214-7	Tallapoosa	5	2/14/2017 13:54	2/14/2017 15:39	2/14/2017 15:39
20170131-23	Tallapoosa	1	1/31/2017 14:20	1/31/2017 15:15	1/31/2017 15:15
20170114-6	Tallapoosa	1	1/14/2017 13:10	1/14/2017 13:51	1/14/2017 13:51
20170113-5	Tallapoosa	2	1/13/2017 16:06	1/13/2017 17:39	1/13/2017 17:39
20161224-8	Tallapoosa	5	12/24/2016 14:25	12/24/2016 16:36	12/24/2016 16:36

20161128-74	Tallapoosa	25	11/28/2016 15:34	11/29/2016 8:39	11/29/2016 8:39
20161126-1	Tallapoosa	10	11/26/2016 0:18	11/26/2016 3:20	11/26/2016 3:22
20161124-4	Tallapoosa	12	11/24/2016 11:59	11/28/2016 9:12	11/28/2016 9:12
20161114-7	Tallapoosa	0.1	11/14/2016 8:47	11/14/2016 8:53	11/14/2016 9:26
20161113-21	Tallapoosa	0.1	11/13/2016 17:58	11/13/2016 19:28	11/13/2016 19:45
20161112-44	Tallapoosa	30	11/12/2016 20:03	11/14/2016 14:12	11/15/2016 11:55
20161112-40	Tallapoosa	1.3	11/12/2016 17:57	11/12/2016 19:33	11/12/2016 19:33
20161111-28	Tallapoosa	0.5	11/11/2016 16:17	11/11/2016 17:26	11/11/2016 17:26
20161111-19	Tallapoosa	0.5	11/11/2016 12:42	11/11/2016 14:02	11/12/2016 1:24
20161108-38	Tallapoosa	1	11/8/2016 16:10	11/8/2016 17:22	11/8/2016 22:16
20161107-21	Tallapoosa	8	11/7/2016 14:11	11/8/2016 8:43	11/8/2016 8:43
20161101-42	Tallapoosa	8	11/1/2016 15:48	11/1/2016 19:53	11/1/2016 19:53

20161101-26	Tallapoosa	1	11/1/2016 13:39	11/1/2016 14:22	11/1/2016 14:22
20161029-31	Tallapoosa	2	10/29/2016 18:01	10/29/2016 19:15	10/29/2016 19:15
20161027-44	Tallapoosa	1	10/27/2016 15:57	10/27/2016 16:42	10/28/2016 20:29
20161027-30	Tallapoosa	32	10/27/2016 13:21	10/27/2016 15:56	10/28/2016 9:00
20161022-49	Tallapoosa	0.1	10/22/2016 15:40	10/22/2016 16:16	10/22/2016 16:16
20161022-34	Tallapoosa	4	10/22/2016 14:13	10/22/2016 15:40	10/22/2016 16:05
20161022-3	Tallapoosa	3	10/22/2016 6:01	10/22/2016 6:45	10/22/2016 6:46
20161021-63	Tallapoosa	1.5	10/21/2016 21:10	10/21/2016 22:29	10/22/2016 12:10
20161021-62	Tallapoosa	0.1	10/21/2016 20:17	10/21/2016 21:10	10/22/2016 1:11
20161021-59	Tallapoosa	3	10/21/2016 19:53	10/21/2016 20:47	10/21/2016 20:50
20161021-26	Tallapoosa	2	10/21/2016 13:16	10/21/2016 14:35	10/21/2016 14:35
20161017-34	Tallapoosa	2	10/17/2016 21:30	10/17/2016 22:34	10/17/2016 22:34

20161011-18	Tallapoosa	0.25	10/11/2016 12:48	10/11/2016 13:57	10/11/2016 13:57
20161010-52	Tallapoosa	8	10/10/2016 16:15	10/10/2016 17:40	10/10/2016 17:40
20161010-38	Tallapoosa	0.5	10/10/2016 14:51	10/10/2016 15:17	10/10/2016 15:17
20161010-25	Tallapoosa	2	10/10/2016 13:30	10/10/2016 14:50	10/10/2016 14:50
20161010-7	Tallapoosa	2	10/10/2016 10:33	10/10/2016 11:54	10/10/2016 11:54
20161009-57	Tallapoosa	53.4	10/9/2016 15:51	10/9/2016 19:16	10/9/2016 19:16
20161005-10	Tallapoosa	1	10/5/2016 12:43	10/5/2016 13:35	10/7/2016 15:15
20161003-5	Tallapoosa	3	10/3/2016 10:59	10/3/2016 12:23	10/3/2016 12:23
20160930-12	Tallapoosa	1	9/30/2016 13:58	9/30/2016 14:48	9/30/2016 14:48
20160930-2	Tallapoosa	60	9/30/2016 9:05	9/30/2016 12:33	9/30/2016 13:41
20160929-12	Tallapoosa	12	9/29/2016 13:02	9/29/2016 15:04	9/29/2016 15:04
20160925-3	Tallapoosa	4	9/25/2016 11:59	9/25/2016 13:23	9/26/2016 16:14

20160924-14	Tallapoosa	1	9/24/2016 15:12	9/24/2016 16:48	9/24/2016 16:59
20160907-8	Tallapoosa	25	9/7/2016 19:19	9/7/2016 22:10	9/7/2016 22:10
20160704-4	Tallapoosa	1	7/4/2016 4:52	7/4/2016 5:13	7/4/2016 5:13
20160704-2	Tallapoosa	1	7/4/2016 2:17	7/4/2016 4:17	7/4/2016 4:25
20160703-11	Tallapoosa	4.1	7/3/2016 17:50	7/3/2016 19:15	7/3/2016 19:15
20160622-11	Tallapoosa	110	6/22/2016 19:15	6/24/2016 8:11	6/24/2016 10:35
20160531-10	Tallapoosa	0.1	5/31/2016 16:29	5/31/2016 18:00	5/31/2016 18:00
20160410-9	Tallapoosa	0.25	4/10/2016 16:35	4/10/2016 17:52	4/10/2016 18:12
20160409-15	Tallapoosa	2	4/9/2016 19:14	4/9/2016 21:11	4/9/2016 21:33
20160405-2	Tallapoosa	3	4/5/2016 12:21	4/5/2016 13:49	4/5/2016 13:49
20160228-10	Tallapoosa	22	2/28/2016 13:47	2/28/2016 16:20	2/28/2016 16:20
20160214-18	Tallapoosa	28	2/14/2016 15:13	2/14/2016 17:16	2/14/2016 17:16

20160212-8	Tallapoosa	3	2/12/2016 13:17	2/12/2016 15:20	2/12/2016 17:09
20160210-12	Tallapoosa	2	2/10/2016 16:55	2/10/2016 18:22	2/10/2016 18:47
20160209-4	Tallapoosa	5	2/9/2016 12:50	2/9/2016 14:34	2/9/2016 15:07
ECR-20151130-002	Tallapoosa	1	11/30/2015 16:33		11/30/2015 17:51
ECR-20151025-001	Tallapoosa	0	10/25/2015 14:32		10/25/2015 15:02
ECR-20150805-002	Tallapoosa	1	8/5/2015 16:39		8/5/2015 17:34
ECR-20150805-001	Tallapoosa	1	8/5/2015 14:14		8/5/2015 15:47
ECR-20150801-002	Tallapoosa	1	8/1/2015 20:46		8/1/2015 21:27
ECR-20150619-001	Tallapoosa	2	6/19/2015 23:03		6/20/2015 1:04
ECR-20150514-002	Tallapoosa	0	5/14/2015 13:53		5/14/2015 14:34
ECR-20150310-003	Tallapoosa	3	3/10/2015 20:47		3/10/2015 22:37
ECR-20150310-001	Tallapoosa	0	3/10/2015 17:23		3/10/2015 19:00

ECR-20150308-002	Tallapoosa	9	3/8/2015 12:38		3/8/2015 14:36
ECR-20150308-001	Tallapoosa	21	3/8/2015 12:29		3/8/2015 15:22
ECR-20150212-003	Tallapoosa	1	2/12/2015 18:42		2/12/2015 18:42
ECR-20150208-005	Tallapoosa	1	2/8/2015 17:48		2/8/2015 19:20
ECR-20150208-006	Tallapoosa	0	2/8/2015 17:48		2/8/2015 19:20
ECR-20150207-005	Tallapoosa	0	2/7/2015 13:00		2/7/2015 14:04
ECR-20150206-002	Tallapoosa	3	2/6/2015 11:58		2/6/2015 14:44
ECR-20150119-005	Tallapoosa	3	1/19/2015 14:53		1/19/2015 15:56
ECR-20150119-001	Tallapoosa	5	1/19/2015 13:11		1/19/2015 14:52
ECR-20150118-002	Tallapoosa	30	1/18/2015 14:25		1/18/2015 16:59
ECR-20141214-001	Tallapoosa	2	12/14/2014 21:30		12/14/2014 23:00
ECR-20141212-004	Tallapoosa	10	12/12/2014 13:53		12/12/2014 16:04

ECR-20141205-001	Tallapoosa	4	12/5/2014 20:09		12/5/2014 22:52
ECR-20141201-003	Tallapoosa	7	12/1/2014 12:41		12/1/2014 14:36
ECR-20141115-001	Tallapoosa	1	11/15/2014 11:48		11/15/2014 13:34
ECR-20141111-001	Tallapoosa	1	11/11/2014 11:23		11/11/2014 14:00
ECR-20141110-004	Tallapoosa	1	11/10/2014 21:27		11/10/2014 22:28
ECR-20141107-001	Tallapoosa	1	11/7/2014 4:51		11/7/2014 6:09
ECR-20141027-002	Tallapoosa	0	10/27/2014 15:25		10/27/2014 16:12
ECR-20141027-001	Tallapoosa	0	10/27/2014 11:31		10/27/2014 12:09
ECR-20140919-001	Tallapoosa	1	9/19/2014 12:35		9/19/2014 14:15
ECR-20140830-002	Tallapoosa	30	8/30/2014 20:54		8/31/2014 10:37
ECR-20140830-001	Tallapoosa	0	8/30/2014 14:30		8/30/2014 15:23
ECR-20140829-001	Tallapoosa	1	8/29/2014 11:19		8/29/2014 12:01

ECR-20140822-001	Tallapoosa	1	8/22/2014 11:23		8/22/2014 12:31
ECR-20140708-001	Tallapoosa	1	7/8/2014 17:11		7/8/2014 18:50
ECR-20140707-001	Tallapoosa	0	7/7/2014 14:48		7/7/2014 15:33
ECR-20140521-002	Tallapoosa	97	5/21/2014 19:01		5/21/2014 22:53
ECR-20140426-002	Tallapoosa	50	4/26/2014 18:44		4/26/2014 21:13
ECR-20140426-001	Tallapoosa	5	4/26/2014 14:31		4/26/2014 17:01
ECR-20140402-007	Tallapoosa	1	4/2/2014 18:57		4/2/2014 19:33
ECR-20140402-006	Tallapoosa	5	4/2/2014 18:37		4/2/2014 18:57
ECR-20140402-005	Tallapoosa	4	4/2/2014 18:15		4/2/2014 18:37
ECR-20140402-004	Tallapoosa	8	4/2/2014 17:47		4/2/2014 18:15
ECR-20140402-003	Tallapoosa	1	4/2/2014 17:03		4/2/2014 17:47
ECR-20140327-008	Tallapoosa	0	3/27/2014 16:54		3/27/2014 17:35

ECR-20140223-003	Tallapoosa	1	2/22/2014 17:34		2/22/2014 18:37
ECR-20140213-001	Tallapoosa	5	2/13/2014 16:01		2/13/2014 17:20
ECR-20140127-001	Tallapoosa	10	1/27/2014 4:39		1/27/2014 6:51
ECR-20140126-007	Tallapoosa	0	1/26/2014 16:44		1/26/2014 17:17
ECR-20140124-002	Tallapoosa	2	1/24/2014 11:17		1/24/2014 12:16
ECR-20140124-001	Tallapoosa	0	1/24/2014 6:10		1/24/2014 7:41
ECR-20140121-002	Tallapoosa	1	1/21/2014 12:16		1/28/2014 12:54
ECR-20140120-003	Tallapoosa	2	1/20/2014 12:48		1/20/2014 14:52
ECR-20131114-004	Tallapoosa	3	11/14/2013 13:57		11/14/2013 15:07
ECR-20130521-001	Tallapoosa	0	5/21/2013 10:12		5/21/2013 10:38
ECR-20130521-002	Tallapoosa	0	5/21/2013 10:12		5/21/2013 10:38
ECR-20130327-001	Tallapoosa	32	3/27/2013 13:53		3/27/2013 16:52

ECR-20130316-017	Tallapoosa	1	3/16/2013 17:47		3/16/2013 19:03
ECR-20130315-002	Tallapoosa	1	3/15/2013 12:33		3/15/2013 13:41
ECR-20130310-010	Tallapoosa	1	3/10/2013 15:56		3/10/2013 17:26
ECR-20130309-008	Tallapoosa	5	3/9/2013 14:41		3/9/2013 16:59
ECR-20130309-006	Tallapoosa	4	3/9/2013 12:24		3/9/2013 14:03
ECR-20130309-004	Tallapoosa	2	3/9/2013 12:00		3/9/2013 13:05
ECR-20130129-001	Tallapoosa	100	1/29/2013 11:30		1/29/2013 14:27
ECR-20130124-001	Tallapoosa	3	1/24/2013 12:20		1/24/2013 13:25
ECR-20121204-001	Tallapoosa	1	12/4/2012 16:36		12/4/2012 18:52
ECR-20121204-002	Tallapoosa	2	12/4/2012 16:36		12/4/2012 18:52
ECR-20121203-005	Tallapoosa	0	12/3/2012 13:51		12/3/2012 14:30
ECR-20121201-003	Tallapoosa	3	12/1/2012 14:51		12/1/2012 15:45

ECR-20121201-002	Tallapoosa	120	12/1/2012 12:39		12/1/2012 17:09
ECR-20121201-004	Tallapoosa	5	12/1/2012 12:39		12/1/2012 17:09
ECR-20121124-004	Tallapoosa	2	11/24/2012 12:27		11/24/2012 13:28
ECR-20121124-001	Tallapoosa	3	11/24/2012 7:52		11/24/2012 9:55
ECR-20121123-005	Tallapoosa	15	11/23/2012 17:26		11/23/2012 20:38
ECR-20121121-001	Tallapoosa	5	11/21/2012 13:19		11/21/2012 14:39
ECR-20121118-001	Tallapoosa	1	11/18/2012 12:28		11/18/2012 14:15
ECR-20121111-001	Tallapoosa	50	11/11/2012 11:45		11/11/2012 14:38
ECR-20121104-001	Tallapoosa	3	11/4/2012 9:11		11/5/2012 9:12
ECR-20121101-002	Tallapoosa	3	11/1/2012 13:14		11/1/2012 15:17
ECR-20121025-004	Tallapoosa	0	10/25/2012 15:48		10/25/2012 17:15
ECR-20121025-005	Tallapoosa	25	10/25/2012 15:48		10/25/2012 17:15

ECR-20121025-002	Tallapoosa	12	10/25/2012 13:35		10/25/2012 15:31
ECR-20121022-001	Tallapoosa	5	10/22/2012 16:01		10/22/2012 18:11
ECR-20120910-001	Tallapoosa	0	9/10/2012 13:53		9/10/2012 14:40
ECR-20120910-002	Tallapoosa	0	9/10/2012 13:53		9/10/2012 14:40
ECR-20120902-001	Tallapoosa	2	9/2/2012 13:57		9/2/2012 15:31
ECR-20120806-001	Tallapoosa	2	8/6/2012 17:08		8/6/2012 18:12
ECR-20120801-002	Tallapoosa	15	8/1/2012 15:25		8/1/2012 18:45
ECR-20120709-002	Tallapoosa	6	7/9/2012 16:07		7/9/2012 18:47
ECR-20120704-001	Tallapoosa	2	7/4/2012 19:16		7/4/2012 21:58
ECR-20120625-002	Tallapoosa	14	6/25/2012 11:51		6/25/2012 13:58
ECR-20120625-003	Tallapoosa	8	6/25/2012 11:51		6/25/2012 13:58
ECR-20120625-001	Tallapoosa	10	6/25/2012 10:42		6/25/2012 14:45

ECR-20120621-003	Tallapoosa	25	6/21/2012 15:35		6/21/2012 17:22
ECR-20120529-003	Tallapoosa	20	5/29/2012 18:25		5/29/2012 21:26
ECR-20120529-001	Tallapoosa	15	5/29/2012 9:19		5/29/2012 11:08
ECR-20120424-001	Tallapoosa	5	4/24/2012 16:31		4/24/2012 18:10
ECR-20120413-002	Tallapoosa	3	4/13/2012 19:35		4/13/2012 22:24
ECR-20120410-003	Tallapoosa	5	4/10/2012 18:00		4/10/2012 19:25
ECR-20120328-001	Tallapoosa	3	3/28/2012 14:23		3/28/2012 15:25
ECR-20120320-003	Tallapoosa	4	3/20/2012 12:52		3/20/2012 16:00
ECR-20120318-001	Tallapoosa	90	3/18/2012 14:15		3/18/2012 18:20
ECR-20120317-002	Tallapoosa	2	3/17/2012 16:40		3/17/2012 18:42
ECR-20120307-002	Tallapoosa	40	3/7/2012 14:30		3/7/2012 16:15
ECR-20120306-004	Tallapoosa	20	3/6/2012 14:15		3/6/2012 15:35

ECR-20120306-003	Tallapoosa	1	3/6/2012 14:01		3/6/2012 14:14
ECR-20120306-002	Tallapoosa	1	3/6/2012 13:22		3/6/2012 14:01
ECR-20120226-001	Tallapoosa	2	2/26/2012 13:44		2/26/2012 14:40
ECR-20120116-002	Tallapoosa	4	1/16/2012 14:00		1/16/2012 15:12
ECR-20120105-004	Tallapoosa	1	1/5/2012 18:24		1/5/2012 17:18
ECR-20120105-003	Tallapoosa	2	1/5/2012 18:18		1/5/2012 16:27
ECR-20120105-002	Tallapoosa	5	1/5/2012 14:38		1/5/2012 16:13
ECR-20111205-002	Tallapoosa	1	12/5/2011 13:37		12/5/2011 15:02
ECR-20111126-002	Tallapoosa	0	11/26/2011 18:55		11/26/2011 19:49
ECR-20111107-002	Tallapoosa	0	11/7/2011 12:33		11/7/2011 14:28
ECR-20111031-005	Tallapoosa	15	10/31/2011 16:26		10/31/2011 18:31
ECR-20111031-007	Tallapoosa	1	10/31/2011 16:26		10/31/2011 18:31

ECR-20111007-001	Tallapoosa	0	10/7/2011 12:06		10/7/2011 12:43
ECR-20111005-001	Tallapoosa	2	10/5/2011 15:24		10/5/2011 16:41
ECR-20110829-003	Tallapoosa	3	8/29/2011 19:04		8/29/2011 20:13
ECR-20110828-009	Tallapoosa	2	8/28/2011 19:55		8/28/2011 20:57
ECR-20110828-002	Tallapoosa	1	8/28/2011 12:43		8/28/2011 13:57
ECR-20110824-001	Tallapoosa	100	8/24/2011 15:00		8/24/2011 19:29
ECR-20110811-001	Tallapoosa	1	8/11/2011 18:15		8/11/2011 20:05
ECR-20110707-001	Tallapoosa	57	7/7/2011 13:15		7/7/2011 15:50
ECR-20110704-001	Tallapoosa	22	7/4/2011 7:53		7/4/2011 13:16
ECR-20110703-001	Tallapoosa	5	7/3/2011 18:49		7/3/2011 19:04
ECR-20110701-002	Tallapoosa	2	7/1/2011 12:24		7/1/2011 13:42
ECR-20110621-002	Tallapoosa	5	6/21/2011 13:08		6/21/2011 15:30

ECR-20110616-008	Tallapoosa	30	6/16/2011 14:18		6/16/2011 17:14
ECR-20110603-002	Tallapoosa	15	6/3/2011 18:53		6/3/2011 21:20
ECR-20110602-003	Tallapoosa	3	6/2/2011 17:31		6/2/2011 19:19
ECR-20110531-001	Tallapoosa	4	5/31/2011 21:17		5/31/2011 23:14
ECR-20110525-004	Tallapoosa	40	5/25/2011 21:57		5/26/2011 10:38
ECR-20110520-004	Tallapoosa	0	5/20/2011 15:35		5/20/2011 16:50
ECR-20110519-002	Tallapoosa	2	5/19/2011 12:55		5/19/2011 14:29
ECR-20110513-002	Tallapoosa	6	5/13/2011 8:50		5/13/2011 11:00
ECR-20110402-001	Tallapoosa	5	4/2/2011 15:59		4/2/2011 17:20
ECR-20110323-003	Tallapoosa	230	3/23/2011 14:28		3/23/2011 18:35
ECR-20110320-004	Tallapoosa	30	3/20/2011 14:48		3/20/2011 16:57
ECR-20110320-002	Tallapoosa	3	3/20/2011 14:01		3/13/2011 14:57

ECR-20110319-006	Tallapoosa	7	3/19/2011 16:14		3/19/2011 17:28
ECR-20110304-003	Tallapoosa	225	3/4/2011 10:47		3/4/2011 15:11
ECR-20110303-005	Tallapoosa	75	3/3/2011 14:28		3/3/2011 19:34
ECR-20110303-002	Tallapoosa	1	3/3/2011 11:51		3/3/2011 14:49
ECR-20110228-002	Tallapoosa	0	2/28/2011 16:18		2/28/2011 16:40
ECR-20110224-009	Tallapoosa	1	2/24/2011 12:59		2/24/2011 14:12
ECR-20110223-018	Tallapoosa	2	2/23/2011 14:48		2/23/2011 16:25
ECR-20110221-008	Tallapoosa	6	2/21/2011 15:57		2/21/2011 17:16
ECR-20110217-013	Tallapoosa	7	2/17/2011 16:01		2/17/2011 18:06
ECR-20110216-006	Tallapoosa	5	2/16/2011 14:49		2/16/2011 16:21
ECR-20110216-001	Tallapoosa	4	2/16/2011 9:14		2/16/2011 10:28
ECR-20110108-001	Tallapoosa	1	1/8/2011 14:21		1/8/2011 16:17

ECR-20101117-001	Tallapoosa	15	11/17/2010 11:57		11/17/2010 12:14
ECR-20101113-002	Tallapoosa	5	11/13/2010 22:38		11/14/2010 0:35
ECR-20101101-001	Tallapoosa	6	11/1/2010 13:03		11/1/2010 14:11
ECR-20101024-003	Tallapoosa	0	10/24/2010 17:15		10/24/2010 18:20
ECR-20101023-002	Tallapoosa	4	10/23/2010 10:04		10/23/2010 11:31
ECR-20101021-002	Tallapoosa	120	10/21/2010 14:50		10/21/2010 19:45
ECR-20101017-005	Tallapoosa	1	10/17/2010 15:50		10/17/2010 16:15
ECR-20101017-003	Tallapoosa	2	10/17/2010 14:42		10/17/2010 15:50
ECR-20101016-001	Tallapoosa	1	10/16/2010 1:29		10/16/2010 2:36
ECR-20101009-003	Tallapoosa	1	10/9/2010 12:57		10/9/2010 14:45
ECR-20101008-002	Tallapoosa	5	10/8/2010 15:56		10/8/2010 16:45
ECR-20101004-001	Tallapoosa	2	10/4/2010 13:01		10/4/2010 13:45

ECR-20101001-005	Tallapoosa	1	10/1/2010 12:42		10/1/2010 15:42
ECR-20101001-006	Tallapoosa	14	10/1/2010 12:42		10/1/2010 15:00
ECR-20101001-004	Tallapoosa	200	10/1/2010 12:34		10/1/2010 16:38
ECR-20101001-002	Tallapoosa	6	10/1/2010 8:01		10/1/2010 9:40
ECR-20101001-008	Tallapoosa	4	10/1/2010 8:01		10/1/2010 10:50
ECR-20101001-009	Tallapoosa	1	10/1/2010 8:01		10/1/2010 11:00
ECR-20101001-010	Tallapoosa	3	10/1/2010 8:01		10/1/2010 11:25
ECR-20101001-011	Tallapoosa	9	10/1/2010 8:01		10/1/2010 11:30
ECR-20101001-012	Tallapoosa	10	10/1/2010 8:01		10/1/2010 10:45
ECR-20101001-013	Tallapoosa	3	10/1/2010 8:01		10/1/2010 10:30
ECR-20101001-014	Tallapoosa	12	10/1/2010 8:01		10/1/2010 10:10
ECR-20100930-001	Tallapoosa	2	9/30/2010 4:03		9/30/2010 5:36

ECR-20100929-001	Tallapoosa	3	9/29/2010 13:19		9/29/2010 14:55
ECR-20100924-002	Tallapoosa	9	9/24/2010 13:50		9/24/2010 15:25
ECR-20100923-001	Tallapoosa	1	9/23/2010 12:37		9/23/2010 14:05
ECR-20100921-004	Tallapoosa	1	9/21/2010 14:42		9/21/2010 15:34
ECR-20100915-003	Tallapoosa	10	9/15/2010 14:32		9/15/2010 15:41
ECR-20100914-004	Tallapoosa	0	9/14/2010 17:39		9/14/2010 18:16
ECR-20100914-001	Tallapoosa	2	9/14/2010 13:11		9/14/2010 15:00
ECR-20100912-003	Tallapoosa	5	9/12/2010 16:20		9/12/2010 19:15
ECR-20100911-003	Tallapoosa	0	9/11/2010 20:24		9/11/2010 21:37
ECR-20100811-006	Tallapoosa	1	8/11/2010 17:59		8/11/2010 20:10
ECR-20100811-004	Tallapoosa	7	8/11/2010 14:58		8/11/2010 19:05
ECR-20100811-002	Tallapoosa	2	8/11/2010 13:17		8/11/2010 14:38

ECR-20100711-001	Tallapoosa	35	7/11/2010 10:02		7/11/2010 12:18
ECR-20100709-001	Tallapoosa	0	7/9/2010 12:12		7/9/2010 13:24
ECR-20100612-001	Tallapoosa	5	6/12/2010 17:09		6/12/2010 18:52
ECR-20100418-001	Tallapoosa	38	4/18/2010 14:35		4/18/2010 17:13
ECR-20100414-003	Tallapoosa	0	4/14/2010 11:23		4/14/2010 13:56
ECR-20100413-009	Tallapoosa	0	4/13/2010 23:45		4/14/2010 12:30
ECR-20100414-004	Tallapoosa	1	4/13/2010 23:35		4/14/2010 1:30
ECR-20100414-007	Tallapoosa	1	4/13/2010 23:25		4/14/2010 1:00
ECR-20100413-004	Tallapoosa	1	4/13/2010 14:55		4/13/2010 15:52
ECR-20100414-005	Tallapoosa	0	4/13/2010 11:28		4/14/2010 12:45
ECR-20100414-008	Tallapoosa	0	4/13/2010 11:23		4/14/2010 1:15
ECR-20100413-001	Tallapoosa	10	4/13/2010 11:15		4/13/2010 13:00

ECR-20100412-002	Tallapoosa	3	4/12/2010 17:50		4/12/2010 19:04
ECR-20100412-001	Tallapoosa	20	4/12/2010 16:24		4/12/2010 17:50
ECR-20100406-005	Tallapoosa	4	4/6/2010 12:33		4/6/2010 13:55
ECR-20100402-008	Tallapoosa	60	4/2/2010 16:29		4/2/2010 18:00
ECR-20100402-005	Tallapoosa	8	4/2/2010 15:23		4/2/2010 16:40
ECR-20100401-001	Tallapoosa	2	4/1/2010 13:20		4/1/2010 14:02
ECR-20100308-013	Tallapoosa	5	3/8/2010 14:47		3/8/2010 18:42
ECR-20100304-003	Tallapoosa	0	3/4/2010 13:59		3/4/2010 14:39
ECR-20100228-004	Tallapoosa	1	2/28/2010 20:17		2/28/2010 20:54
ECR-20100228-003	Tallapoosa	3	2/28/2010 18:29		2/28/2010 20:54
ECR-20100301-005	Tallapoosa	70	2/28/2010 18:00		3/1/2010 10:00
ECR-20100301-006	Tallapoosa	15	2/28/2010 18:00		3/1/2010 10:45

ECR-20100301-007	Tallapoosa	10	2/28/2010 18:00		3/1/2010 11:15
ECR-20100221-003	Tallapoosa	1	2/21/2010 11:49		2/21/2010 13:04
ECR-20100221-001	Tallapoosa	15	2/21/2010 10:07		2/21/2010 11:06
ECR-20100105-003	Tallapoosa	3	1/5/2010 14:42		1/5/2010 15:30
ECR-20090704-002	Tallapoosa	0	7/4/2009 11:20		7/4/2009 13:12
ECR-20090702-001	Tallapoosa	3	7/2/2009 16:59		7/2/2009 18:31
ECR-20090701-002	Tallapoosa	0	7/1/2009 17:18		7/1/2009 17:32
ECR-20090502-001	Tallapoosa	2	5/2/2009 0:02		5/2/2009 2:10
ECR-20090330-001	Tallapoosa	0	3/30/2009 23:18		3/31/2009 0:52
ECR-20090324-002	Tallapoosa	2	3/24/2009 12:38		3/24/2009 13:49
ECR-20090311-003	Tallapoosa	7	3/11/2009 17:40		3/11/2009 19:34
ECR-20090310-002	Tallapoosa	2	3/10/2009 14:23		3/10/2009 16:05

ECR-20090307-004	Tallapoosa	15	3/7/2009 17:40		3/7/2009 19:30
ECR-20090226-014	Tallapoosa	0	2/26/2009 17:43		2/26/2009 17:50
ECR-20090224-018	Tallapoosa	1	2/24/2009 18:22		2/24/2009 20:15
ECR-20090224-007	Tallapoosa	35	2/24/2009 17:07		2/24/2009 14:58
ECR-20090224-003	Tallapoosa	15	2/24/2009 9:00		2/24/2009 10:30
ECR-20090212-001	Tallapoosa	4	2/12/2009 12:40		2/12/2009 12:42
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DDV-20081108-001	Tallapoosa	1	11/8/2008 12:27		11/8/2008 15:06
DDV-20081103-001	Tallapoosa	2	11/3/2008 13:00		11/3/2008 13:48
DDV-20081016-001	Tallapoosa	6	10/16/2008 15:05		10/16/2008 17:00
DDV-20081002-001	Tallapoosa	2	10/2/2008 11:17		10/2/2008 12:50

DDV-20080906-001	Tallapoosa	1	9/6/2008 18:14		9/6/2008 19:30
DDV-20080804-002	Tallapoosa	0	8/4/2008 12:21		8/4/2008 13:50
DDV-20080721-002	Tallapoosa	6	7/21/2008 14:50		7/21/2008 16:08
DDV-20080704-003	Tallapoosa	15	7/4/2008 13:51		7/4/2008 16:10
DDV-20080627-007	Tallapoosa	15	6/27/2008 20:00		6/27/2008 22:31
DDV-20080619-003	Tallapoosa	0	6/19/2008 16:15		6/19/2008 17:50
DDV-20080602-001	Tallapoosa	2	6/2/2008 15:55		6/2/2008 18:11
DDV-20080422-001	Tallapoosa	1	4/22/2008 11:00		4/22/2008 13:45
DDV-20080323-003	Tallapoosa	6	3/23/2008 15:16		3/23/2008 16:40
DDV-20080323-002	Tallapoosa	15	3/23/2008 14:25		3/23/2008 17:00
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DDV-20080321-002	Tallapoosa	0	3/21/2008 14:03		3/21/2008 14:36

DDV-20080318-003	Tallapoosa	27	3/18/2008 15:36		3/18/2008 18:33
DDV-20080317-002	Tallapoosa	8	3/17/2008 13:56		3/17/2008 15:10
DDV-20080316-002	Tallapoosa	1	3/16/2008 13:00		3/16/2008 13:30
DDV-20080315-001	Tallapoosa	8	3/15/2008 16:15		3/15/2008 18:25
DDV-20080303-009	Tallapoosa	5	3/3/2008 18:46		3/3/2008 20:08
DDV-20080302-009	Tallapoosa	0	3/2/2008 22:15		3/2/2008 16:46
DDV-20080302-005	Tallapoosa	40	3/2/2008 16:30		3/2/2008 18:54
DDV-20080302-001	Tallapoosa	0	3/2/2008 10:15		3/2/2008 16:46
DDV-20080302-008	Tallapoosa	0	3/2/2008 10:15		3/2/2008 16:46
DDV-20080302-010	Tallapoosa	0	3/2/2008 10:15		3/2/2008 16:46
DDV-20080227-001	Tallapoosa	1	2/27/2008 14:25		2/27/2008 14:52
DDV-20080225-001	Tallapoosa	1	2/25/2008 14:30		2/25/2008 15:15

DDV-20080220-001	Tallapoosa	0	2/20/2008 3:50		2/20/2008 5:00
DDV-20080219-007	Tallapoosa	1	2/19/2008 15:09		2/19/2008 17:03
DDV-20080219-004	Tallapoosa	3	2/19/2008 13:52		2/19/2008 15:35
DDV-20080210-008	Tallapoosa	2	2/10/2008 16:39		2/10/2008 17:30
DDV-20080209-004	Tallapoosa	20	2/9/2008 15:14		2/9/2008 17:56
DDV-20080209-003	Tallapoosa	2	2/9/2008 14:22		2/9/2008 16:41
DDV-20080209-001	Tallapoosa	10	2/9/2008 12:37		2/9/2008 16:05
DDV-20080114-003	Tallapoosa	0	1/14/2008 16:30		1/14/2008 17:52
DDV-20080104-001	Tallapoosa	0	1/4/2008 8:00		1/4/2008 9:45
DDV-20071206-002	Tallapoosa	2	12/6/2007 16:31		12/6/2007 17:57
DDV-20071201-002	Tallapoosa	0	12/1/2007 14:19		12/1/2007 15:37
DDV-20071107-001	Tallapoosa	0	11/7/2007 11:21		11/7/2007 13:00

DDV-20071106-003	Tallapoosa	2	11/6/2007 11:26		11/6/2007 12:40
DDV-20071104-001	Tallapoosa	0	11/4/2007 9:54		11/4/2007 11:06
DDV-20071015-006	Tallapoosa	0	10/15/2007 16:47		10/15/2007 16:28
DDV-20071015-003	Tallapoosa	6	10/15/2007 13:42		10/15/2007 15:17
DDV-20071015-001	Tallapoosa	2	10/15/2007 12:57		10/15/2007 13:59
DDV-20071014-002	Tallapoosa	20	10/14/2007 12:34		10/14/2007 16:48
DDV-20071013-003	Tallapoosa	10	10/13/2007 15:50		10/13/2007 18:12
DDV-20071011-003	Tallapoosa	5	10/11/2007 13:56		10/11/2007 15:17
DDV-20071003-001	Tallapoosa	0	10/3/2007 12:00		10/3/2007 12:59
DDV-20071002-002	Tallapoosa	4	10/2/2007 13:18		10/2/2007 17:00
DDV-20070905-001	Tallapoosa	2	9/5/2007 13:05		9/5/2007 14:14
DDV-20070829-001	Tallapoosa	3	8/29/2007 13:45		8/29/2007 15:27

DDV-20070824-001	Tallapoosa	1	8/24/2007 11:54		8/24/2007 13:23
DDV-20070823-003	Tallapoosa	20	8/23/2007 15:50		8/23/2007 18:13
DDV-20070822-002	Tallapoosa	1	8/22/2007 8:00		8/22/2007 9:07
DDV-20070820-002	Tallapoosa	45	8/20/2007 11:39		8/20/2007 13:29
DDV-20070820-001	Tallapoosa	0	8/20/2007 5:32		8/20/2007 6:46
DDV-20070811-003	Tallapoosa	10	8/11/2007 16:50		8/11/2007 19:05
DDV-20070811-001	Tallapoosa	0	8/11/2007 14:10		8/11/2007 15:50
DDV-20070806-002	Tallapoosa	1	8/6/2007 13:15		8/6/2007 14:49
DDV-20070804-002	Tallapoosa	2	8/4/2007 14:03		8/4/2007 15:54
DDV-20070623-002	Tallapoosa	1	6/23/2007 15:42		6/23/2007 18:40
DDV-20070618-001	Tallapoosa	0	6/18/2007 15:23		6/18/2007 16:48
DDV-20070613-002	Tallapoosa	3	6/13/2007 14:48		6/13/2007 16:24

DDV-20070610-002	Tallapoosa	5	6/10/2007 13:49		6/10/2007 15:50
DDV-20070609-002	Tallapoosa	8	6/9/2007 19:40		6/9/2007 20:43
DDV-20070606-006	Tallapoosa	10	6/6/2007 15:39		6/6/2007 17:11
DDV-20070606-005	Tallapoosa	25	6/6/2007 1:31		6/6/2007 17:55
DDV-20070531-007	Tallapoosa	3	5/31/2007 20:00		5/31/2007 22:15
DDV-20070531-005	Tallapoosa	0	5/31/2007 14:18		5/31/2007 19:24
DDV-20070531-004	Tallapoosa	0	5/31/2007 9:44		5/31/2007 12:35
DDV-20070531-002	Tallapoosa	45	5/31/2007 8:30		5/31/2007 11:28
DDV-20070531-003	Tallapoosa	0	5/31/2007 7:27		5/31/2007 14:18
DDV-20070530-003	Tallapoosa	0	5/30/2007 14:32		5/30/2007 18:38
DDV-20070530-002	Tallapoosa	0	5/30/2007 13:58		5/30/2007 16:51
DDV-20070530-001	Tallapoosa	60	5/30/2007 13:19		5/30/2007 19:24

DDV-20070528-004	Tallapoosa	0	5/28/2007 22:00		5/28/2007 23:15
DDV-20070528-005	Tallapoosa	0	5/28/2007 22:00		5/28/2007 23:41
DDV-20070525-003	Tallapoosa	4	5/25/2007 14:59		5/25/2007 17:10
DDV-20070523-005	Tallapoosa	3	5/23/2007 13:41		5/23/2007 15:05
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DDV-20070506-002	Tallapoosa	0	5/6/2007 15:05		5/6/2007 15:55
DDV-20070506-001	Tallapoosa	4	5/6/2007 13:56		5/6/2007 14:58
DDV-20070505-003	Tallapoosa	8	5/5/2007 17:38		5/5/2007 19:10
DDV-20070505-002	Tallapoosa	0	5/5/2007 3:00		5/5/2007 17:30
DDV-20070427-001	Tallapoosa	1	4/27/2007 14:47		4/27/2007 15:53
DDV-20070424-003	Tallapoosa	10	4/24/2007 20:04		4/24/2007 21:45

DDV-20070328-001	Tallapoosa	12	3/28/2007 13:18		3/28/2007 15:06
DDV-20070327-002	Tallapoosa	60	3/27/2007 5:30		3/27/2007 16:27
DDV-20070326-008	Tallapoosa	4	3/26/2007 15:59		3/26/2007 18:00
DDV-20070323-004	Tallapoosa	4	3/23/2007 15:14		3/23/2007 16:33
DDV-20070321-002	Tallapoosa	8	3/21/2007 14:00		3/21/2007 15:22
DDV-20070319-006	Tallapoosa	40	3/19/2007 14:46		3/19/2007 17:49
DDV-20070319-004	Tallapoosa	2	3/19/2007 13:53		3/19/2007 15:33
DDV-20070317-001	Tallapoosa	0	3/17/2007 12:22		3/17/2007 13:12
DDV-20070313-008	Tallapoosa	30	3/13/2007 18:08		3/13/2007 21:30
DDV-20070313-002	Tallapoosa	0	3/13/2007 14:00		3/13/2007 15:50
DDV-20070313-003	Tallapoosa	13	3/13/2007 14:00		3/13/2007 18:29
DDV-20070310-003	Tallapoosa	0	3/10/2007 12:57		3/10/2007 14:10

DDV-20070309-001	Tallapoosa	15	3/9/2007 8:19		3/9/2007 10:26
DDV-20070303-003	Tallapoosa	1	3/3/2007 12:50		3/3/2007 13:31
DDV-20070228-009	Tallapoosa	1	2/28/2007 16:45		
DDV-20070226-003	Tallapoosa	12	2/26/2007 15:07		2/26/2007 16:19
DDV-20070226-001	Tallapoosa	2	2/26/2007 13:39		2/26/2007 15:07
DDV-20070224-010	Tallapoosa	4	2/24/2007 15:51		2/24/2007 17:17
DDV-20070224-009	Tallapoosa	1	2/24/2007 14:03		2/24/2007 14:52
DDV-20070224-006	Tallapoosa	4	2/24/2007 13:02		2/24/2007 14:48
DDV-20070224-004	Tallapoosa	30	2/24/2007 12:49		2/24/2007 15:32
DDV-20070219-006	Tallapoosa	4	2/19/2007 14:47		2/19/2007 16:35

Table 7.9: Winter Storm

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K

CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/19/2008	6:00	CST-6	Winter Weather		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/19/2008	6:00	CST-6	Winter Weather		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	2/12/2010	11:00	CST-6	Winter Weather		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/15/2010	7:00	CST-6	Winter Weather		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/15/2010	10:00	CST-6	Winter Weather		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/26/2010	6:00	CST-6	Winter Weather		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	2/9/2011	18:00	CST-6	Winter Weather		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/28/2014	7:15	CST-6	Winter Storm		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/28/2014	7:30	CST-6	Winter Storm		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	1/28/2014	8:00	CST-6	Winter Storm		0	0	0.00K	0.00K

CHILTON (ZONE)	CHILTON (ZONE)	AL	2/12/2014	20:00	CST-6	Winter Weather		0	0	0.00K	0.00K
CHILTON (ZONE)	CHILTON (ZONE)	AL	12/8/2017	6:00	CST-6	Winter Storm		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	12/8/2017	11:00	CST-6	Winter Storm		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	12/8/2017	12:00	CST-6	Winter Storm		0	0	0.00K	0.00K
CHAMBERS (ZONE)	CHAMBERS (ZONE)	AL	1/16/2018	19:00	CST-6	Winter Storm		0	0	0.00K	0.00K
TALLAPOOSA (ZONE)	TALLAPOOSA (ZONE)	AL	1/16/2018	19:00	CST-6	Winter Storm		0	0	0.00K	0.00K

East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan: Phase Three-B
June 2021

A Hazard Mitigation Plan for AEMA Division D Counties: Coosa County

Prepared For:

Coosa County, Town of Goodwater, Town of Kellyton, Town of Rockford

Prepared By:
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1.1 Introduction

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is a plan that details the multitude of hazards that affect the Alabama Emergency Management Agency (AEMA) Division D area. The Phase III-B, which is covered in this plan, will be adopted by the following jurisdictions in Coosa County: Town of Goodwater, Town of Kellyton, and the Town of Rockford.

Alabama Emergency Management Agency (AEMA) Division D region will include the following counties when it is complete: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell and Tallapoosa counties and the jurisdictions within these counties. The remaining counties will be addressed in Phase II or Phase 3.

This plan fulfills the requirements set forth by the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires counties to formulate a hazard mitigation plan in order to be eligible for mitigation grants made available by the Federal Emergency Management Agency (FEMA).

Each county in AEMA Division D has an existing multi-jurisdictional hazard mitigation plan. This plan will compile information from each of those existing plans and documents the incorporation of hazard mitigation objectives into the region, as a whole. The AEMA Division D is diverse in terms of development and physical geography, but many of the hazards affecting the region have similar impacts throughout the area. A community must deal with localized threats such as flooding, wildfires, or sinkholes as well as the hazard that do not have geographical limitations like tornadoes, hail, or high winds events. A regional hazard mitigation plan is able to encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts. Local EMA in the counties have a responsibility for both urban and rural areas of varying population density. A regional hazard mitigation plan is able to encapsulate these similarities in risk and vulnerability impact, with regional stakeholders being able to discuss mitigation techniques for these similar impacts.

1.2 Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a hazard mitigation plan as a condition of receiving federal disaster assistance. These plans should be approved by FEMA and updated every five years.

Funding

Funding for the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan was made available through the Hazard Mitigation Grant Program (HMGP), under Disaster Recovery Declaration 1971 (DR-1971). Supplemental funding was supplied by the county commissions of Lee and Russell counties and the Lee-Russell Council of Governments.

Purpose

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an effort to evaluate and identify all prioritized hazards which may affect AEMA Division D. It presents mitigation strategies that address the hazards identified. This plan is only one of many steps jurisdictions in

East Alabama will take to protect the welfare of residents by achieving a safer environment for its residents.

Multi-Jurisdictional Plan Adoption

Coosa County, Town of Goodwater, Town of Kellyton, and the Town of Rockford are the eligible jurisdictions to adopt Phase I of the Hazard Mitigation Plan when it is deemed "approvable pending adoption" by the Federal Emergency Management Agency (FEMA). The plan can also be adopted by, but not limited to the following: regional planning councils and local governing bodies, including municipal councils, county commissions, and local school districts.

The jurisdictions in the remaining AEMA Division D counties are not eligible to adopt Phase I of the AEMA Division D Hazard Mitigation Plan. Those counties will be covered in Phase II (Autauga, Elmore, and Montgomery) or Phase 3 (Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa) of the Division D Hazard Mitigation plan. At the conclusion of the three-phased process, the plan will be compiled to create a regional AEMA Division D Hazard Mitigation Plan with the same deadline/update cycle.

Multi-Jurisdictional Planning Process

Each eligible local jurisdiction, Coosa County, Town of Goodwater, Town of Kellyton, and the Town of Rockford provided participation in the development of this regional hazard mitigation plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee.

The remainder jurisdictions were to be included in Phases 1, Phase II, and Phase III-B will follow the same process.

Each eligible local jurisdiction, Coosa County, Town of Goodwater, Town of Kellyton, Town of Rockford, participated in the development of the plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee and were involved in the updated hazard mitigation planning process. Participants include but are not limited to local government leaders, members of law enforcement, first responders, school boards, and public utilities. The previous hazard mitigation plan and a presentation were distributed to the participant stakeholders along with surveys for feedback identifying hazards, risks, vulnerabilities, and strategies. A list of stakeholders can be found in Table 1.2. Each participating jurisdiction was represented by personnel that performed a variety of functions including review of the plan at various stages during its drafting, attending meetings and updates on plan progress and contents, and providing feedback, comments, and consultation during the plan's drafting stages. Refer to Table 1.22 for the summary of each jurisdictions' involvement, names of the representatives from each jurisdiction involved in the plan, and how involved each jurisdiction was during Phase I. Threats are assessed for each jurisdiction so that hazards affecting one jurisdiction are considered to have an equal impact or potential impact on assets located in those jurisdictions. It is assumed those hazards affecting a specific jurisdiction will have a similar impact on school systems and utilities of the jurisdiction.

Hazard Mitigation Plan Process

At the beginning of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan a Division D Core Team was developed through interaction between AEMA Division D EMA Directors, the AEMA Division D Coordinator, and the Lee-Russell Council of Governments. Members of the AEMA Division D Core Team developed county-level planning subcommittees primarily based on past Hazard Mitigation Plan update participants and the Local Emergency Planning Committees. The teams reviewed previous county-wide local hazard mitigation plans and development of the plan requirements and hazards for Division D Region.

The AEMA Division D Core Team developed the phased process of preparing the Regional Hazard Mitigation Plan based upon the staggered deadlines for each jurisdiction. The AEMA Division D Core Team met to compare the identified hazards in each individual jurisdiction plan in order to reach a consensus of the identified Regional Hazard Profiles. The AEMA Division D Core Team also met to discuss Division D Mitigation Goals/Strategies based on these items found in each individual jurisdiction plan. The meetings took place on July 20th and September 19th, 2019.

The July 20th, 2019 meeting included discussion of the following:

- Meet with other Division D leaders
- Introduction to hazard mitigation in the region
- Established core planning team responsibilities
- Identified deadlines
- Updated and outlined the evaluation process
- Organize the process

The September 19th, 2019 meeting included discussion of the following:

- Compared goals and hazards in Division D
- Identified goals for Division D
- The Lee-Russell Council of Local Governments (LRCOG) was in charge of the planning process.

Phase III-B of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan was developed through the cooperation between Coosa County EMA, Lowndes County EMA, Macon County EMA, the AEMA Division D Coordinator, the South Central Alabama Development Commission, and the Lee-Russell Council of Governments, as well as stakeholders representing organizations such as county commissions, local governments, local school districts, local utility boards, or law enforcement.

The natural hazards that threaten and impact the jurisdictions in Coosa were identified by the Division D Core Team, as well as noted in previous county-level hazard plans. The mitigation actions from the previous county-level hazard plans were identified and presented to the stakeholders, local EMA directors, and participating jurisdictions for reviewed and approved. These hazard and mitigation actions were updated to reflect current information, such as hazard frequency and severity data available on natural hazard events in Coosa County. Risk analysis was conducted using historical data estimates of magnitude and extent of damage from events. Results were presented to stakeholders and participating jurisdictions in print format, electronically and in

hard copy, and were reviewed in a series of local meetings.

Stakeholders participated in and helped facilitate the planning process by:

- Attend scheduled meetings, or if unable to attend, send a designee or make themselves available to discuss the agenda through a phone conversation, email, or in-person meeting.
- Represent their jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Collecting and reviewing information on their jurisdiction's conditions and resources
- Facilitating the development of a comprehensive range of mitigation alternatives
- Recommending selected alternatives for action
- Facilitating information exchange among participating jurisdictions, acting as liaisons to eligible entities of each jurisdiction
- Provide an assessment of prioritized projects that have been completed or are ongoing or changes to prioritization.

The discussions with the AEMA Division D Core Team led to county-level meetings with Lee and Russell counties to review the Risk, Vulnerability, and Mitigation components of the Hazard Mitigation Plan. During the summer and fall of 2019, the Hazard Mitigation Plan and the Hazard Mitigation Plan Action Strategies were sent to each participant of the county-level subcommittee prior to the meetings held in 2019. The scope of the meetings was to assess the progress of each jurisdiction's mitigation goals and objectives and to determine recent hazard events and how they affected the jurisdictions. From these meetings, hazard profiles were consolidated, updated for the regional scope of the plan, and risk analysis updates were conducted using historical and local documentation. Plan drafts were distributed to stakeholders and local jurisdictions for review and the plan draft was discussed in the realm of public meetings before submission to AEMA and FEMA.

June 12th, 2020 made contact with Coosa EMA director.

- Reached out to local EMA directors.
- Received Stakeholder Contact List

September 23rd, 2020 Contacted Coosa County Stakeholders.

- Emailed: Stakeholders surveys and PowerPoints
- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Division D Goals
- How to Measure Community Resilience
- Hazards Ranked
- Recap Past Hazards Events

September 23rd, 2020 Community Engagement in Coosa County

- Setup Survey for Community Participation
- Collected and Analyzed Data Collected

The joint Lowndes and Macon County meeting on January 27th, 2021 included discussion of the

following:

- Divisions in Alabama and Counties in Division D
- Benefits of Mitigation Planning
- Legal Regulations for Local Hazard Mitigation
- Plan Requirements
- Responsibilities, Processes, Timeline
- Demographic Profile
- Vulnerable Population Facilities, Groups and Locations
- Preliminary Hazard Profiles
- Mitigation Goals

The two individual Lowndes and Macon County meetings on February 3rd, 2021 included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Plan Requirements, Process, and Timeline
- Role of Stakeholders and Technical Advisors
- Benefits of Mitigation Planning
- Planning and Regulatory Tools
- Preliminary Goals and Action Plan Review
- Finalize Goals

The joint Lowndes and Macon County meeting on February 10th, 2021 included discussion of the following:

- Survey Responses
- Available Tools and Capacity
- Disaster Declarations
- Hazard Summary Review
- Review Risk Assessment
- Review Hazard Priorities
- Review Mitigation Strategies

From June 7th until July 8th, 2021 the plan was open for to 2021 Public Comment Period

- Briefed the public on updates to the plan.
- Received feedback on the Plan.
- Posted Draft on Facebook and Website

Table 1.1: AEMA Division D Core Team

Organization	Contact
Autauga County EMA	Ernie Baggett
Bullock County EMA	Josh Powell
Chambers County EMA	Jessica Yeagar
Chilton County EMA	Derrick Wright
Coosa County EMA	Terri Q. Hale

Elmore County EMA	Keith Barnett
Lee County EMA	Rita Smith
Lowndes County EMA	David Butts
Macon County EMA	Frank Lee
Montgomery County EMA	Christina Thornton
Russell County EMA	Robert “Bob” Franklin
Tallapoosa County EMA	Jason Moran
AEMA Division D Coordinator	Monique Smith
Lee-Russell Council of Governments	Lisa Sandt

Source: Alabama Emergency Management Agency, County EMA Director

Table 1.2 Stakeholders:

Name	Jurisdiction	Employer	Job Title	Participated	Attended Meeting
Terri Hale	All	Homeland Security	Local Homeland Security POC	X	X
Todd Adams	Coosa County	Coosa County	County Commission Chairman	X	X
Micheal Howell	Coosa County	Coosa County	Sheriff	X	X
Lester Duke	Coosa County	Coosa VFD Association	President	X	X
Amanda Robinson	Coosa County	Coosa County	E911 Director	X	X
Jack Brewer	Coosa County	Coos County	Coosa County Coroner	X	X
Wade McElranth	Town of Goodwater	Goodwater	Mayor	X	X
Randall Lewis	Town of Rockford	Town of Rockford	Mayor	X	X
Johnny Sharp	Town of Kellyton	Town of Kellyton	Mayor	X	X

1.3 Public and Other Stakeholder Involvement

The presence of community engagement is an important element to consider during the planning process because it allows the public/ residences to have input in potential projects specifically at the local level. According to APA, public engagement is "the key to building an inclusive community," because it gives everyone access to participate in the planning process. Working with the people who live in Lee and Russell counties gives the community an active role in planning, creates a partnership between the public and planners.

Due to the COVID-19 pandemic zero meetings were held in order to comply with social distancing laws in places at the time. The public was invited and encouraged to participate in the planning process by partaking in surveys and reviewing the draft plans. Digital copy of the plan was uploaded on the Lee Russell Council of Governments and EMA county websites, city and county websites as well as links to the plan were posted on socials media pages. These initiatives were done prior to the plan approval and adoption of the plan. A copy of the final plan approved by FEMA will be placed on the LRCOG website as well as hard copies at the local EMA offices, city and county offices (as determined), school boards, and water authorities will also receive a hard copy. The Lee-Russell Council of Governments consulted with other regional planning offices in the state in order to receive feedback on Phase Three-A of the Hazard Mitigation Plan. Due to the nature of a regional plan, it was impossible to reach out to neighboring jurisdictions because the regional plan covers all the jurisdictions in the closest eleven counties. Therefore, the planning staff decides to contact the planning directors following regional planning offices in order to meet FEMA's requirements on having the plan reviewed by an outside entity: Barbour County, Shelby County, Bibb County, and Talladega County.

Extensive public outreach was conducted with surveys to garner input on hazard assessment in the region in order could obtain helpful information about the residences' knowledge, needs, and concerns. The survey consisted of multiple choice and short answer questions that focused on understanding the residences' knowledge, needs, and concerns regarding hazard events and hazards preparation. For this project, we chose to use a non-probability sampling method because we do not know the probability of everyone has been chosen or not chosen to participate in the survey. This type of survey method is focused on qualitative research rather than quantitative research, which will allow us to understand people's feelings towards hazards.

The target population for our survey was those individuals who live or work in Coosa counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys. Interactive surveys were sent to or posted on the following locations: The Lee-Russell Council of Governments website; Each EMA office's Facebook, Twitter, and Websites; County and City websites, local newspapers and social media pages; for a detailed list of all the places and groups who received the survey please refer to Section 7.3 in the Appendix. Due to the outbreak of COVID-19 the staff was unable to attend any community events to receive citizen input, nor could staff work with the RSVP program to go into senior centers.

Chilton County had 0 response despite numerous efforts to engage the public. Please review the notes in section 7.1 of appendix.

The Lee-Russell Council of Governments and the local EMA directors involved multiple stakeholders in the formation of this plan as identified in Table 3.2. These stakeholders were informed of the process, plan update, and information. Comments were solicited from the stakeholders identified.

1.4 Integration with Existing Plans

Existing plans were consulted upon drafting the Phase-3B Regional Hazard Mitigation Plan to gauge understanding of the region's capacity for hazard mitigation. Plans reviewed include:

Alabama State Hazard Mitigation Plan (2018 Update):
The State Hazard Mitigation Plan was consulted to assist with the consistency of information within the regional plan, including items within the Risk Assessment and local capabilities.

Coosa County both have previously developed and approved local hazard mitigation plans. These plans were reviewed for consistency of information within the regional plan.

Local Comprehensive/Master Plans:
Local Comprehensive/Master Plans that that have been prepared and adopted in the Lee County and Russell County region were reviewed for consistency with information in the regional hazard mitigation plan.

- Coosa County Ordinances
- Coosa County Subdivision Regulations
- Town of Goodwater Town Ordinances
- Town of Rockford Town Ordinances

LRCOG Comprehensive Economic Development Strategy 2010 Update:
The LRCOG CEDS was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for the Lee-Russell region.

Emergency Operations Plans:
Coosa County both have an Emergency Operation Plan (EOP) that is utilized in an emergency. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. These plans complement the hazard mitigation plan but do not necessarily cover the same material.

Alabama Drought Management Plan (2018)
The Alabama Drought Management Plan was studied to provide background information about drought impacts on the planning area.

Section 2- Regional Profile

Section Contents

2.1 Background
2.2 Demographics
2.3 Business and Industry
2.4 Infrastructure
2.5 Land Use and Development Trends
2.6 NFIP Compliance

2.1 Background

The planning area is defined by Alabama Emergency Management Agency (AEMA) as Division D, which is one of seven emergency management divisions within the state. AEMA Division D is located in eastern Alabama (Figure 2.1). AEMA Division D is comprised of the following twelve counties: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell, Tallapoosa, and the jurisdictions in those counties. This version of the multi-jurisdictional hazard mitigation plan covers three of the twelve AEMA Division D counties and the jurisdictions in Chambers, Chilton, Coosa, Macon, Lowndes, and Tallapoosa counties. Due to expirations dates of plans Phase III was divide into A and B. Phase III-A will cover Chambers, Chilton, and Tallapoosa. Phase III-B will cover Coosa, Lowndes, and Macon. Phase I counties are currently covered by the Phase I of Division D, and Phase II is in the process of being approved. When all of the phases are approved by FEMA all of the plans will be updated. Information for Chambers, Chilton, and Tallapoosa counties are the only counties included in Phase III-B. Please refer to Figure 1 to see where in Alabama Division D is located and the phases.

Coosa County is located in Central, and occupies 701 mi², of Alabama. Table 2.1 presents the land area of each county and that of its municipalities. Coosa County is located south of Clay, Shelby, Talladega, and Randolph counties; Bibb and Perry counties are to the west; the state Georgia is to the east. Figure 2 shows an overview of details for the location of Coosa County.

This part of the Alabama is home to the Coosa, which is not a free flowing rivers due to the Southern Company's dams along the rivers. Lake Martin has a large presence because of the recreation amenity it offers the area. Coosa County is an apart of the Piedmont Plain. According to Dr. Gamble the Piedmont Region is home to the some of the oldest soils in the Western Hemisphere, which are well-drained and fertile.

Figure 1: AEMA Division D Plan Phases

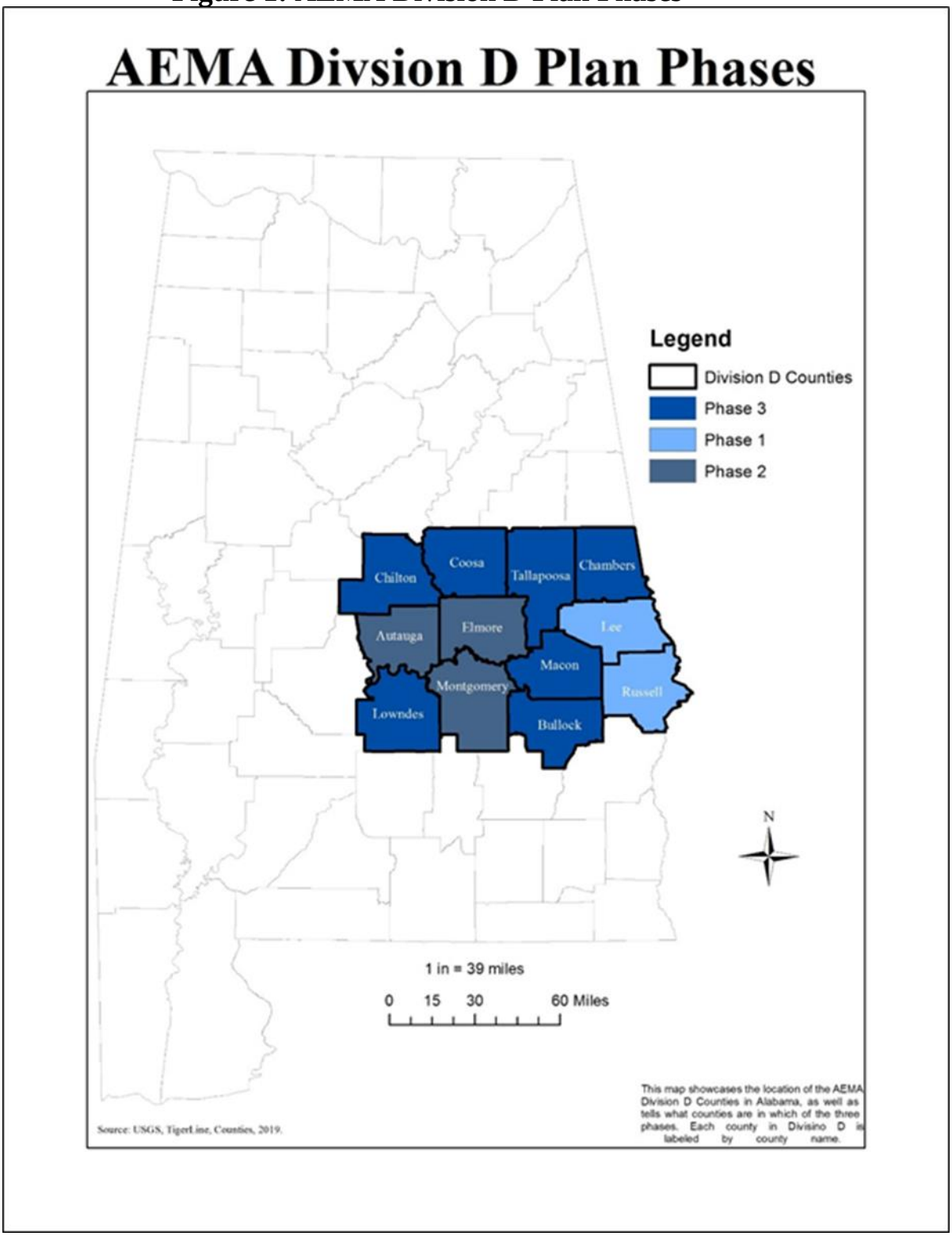


Figure 2: Overview Phase III

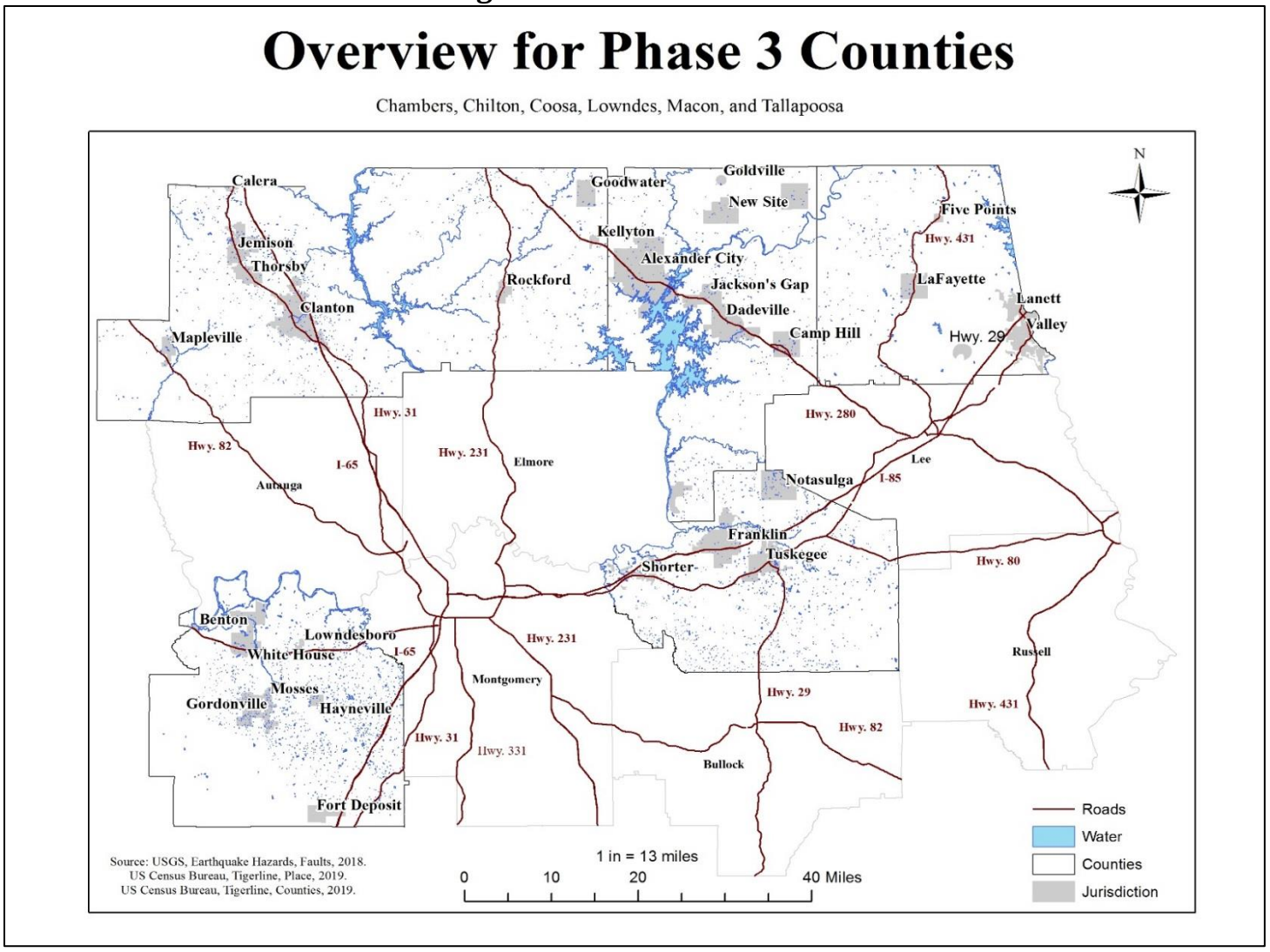


Table 2.1 Total Area by County

Jurisdiction	Total Area
Coosa County (entire)	**701 mi²**
Town of Goodwater	7 mi²
Town of Kellyton	3 mi²
Town of Rockford	3 mi²
Unincorporated County	688 mi²

Source: USGS, Tiger Line, Places, Total Area, 2019

According to the 2010 Census, the combined population of Coosa County was 11,470 and the estimate population was 10,855 according to the 2018 ACS. The following table provides the 2010 population according to the US Census Bureau as well as the 2018 American Community Survey estimates for each jurisdiction. As evidenced in Table 2.2, Coosa County experienced a decrease in population from 2010 to 2018.

Table 2.2: Jurisdiction Population

Jurisdiction	2010	2018	% Change
Coosa County (entire)	11,470	10,855	-5%
Town of Goodwater	1,517	1,311	-14%
Town of Kellyton	341	196	-43%
Town of Rockford	420	714	70%
Unincorporated County	9,192	8,634	-6%

Source: United States Census Bureau (2010 Census and 2018 Population Estimates

Persons who lived in Coosa County were majority white, according to the ACS 2013 to 2018 5 year estimates. The racial characteristics from the ACS 2013 to 2018 5 year estimate by jurisdiction are presented below in Table 2.3.

Table 2.3: Racial and Ethnic Demographics by County

Jurisdiction	White	African American	Hispanic or Latino	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Other race
Coosa County (entire)	10,805	7,084	50	8	-	-	-
Town of Goodwater	199	1,112	-	-	-	-	-
Town of Kellyton	174	22	-	-	-	-	-
Town of Rockford	350	338	18	8	-	-	-
Unincorporated County	10,082	5,612	32	-	-	-	-

Source: United States Census Bureau (ACS 2014- 2018 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate, there are 6,558 total housing units in the Coosa County. Unincorporated Coosa County has the most occupied housing units in the region, but it also has the oldest housing stock. Older housing can

make people more vulnerable to hazard if the house is dilapidated. Housing information estimates, including more vulnerable housing such as mobile homes and aging housing, are presented by county in Table 2.4 below:

Table 2.4: Housing Conditions by County

Jurisdiction	Total Housing	Occupied Units	Manufactured Homes	Houses 30+ Years
Coosa County (entire)	6558	4,103	2,015	2237
Town of Goodwater	795	513	132	700
Town of Kellyton	137	104	33	812
Town of Rockford	315	315	29	246
Unincorporated County	5311	3171	1821	479

Source: U.S. Census Bureau (2014-2018 ACS 5-Year Estimates, Table DP04)

All persons living in manufactured homes, as well as older housing, are vulnerable to natural disasters due to the building materials and standards are not the same as homes built on a slab. The jurisdictions such as Unincorporated Coosa County and the Town of Goodwater have the largest amount of manufactured homes, which is dangerous because these people should not stay in their homes in the event of natural disasters like a tornado, or severe thunderstorm with high winds. For more details on housing characters please refer to the Table 2.4

Based on the U.S. Census Bureau's 2014-2018 ACS 5-Year Population Estimate, Unincorporated Coosa County has the largest number of household. The U.S. Census Bureau defines a "household" to include all people who occupy one unit of residence, such as an apartment, single room, mobile home, or a house. Table 2.5 represents the median household income for Coosa County.

Table 2.5: Household Median Income by County

Median Household Income By County	
County	**Income**
Coosa	$ 38,301

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

The U.S. Census Bureau determines poverty based on the poverty threshold. If the total income is greater than the poverty threshold, then the family or person is not considered in below the poverty line. The U.S. Census Bureau uses the following two equations to determine poverty status: *Income / Threshold =X or Income – Threshold =X*. The Town of Rockford has the most people living under the poverty, 30%, in Coosa County. Table 2.6 displays the total number of an individual below the poverty line and the percent below the poverty line.

Table 2.6: Individuals below the Poverty Line by County

*Individuals Below the Poverty Line *2019*			
Jurisdiction	**Number of Individuals**	**Total Population**	**Percent of Total Population**
Coosa County (entire)	**1,459**	**10,855**	**13%**

Town of Goodwater	375	1,311	29%
Town of Kellyton	28	196	14%
Town of Rockford	212	714	30%
Unincorporated County	844	8,634	10%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

According to the U.S. Census Bureau's 2013-2017 ACS 5-Year Population Estimate there are 8,259 that are 25 years or older. Of these person whom are 25 years or older living in Coosa County, 61% of these persons do not have more than a high school education.. Unfortunately, this data is only available at the county level. The lack of education stresses the need for education about natural hazard vulnerability. Table 2.7 shows the total number and rate for highest education attained (high school graduate or less) of person 25 and older.

Table 2.7: Highest Education Attained (High school Graduate or Less) by County

County	Individuals (25+) with High School Graduate or Less	% Individuals (25+) with High School Graduate or Less
Coosa	4,979	60%

Source: U.S. Census Bureau (2013-2017 ACS 5-Year Estimates)

Based on the U.S. Census Bureau's 2010 Census there were 757 persons 75 years or older lived in Coosa County. The 2014-2018 ACS 5-Year Population Estimate reported 1,057persons 75 years or older lived in Coosa County. The large increase in the persons 75 years or older can be attributed to the large Baby Boomer population reaching 75 years old, which can be seen in Table 2.8. The population under 19 years old is also vulnerable during natural disasters because these persons may not know how to react during an event. It is important to learn about how to prepare for hazards in school. Tables 2.9 shows the population of persons under 19 years old.

Table 2.8: People 75 years or older in 2010 and 2018

County	2010	2018
Coosa	757	1,057

(Source: U.S. Census Bureau (2010 Census and 2018 ACS Population Estimates)

Table 2.9: People 18 years and Under & 75 years or Older in 2018

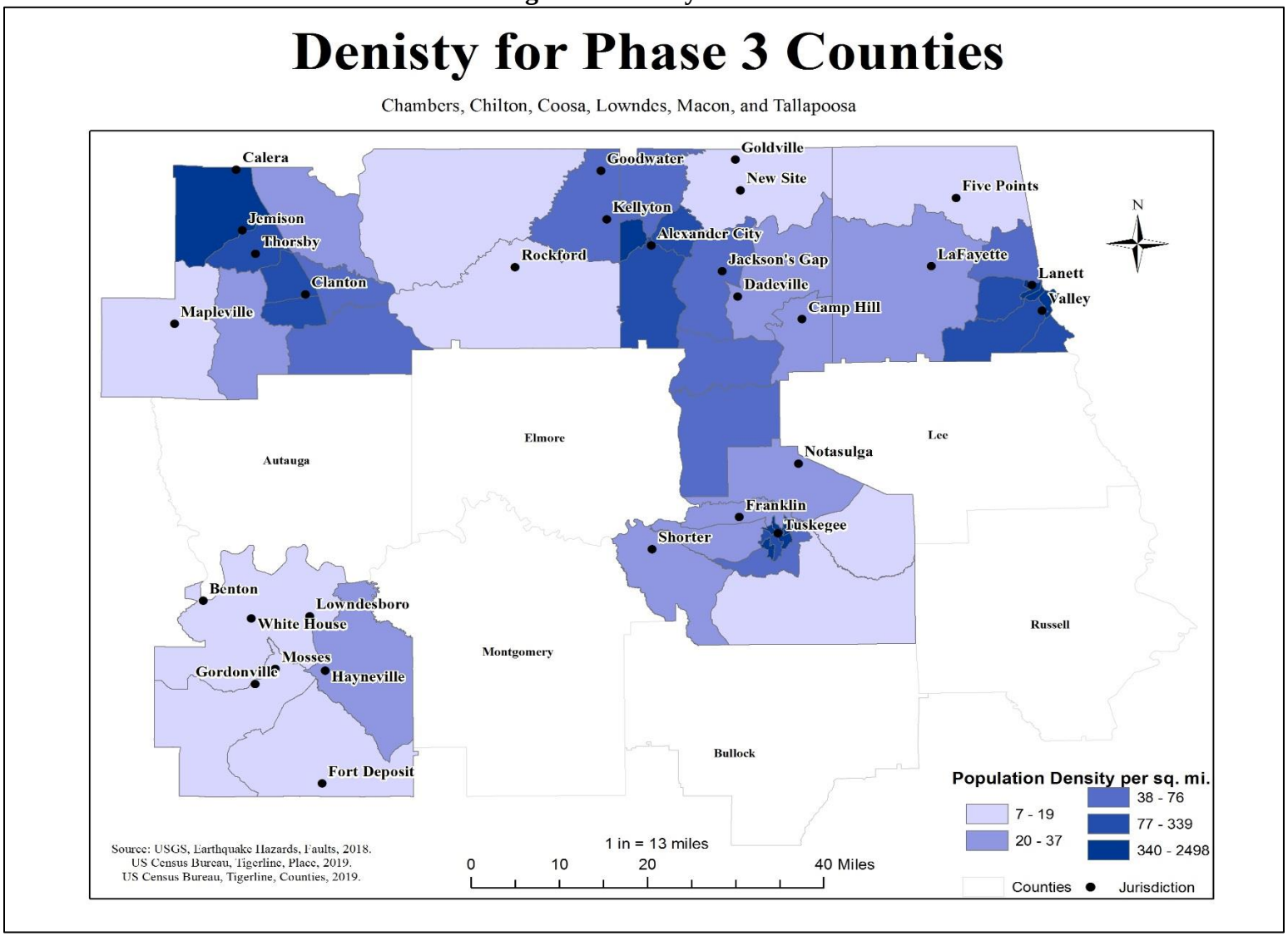
County	19 and Under	75+ Year
Coosa	2046	1018

Source: U.S. Census Bureau (2018 ACS Population Estimates)

The population under 18 years old is also vulnerable during natural disasters because these persons may not know how to react during an event. It is important to learn this education in school.

Figure 3 shows where the pockets of density are located in Coosa County near Kellyton and Goodwater. The eastern and southern portion of Coosa County is rural.

Figure 3: Density for Phase 3 Counties



2.3 Business and Industry

These counties support a wide variety of industrial and commercial stakeholders such as: automotive, aviation, medical, governmental, and other manufacturing and high-tech industry. The region is home to a wide variety of industries, which Table 2.10 shows the largest employers in Coosa County:

Table 2.10: Major Employers (Over 200 employees)

Major Employers by County (400+ Employees)			
Employer	**County**	**Product/Service**	**Number of Employees**
Prime Healthcare	Coosa Counties	Healthcare	685
Madix	Coosa County	Manufacturing	383
Coosa County Board of Education	Coosa County	Education	210
Alabama DOT - 4th Division	Coosa Counties	Government	

Source: Economic Development Partnership of Alabama, Local Economic Development Contact

The individual industries are susceptible to the same natural hazards as the remainder of the region, i.e., high wind events, tornadoes, flooding, etc. The economic impact of losing any industry is directly related to the size/type of business and the duration/severity of the loss.

2.4 Infrastructure

2.4.1 Transportation

Division D is bisected by Interstate 85, which connects Atlanta, Georgia, to Montgomery, Alabama, and Interstate 65, which connects Mobile, Alabama, to North Alabama. I-85 and I-65 are the main transportation corridor between the Port of Mobile, Midwestern states, and the East coast. U.S. Highway 231, U.S. Highway 431, U.S. Highway 80, U.S. Highway 82, and U.S. Highway 31 also crisscross through the portion of Alabama. These routes are major thought the South east. The region is in the middle of Alabama, and conveniently located near Birmingham and Atlanta. Montgomery regional airport is the only comical airport in the region, but it also serves as a military airport. Rail lines serving the region include Alabama Southern Railroad, Autauga Northern Railroad, Meridian & Bigbee Railroad, Norfolk Southern and CSX Transportation.

2.4.2 Utilities

Electrical services are provided by Alabama Power Company and Central Alabama Cooperative. Natural gas is provided by Alexander City as Department, East Alabama Gas District, and Sylacauga Utilities Board. Water and sewer service is provided by a mixture of municipal and county utility authorities. Most populated areas have public water service; however, most unincorporated areas rely on septic systems for sewer disposal.

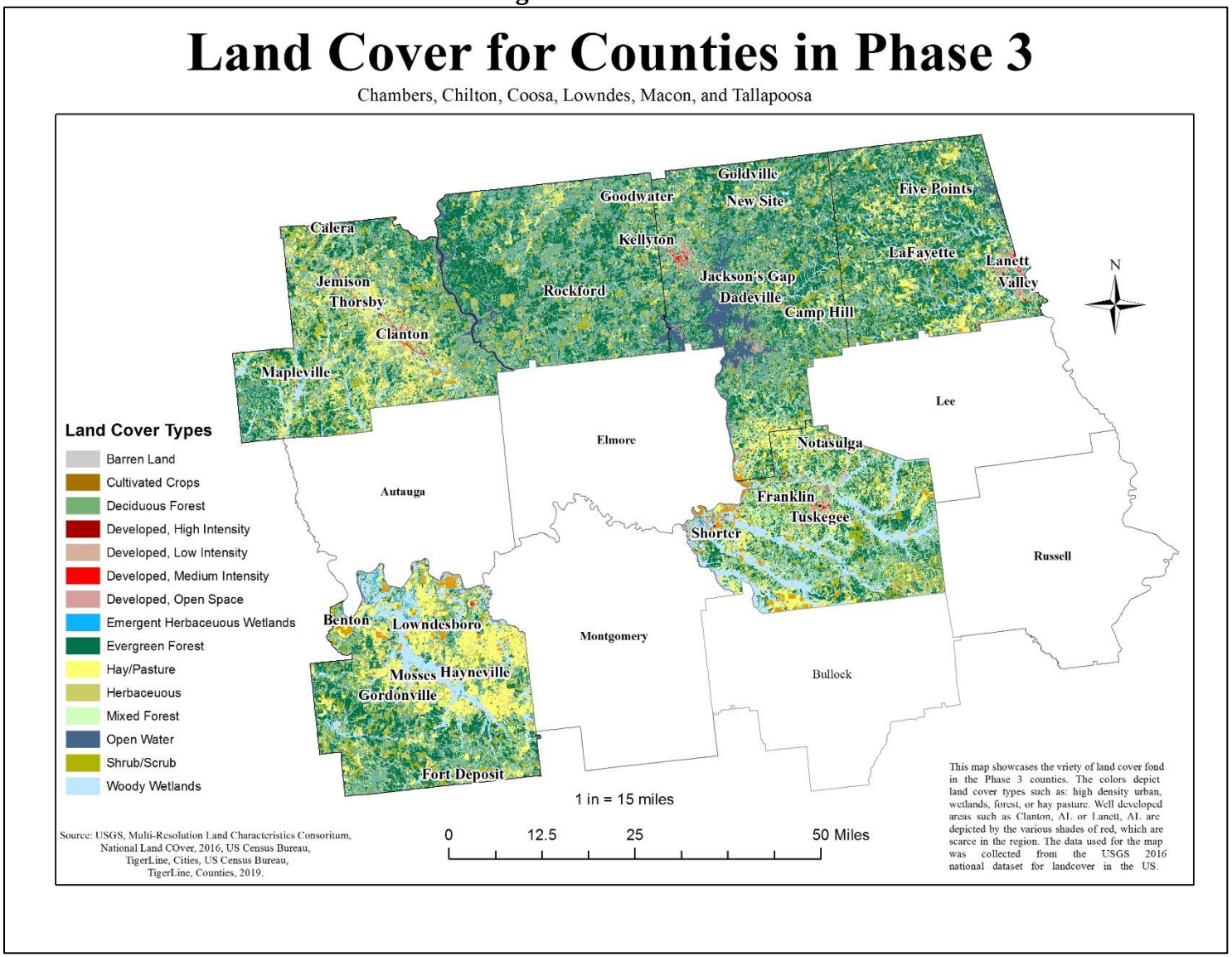
2.5 Land Use and Development Trends

Coosa County is semi/-rural predominantly composed of evergreen forest, lakes/rivers, deciduous forest, pasture, and urban areas, which can be seen in red in Figure 4. Overall, these counties are home to rural small towns, which their footprint does not show up on the map.

The following data comes from the 2010 and 2018 ACS Population Estimates. According to Table 2.2, Coosa County population has decreased at a county level. A rapid decline in population can also increase vulnerably for natural hazards due to the lack of available resources for recovery.

Every jurisdiction (Coosa County,of Goodwater, Town of Kellyton, Town of Rockford) should work towards building in compatible areas that are not susceptible hazards such as flooding and other location-specific hazards in their long-range development plans in order to make communities more resilient to hazards. The following places' vulnerability has not changed because the population in these areas have decreased since 2010: Coosa County, Town of Goodwater, Town of Kellyton,

Figure 4: Land Cover



2.6 NFIP Compliance

The table below summarizes NFIP participation and policy statistics for each jurisdiction in the planning area as of December 31, 2019. More site-specific information is provided in the Risk Assessment section. Jurisdictions that are non-participating in the NFIP Program have participated in the hazard mitigation planning process. Table 2.11 shows the National Flood Insurance Program Status for each jurisdiction in Coosa County.

Table 2.12 shows the number of NFIP policies in each jurisdiction for Coosa

Table 2.11 National Flood Insurance Program (NFIP) Status

Jurisdiction	County	Participation Status	Initial FBHM Identified	Initial FIRM Identified	Current Effective Map Date
Coosa County (entire)	**Coosa County (entire)**	**Coosa**	**Yes**	**12/27/1984**	**8/15/1984**
Town of Goodwater	Town of Goodwater	Coosa	Yes	11/3/1978	11/26/2010
Town of Kellyton	Town of Kellyton	Coosa	**No**	-	-
Town of Rockford	Town of Rockford	Coosa	Yes	11/26/2010	11/26/2010

Source: FEMA, the National Flood Insurance Program Community Status Book, 2019

Table 2.12 shows the number of NFIP policies in each jurisdiction for Coosa.

Table 2.12: National Flood Insurance Program Policy Numbers

Jurisdiction	Number of NFIP Policies
Coosa County (entire)	22
Town of Goodwater	0
Town of Kellyton	0
Town of Rockford	0
Unincorporated County	22

Non-participating Communities Rationale

Coosa County and its municipal jurisdictions, with the exception of Kellyton, have been mapped and the floodplain identified. Most NFIP communities in Coosa County have continued to effectively enforce and keep their floodplain ordinances current since their original entry into the program. Local flood plain ordinance administrators provide technical assistance to applicants and keep abreast of changes in flood plain management requirements through the State NFIP Coordinator. All communities, except for Kellyton (which have no areas of special flood hazards mapped by FEMA), have developed five-year action programs to improve local flood plain management programs.

As of 5/8/2020, new FIRMS have been issued and cover's Kellyton adequately. For this reason and having no areas of flood hazards mapped by FEMA, Kellyton is not a participating community in NFIP coverage. Les Sellers of Coosa County EMA has confirmed this.

Section 3- Hazard Risk Assessment

3.1 Risk Assessment
3.2 Natural Hazards Identification and Description
3.3 Dams
3.4 Droughts
3.5 Earthquakes
3.6 Extreme Heat
3.7 Hail
3.8 High Winds/ Thunderstorms
3.9 Landslides
3.10 Lightning
3.11 Sinkholes
3.12 Tropical Depression/ Tropical Storm/ Hurricane
3.13 Tornado
3.14 Wildfire
3.15 Winter Storm

3.1 Risk Assessment

Coosa counties are affected by a wide range of natural and human-caused hazards that negatively impact life and property. Current FEMA regulations are under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is allowed, but not required for plan approval. The Regional Hazard Mitigation Plan concentrates on natural hazards but does include a summarized assessment of potential human-caused hazards.

The AEMA Division D Core Team identified the hazard based on the vulnerability of the AEMA Division D to natural hazards. Coosa County EMA, Lee Russell Council of Governments, local governments, and stakeholders developed a risk assessment for Coosa County, which details the risk Coosa County have towards each hazard. The following components are included for each hazard:

- Hazard Description
- Probability of Future Hazards
- Previous Occurrences
- Impact of Hazards by Jurisdiction
- Probability of Future Occurrence by Jurisdiction
- Vulnerability Overview
- Vulnerability Synthesis and Overall Risk

3.2 Natural Hazard Identification

AEMA Division D is affected by multiple hazards that are addressed below. These hazards were identified and evaluated through a process that included studying historical events, previous local mitigation plans, the susceptibility of the location to hazards, and input from local stakeholders. Each hazard addressed in the risk assessment will include a general description of the hazards and its extent of effects on the region. Phase III-B of the Regional Hazard Mitigation Plan will include only Coosa County. The remaining counties, Chambers, Chilton, Tallapoosa, Autauga, Elmore, Montgomery Lee, Russell, Lowndes, and Macon, and Bullock were completed in Phase I, Phase II, Phase III-A.

Due to the geographical location of Coosa County, each county is vulnerable to many hazards that could potentially disrupt life and damage property year-round. The following hazard types do not have any applicability to the region, and will not be mentioned any further: Avalanche, coastal erosion, tsunami, and volcano. Table 3.1 below displays the hazards that can impact Coosa County information sources, and how the hazard associates to the region.

Table 3.1: Potential Hazards and Data Sources

Hazard	Risk	Source	Correlation with Region
Dam Failure	Yes	USACE National Inventory of Dams	Population downstream from dams; flooding concerns; no State regulation of dam safety
Hazard	Risk	Source	Correlation with Region
Drought	Yes	United States Drought Monitor	Historic Incidents with damage
Earthquakes	Yes	USGS Earthquake Hazard Program	Proximity to Southeast US seismic zones
Extreme Temperatures	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Flooding	Yes	FEMA; NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents/identified flood hazard areas
Hail	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
High Winds/Thunderstorms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Landslides	Yes	Geological Survey of Alabama USGS Landslides Hazard Program Alabama State HMP	Historic Incidents
Lightning	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Sinkholes and Land Subsidence	Yes	Geological Survey of Alabama	Historic Incidents
Tropical Storms/Tropical Depressions/Hurricanes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents

Tornadoes	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents
Wildfire	Yes	Alabama Forestry Commission Wildfire Assessment Maps	Historic Incidents
Winter Storms	Yes	NOAA, National Centers for Environmental Information, Storm Events Database	Historic Incidents

Effects from tornadoes, high winds and flooding are regarded as the most significant natural hazards affecting the county areas.

Coosa County has been included in 19 Federal Disasters since 1975, which can be seen in Table 3.2. The declared disasters have been primarily related to two major types of impacts: flooding (through both tropical and non-tropical events) and severe storms to include hurricanes and tornadoes. There has also been a declaration for a drought incident and a winter storm incident.

Table 3.2: Lee Russell Counties region, Federally-Declared Disasters

Declaration Date	Disaster Number	Type of Incident	Counties Declared
1977	3045	Drought	Coosa
1979	3074	Flooding	Coosa
	578	Storms, Wind, Flooding	Coosa
1990	856	Severe Storms, Tornadoes, Flooding	Coosa
	861	Severe Storms, Tornadoes, Flooding	Coosa
1993	3096	Snowfall, Winter Storm	Coosa
1995	1070	Hurricane Opal	Coosa
2003	1466	Severe Storms, Tornado, Flooding	Coosa
2004	1549	Hurricane Ivan	Coosa
2005	1593	Hurricane Dennis	Coosa
2005	3237	Hurricane Katrina Evacuation	Coosa

2008	3292	Hurricane Gustav	Coosa
2011	3319	Severe Storms, Tornadoes, Wind	Coosa
2011	1971	Severe Storms, Tornadoes, Winds, Flooding	Coosa
2017	3389	Hurricane Irma	Coosa
2017	3394	Hurricane Nate	Coosa
2020	4554	Severe Storms, Winds, Tornadoes	Coosa

Under a federally declared disaster, the State of Alabama and affected local jurisdictions are eligible to apply for federal reimbursement for debris removal, emergency services, and critical facility repair/replacement. Funding is also made available for hazard mitigation grants that allow for the implementation of mitigation projects that are listed in this plan.

Each hazard profile includes a summary of the following:

- **Background:** Provides general definitions and brief descriptions of the hazard, its characteristics, and potential effects.

- **Extent:** Provides information on the potential strength or magnitudes of the hazard.

- **Previous Occurrences:** Provides information on the history of previous hazard events in the planning area, including their impacts.

- **Impact:** Provides information on the geographic areas within the Coosa County that are susceptible to hazard occurrences. Locations affected are described regionally unless a specific jurisdiction has different risks, which is further explained.

- **Probability of Future Events:** Describes the likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low or Very Low as described below:

  High: Probable major damage in a 1-10 Year Period

Medium: Probable major damage in a 10-50 Year Period
Low: Probable major damage in a 100 Year Period
Very Low: No probable major damage in a 100 Year Period.

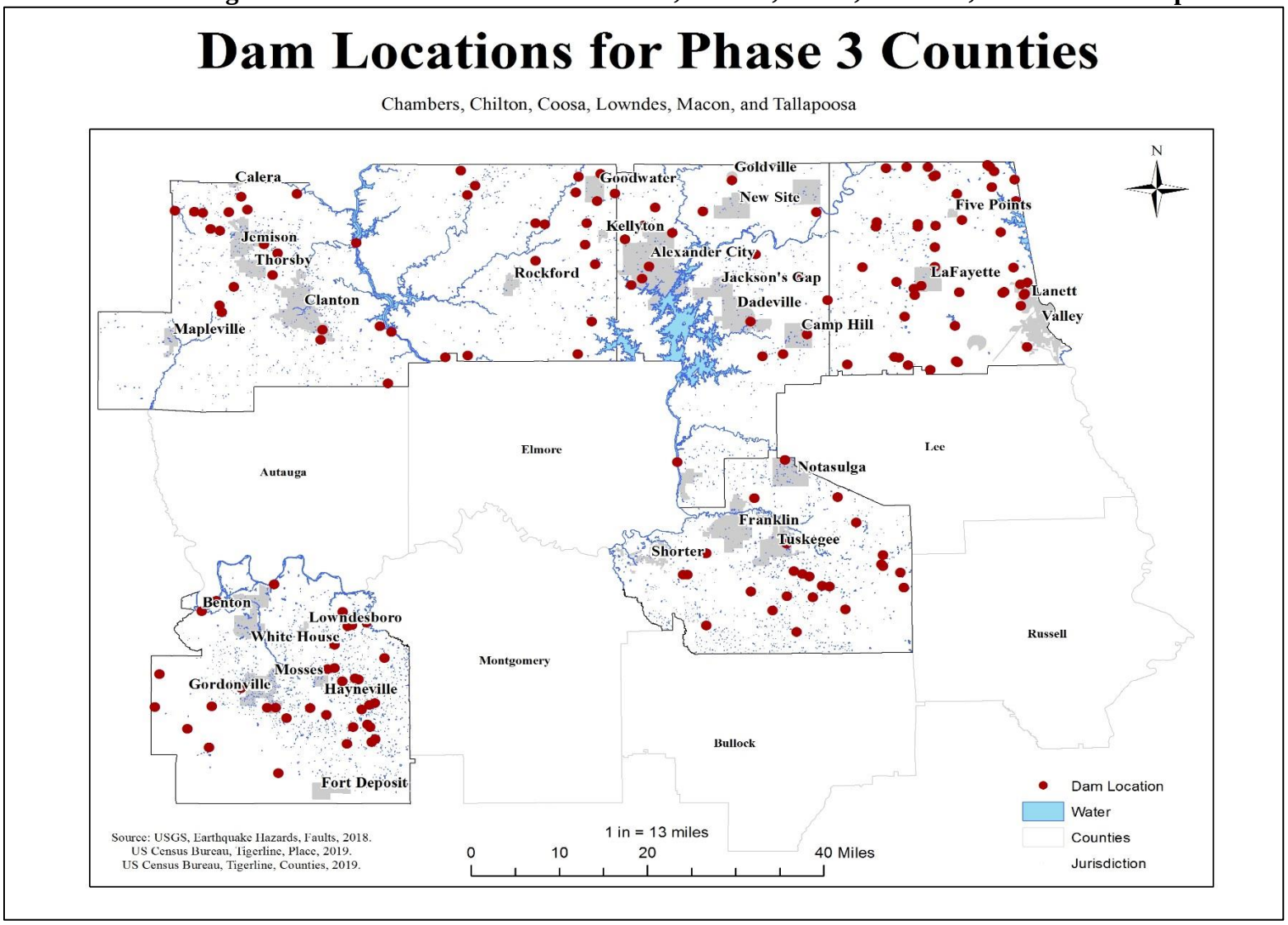
3.3 Dams

3.3.1 Description

Dams are a vital part of communities today because these assets provide drinking water, recreation, flood control, power generation, or water for agriculture and livestock. When a dam or levee failures arise, the areas located downstream are subject to flooding due to the large volumes of water released suddenly. These events happen with little warning are may cause extensive property damages and casualties. Dam safety is a hazard that the State of Alabama works on continuously for the last two decades as the infrastructure ages, especially small privately-owned dams and/or poorly maintained. Alabama currently does not have a state law to regulate existing private dams or new construction of private dams that do not require federal licenses or inspections. There are approximately 1,700 privately owned dams in Alabama that are on bodies of water over 50 acre-feet or dams higher than 25 feet. Efforts to pass legislation regarding the regulation of these 1,700 dams have not been successful.

According to the National Inventory of Dams, there are 16 dams in Coosa County. Please refer to Tables 3.3 a list of all dams. All of these dams are owned by a public utility, local government, or state government. Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: Unincorporated Coosa. Coosa does not have a reported history of dam failures. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk. Please refer to Figure 5 to see the locations of all dams in Coosa County, or refer to Table 7.4.8 in section 7 of the Appendix for the exact location of dams in these counties.

Figure 5: Locations of Dams in Chambers, Chilton, Coosa, Lowndes, Macon and Tallapoosa Counties



3.3.2 Extent by Jurisdiction

"Hazard potential" is the classification used to indicate probability for damages, human losses, or property damage, which could arise to the region if a dam failure occurred. The Federal Guidelines for Dam Safety present three classifications of dams, please refer to Table 3.2, which is below to see the classifications. Table 3.3 show the hazard level for all dams found in Coosa County, please refer to the Appendix to see the more details on Dams in section 7.4.

Table 3.2: Dam Hazard Classifications

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None Expected	Low; Generally Limited o Owner
Significant	None Expected	Yes
High	Probable; One or More Expected	Yes

Source: Federal; Guidelines for Dam Safety (published April 2004)

Dams located in Coosa County are valuable assets for the communities in the region because these dams provide communities with benefits including water for drinking and agricultural purposes, recreation, flood control, and power generation. Despite the importance of the dams, if a dam failure was to occur large problems can arise downstream. The water that is stored behind the dam's wall has a large amount of energy stored, which can cause casualties and property damage should a dam fail and release its capacity uncontrolled. In Coosa County, two dams 'hazard potential are classified as high, Lay Dam and Mitchell Dam. High-risk dams are those with the capacity to cause both property and casualties in the downstream areas should the dam fail. There are several high-risk dams located in each of the counties for Phase III-B of the Hazard Mitigation plan. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All of these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams are the most susceptible, which is the most common type of dam found in Coosa County. Concrete structures with spillways and controls would be less susceptible. The larger dams like Lay Dam and Mitchell Dam on the Coosa River are operated by Alabama Power and are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

The majority of the dams Coosa County area are considered to be earth dams, as reported by the National Inventory of Dams, which is constructed of earth material such as gravel, soil, rock, and silt. The largest dams are classified as gravity dams, and are all located on the Coosa-Chilton county line. These dams are built out of concrete in order to hold back water. The dam list from the National Inventory of Dams is outdated, due to the lack of regulatory authority in Alabama. Private dams may be missing from this list if local authorities are unaware of the features. Localized studies conducted by the Office of Water Resources (OWR) demonstrate that data collected from the National Inventory of Dams might be inaccurate due to locational errors and the misrepresentation of the potential hazards of dams. Future updates to the Division D Hazard Mitigation Plan will incorporate information regarding the classification of potential dam hazards.

Table 3.3: Coosa County Dams

Dam Name	County	Owner Type	NID Height	NID Storage	Dam Type	Purpose	Hazard Potential/ Low	Year Completed
ANN JORDAN LAKE	COOSA	Utility	32	1322	Recreation	Recreation	Low	1966
EWELL C FORBUS	COOSA	Utility	27	115	Recreation	Recreation	Low	1961
J M GRANGER	COOSA	Utility	15	66	Recreation	Recreation	Low	1968
C W GASTON	COOSA	Utility	12	72	Recreation	Recreation	Low	1960
ELMER DUNNAM	COOSA	Utility	37	296	Recreation	Recreation	Low	1968
PEOPLES LAKE	COOSA	Utility	16	70	Recreation	Fire Protection Recreation	Low	1964
CULLEN THOMAS	COOSA	Utility	30	83	Recreation	Recreation	Low	1960
A W RAYFIELD	COOSA	Utility	12	57	Recreation	Recreation	Significant	1962
H KAUL	COOSA	Utility	27	90	Recreation	Recreation	Low	1954
J S DUNLAP	COOSA	Utility	15	72	Recreation	Recreation	Low	1963
PEOPLES LAKE NO 2	COOSA	Utility	26	50	Recreation	Recreation	Low	1964
GRIFFIN HARRIS LAKE	COOSA	Utility	27	103	Recreation	Recreation	Low	1971
BAKER CREEK LAGOON	COOSA	Utility	12	83	Recreation	O	Low	1964
WALLS LAKE	COOSA	Utility	16	124	Recreation	Recreation	Low	1974
GROOVES LAKE	COOSA	Utility	19	61	Recreation	Recreation	Low	1972
SHELTON LAKE	COOSA	Utility	17	54	Recreation	Recreation	Low	1972

Source: FEMA, National Inventory of Dams, Coosa County, Alabama, 2019

3.3.3 Previous Occurrences and Impact

According to the EMA directors and the stakeholders zero reports of a dam failure have been reported in these counties, but this might not include failures for small private dams.

Dam failure can potentially impact the people, structures, and infrastructure downstream in the following jurisdictions: Alexander City, City of Dadeville, Town of Notasulaga, Town of Camp, Town of LaFayette, Town of Lanett, Town Valley, unincorporated Chilton, unincorporated Chambers, unincorporated Coosa, unincorporated Lowndes, unincorporated Macon, and unincorporated Tallapoosa counties. There have not been any reports or a history of dam failures in these counties. In the event of a dam failure, the impact would cause extreme property damage and potential loss of lost life downstream. Fortunately, dam failure is extremely rare and poses a little overall risk.

A dam failure near/in areas of higher density in places such as Goodwater or Rockford is concerning due to the potential loss of life, injury, and damage to property downstream that could result. All persons living in a manufactured home near a high-risk dam are vulnerable in their homes if the dams fail in unincorporated Coosa County. In the event of a dam failure, infrastructure and everyone downstream would be at risk due to a large amount of water these dams hold. This is particularly concerning for all persons in retirement communities, all persons in assisted living facilities, disabled, staff and patients at medical facilities, staff and students at schools, elderly, and those persons in poverty living near the Coosa rivers in unincorporated Coosa County. These specific groups would have difficulty evacuating quickly in an emergency event such as a dam failure.

In unincorporated Coosa County, the following types of assets would be vulnerable if a nearby high-risk dam was to fail: manufactured homes, structures, bridges, power lines, livestock /animals, crops, trees/timber, roads, buildings (made of wood, vinyl, or metal).

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a catastrophic failure would cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. At this time we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for Unincorporated Coosa County. This information will be provided in the next Hazard Mitigation Plan in five years.

3.3.4 Probability of Future Occurrences

Since zero dam failures have been recorded, it is not possible to calculate risk losses from dam failure based on the historical record. Dated and incomplete information pertaining to dam classification in Alabama makes it difficult to predict what dams are susceptible in the planning region. It is unlike that that a dam failure will occur in the region and will be considered to have a low probability. Table 3.4 shows the probability of future occurrences.

Table 3.4: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Dam Failure	**Coosa County (entire)**	0	13	0
Dam Failure	Town of Goodwater	0	13	0
Dam Failure	Town of Kellyton	0	13	0
Dam Failure	Town of Rockford	0	13	0
Dam Failure	Unincorporated County	0	13	0

Source: NOAA, National Weather Service Strom Events Database, 2020,

3.4 Drought

3.4.1 Description

Drought occurs when there is below-average precipitation over an extended period of time, gradually affecting hydrological, agricultural, and social concerns. Occurrences of drought are typically classified as follows:

Table 3.5: Drought Classifications

Drought Type	Description/Definition
Meteorological Drought	Defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales
Hydrologic Drought	Related to the effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Defined principally in terms of soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic Drought	Associates the supply and demand of economic goods or services with elements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of a weather-related supply shortfall. This type of drought may also be called a water management drought.

Source: FEMA's Multi-Hazard Identification and Risk Assessment, published January 1997. Also cited in the State of Alabama Hazard Mitigation Plan, 2018.

The long-term dangers of drought can have a serious economic impact on a community. Agricultural production can be damaged or destroyed by the loss of crops or livestock, resulting in food shortages. The increased demand for water and electricity can result in shortages of these resources. Water supply that is drawn from groundwater sources could also be negatively impacted by prolonged drought. Drought can also be a contributing factor to wildfires in the forested areas of the region.

3.4.2 Extent by Jurisdiction

For the extent of drought, the United States Drought Monitor classifies drought in five levels of severity, based on multiple indicators including soil moisture, streamflow levels, precipitation levels, and local observations. These classifications are listed in the Table 3.6:

Table 3.6: United States Drought Monitor Classification

Category	Description	Possible Impacts
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops, or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate Drought	Some damage to crops, pastures, streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested.
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions.
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies.

Source: US Drought Monitor Classifications

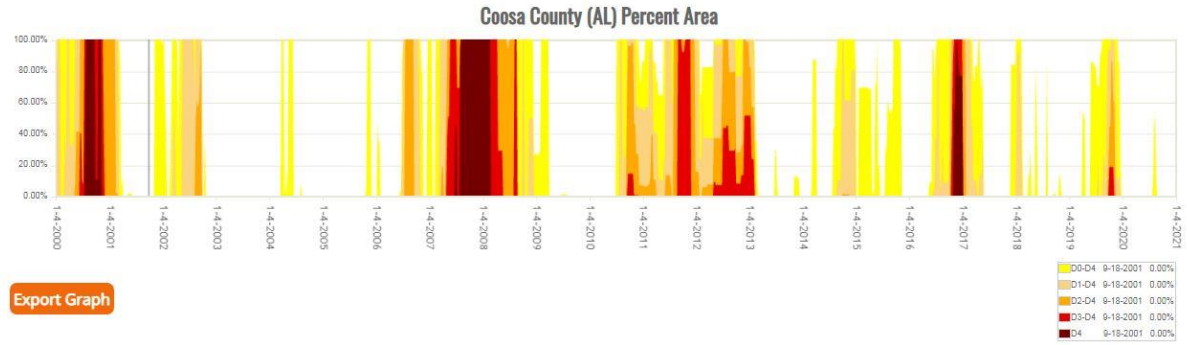
Table 3.7 describes the extent of drought in Coosa County. Extent is used to define how severe or how intense drought can be, which provides a foundation for implementing mitigation strategies to reduce damages from a drought. The extent of the potential for damages across Coosa County is equal.

Table 3.7: United States Drought Monitor Classification

Hazard	Extent (All Jurisdictions)
Drought	A D4: Exceptional Drought corresponds to an area experiencing exceptional and widespread crop and pasture losses, fire risk, and water shortages that result in water emergencies.

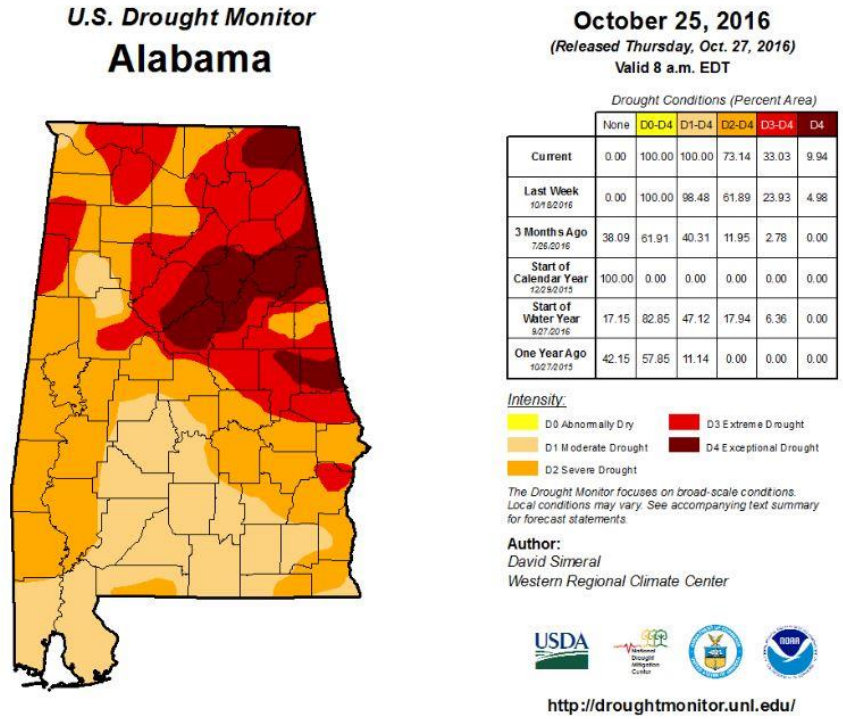
Figures 6 below show the percent of the area in Coosa County that have suffered from droughts, as well as how bad the drought was in the county. Figures 7 and 8 demonstrates how severe droughts can be Coosa County when there is a wide drought.

Figure 6: Coosa County Area Affected by Droughts



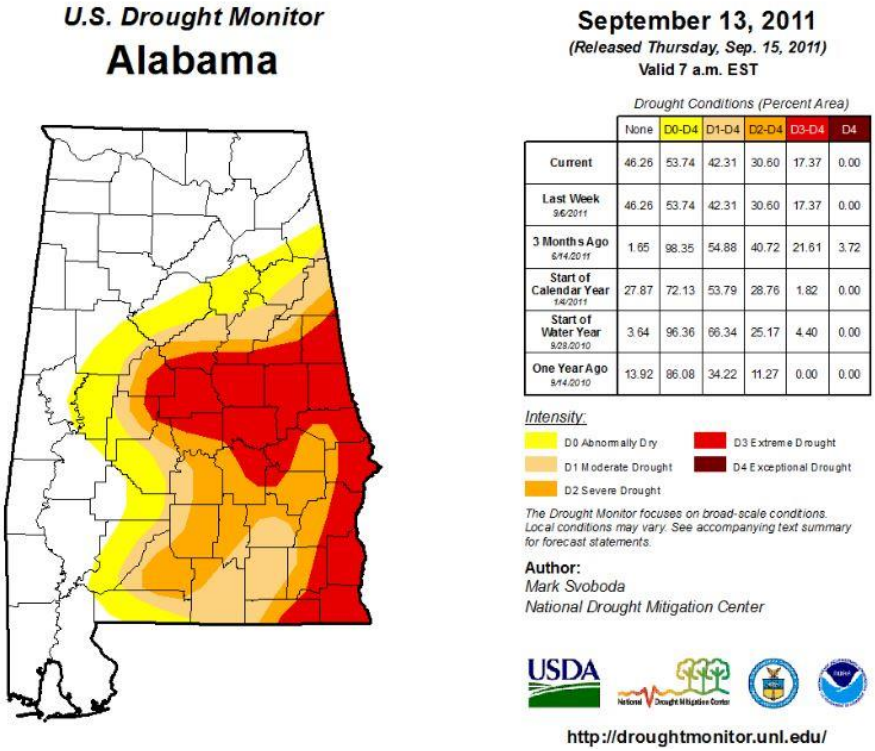
Source: the United States Drought Monitor, 2020

Figure 7: Alabama Drought Monitor Map as of October 4th, 2016



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2016

Figure 8: Alabama Drought Monitor Map as of October 1st, 2019



Source: University of Nebraska-Lincoln, the National Drought Mitigation Center, Alabama Map, 2017

3.4.3 Previous Occurrences and Impact

Since 2006 Coosa County experienced 55 months with droughts. Federal disaster declaration were made due to droughts that occurred in Coosa County in the years of 1990, 1977, 1993, 1995, 2004, 2005, 2008, 2011, and 2017.

In 2007 to 2008, Chambers, Chilton, Coosa. Lowndes, Macon, and Tallapoosa counties experienced a severe to extreme drought D2 to D4, which is considered an Exceptional Drought event. Along with the rest of Alabama, experienced a severe drought that lasted from May to June of 2008. In June of 2007, NOAA reported, "Hydrologic and agricultural impacts were widely felt. Crops became highly stressed due to the lack of rainfall, with losses by the end of the month ranging from 50 to nearly 100 percent in some Central Alabama counties. Stream flows on area rivers and waterways remained near record low levels, and most reservoir levels were well below normal." In August NOAA reported, "Severe (D2) to Exceptional (D4) drought conditions continued across all of Central Alabama...more than 3/4 of the corn crop was still considered to be in poor or very poor condition, as well as about half of the cotton and soybean crop, along with livestock and hay production. Major rivers and reservoirs continued to run much below normal…Area water utility companies continued to enforce fines and surcharges for excessive water usage, and water restriction plans remained in effect." The Drought worsened into August "Around 80 percent of the corn and soybean crop, 70 percent of the cotton crop, and 40 percent of the peanut crop, about 60 percent of the livestock, and 75 percent of pasture lands, was considered to be in poor or very poor condition. Due to Major River and Major rivers and reservoirs levels navigation on major rivers became significantly impacted, and many boat landings on major lakes became unusable due to extremely low lake levels." By December NOAA reported "roughly three-quarters of Central Alabama remained in Exceptional Drought (D4), with the remainder in Moderate (D1) to Extreme (D3) Drought. This severe drought had a large negative impact on the Coosa River, and Tallapoosa River as well as caused a water shortage in municipalities and water restrictions. Hurricane Fay, in October of 2008, brought widespread rainfall to the region, which helped improve the drought conditions."

Starting in September of 2010, the Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties experienced and sustained extreme exceptional drought conditions that lasted until February 2013. Chambers, Coosa, Macon, and Tallapoosa counties experienced a worst drought, D4, than Chilton and Lowndes County during this time. Water restrictions were necessary across the jurisdictions. The United States Department of Agriculture declared all of Autauga, Elmore, and Montgomery counties a natural drought disaster area in both 2012 and 2013 for crop disaster losses.

The USDA issued a Secretarial Drought Designation for Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties in 2012, 2013, 2014, 2016, 2017, 2018 and 2019, which made emergency loans available to producers suffering losses. In 2016, the Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties experienced a D1 to a D4 level of severe to extreme drought. According to NOAA, "sites across east-central Alabama were 10-15 inches below normal

by October 2016." This drought would continue until January of 2017 when heavy rainfall ended the drought.

According to NOAA, a drought is "is a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people." Droughts become dangerous when it impacts economic prosperity, agricultural productivity, and human health and welfare. "Human factors, such as water demand and water management, can exacerbate the impact that drought has on a region," according to NOAA. Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties are susceptible to long periods without any perception which results in drought conditions. When an extreme drought arises water shortages will impact the local jurisdictions, which can lead to water rationing for communities. Unfortunately, droughts are not easily predicted, and the impacts felt from a prolonged drought are not readily quantifiable. The moderate drought condition experienced in Autauga, Elmore and Montgomery counties have promoted concern about the areas vulnerable to prolonged and extreme droughts. Counties have promoted concern about the areas vulnerable to prolonged and extreme droughts.

3.4.4 Probability of Future Occurrences

The probability that drought conditions will occur annually in Chambers, Chilton, Coosa, Lowndes, Macon, and Tallapoosa counties are between 10%-100% (medium). The potential impacts on the region will range between minor impacts critical due to possible stress on agricultural and forestry interests in some areas of the region. Table 3.8 shows the probability of a drought occurring.

Table 3.8 Drought Probability

Hazard	Jurisdiction	Months of Droughts	2006 to 2019	Frequency Event per Year
Droughts	**Coosa County (entire)**	55	13	4.23
Droughts	Town of Goodwater	NA*	13	0
Droughts	Town of Kellyton	NA*	13	0
Droughts	Town of Rockford	NA*	13	0
Droughts	Unincorporated County	NA*	13	0

Source: NOAA, National Weather Service Strom Events Database, 2020,
Data is only offered at the county level

3.5 Earthquakes

3.5.1 Description

According to NOAA, an earthquake is "anything that causes seismic waves to radiate throughout the Earth is an earthquake. There are two main types of earthquakes, tectonic and caused by humans." Earthquakes occur along the fault line or when tectonic plates move. Lee and Russell counties are susceptible to earthquakes due to proximity to two major seismic zones, The Southern Appalachian Seismic Zone, the New Madrid Seismic Zone, or the South Carolina Seismic Zone. The Southern Appalachian Seismic Zone extends into northern and central Alabama, and the South Carolina Seismic Zone is in South Carolina. These seismic zones typically create infrequent earthquakes of small intensity and moderate earthquakes every few hundred years. The New Madrid Seismic Zone lies within the central Mississippi Valley but has produced some of the strongest earthquakes in North America that were felt in Alabama. The New Madrid Seismic Zone lies north and west of the region. Earthquakes in 1811-1812 had limited damage in the region due to the low-density settlements, but it created Reelfoot Lake in Tennessee and Kentucky. While large earthquakes (magnitude 7 or higher) can be created from these seismic zones, but according to the USGS, the probability of a moderate or large earthquake in Coosa County is low. The impact of an earthquake could produce minor damage in the Coosa County such as cracked windows, since there are zero seismic zones located in Lee or Russell County. However, this region does have some faults.

3.5.2 Extent by Jurisdiction

The USGS defines the Mercalli Intensity Scale as a method to define "value assigned to a specific site after an earthquake has a more meaningful measure of severity to the nonscientist than the magnitude because intensity refers to the effects actually experienced at that place. The lower numbers of the intensity scale generally deal with the manner in which the earthquake is felt by people. The higher numbers of the scale are based on observed structural damage. Structural engineers usually contribute information for assigning intensity values of VIII or above."

Table 3.9: Earthquake Extent All Jurisdictions

Hazard	Extent (All Jurisdictions)
Earthquakes	The epicenter of an earthquake has not originated in Coosa County. A large earthquake of 7.0 or higher on the Richter Scale from the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, or the South Carolina Seismic Zone could be felt by a few people in Coosa County counties. The impact would be felt by a few people but resulting in no damages or injuries.

An earthquake could potentially causing serious damage to buildings, structure, and infrastructure as well as injury and loss of life. Figure 9 describes each magnitude and the potential damage each magnitude can create.

Figure 9: Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Modified Mercalli Intensity Scale, 2020.

3.5.3 Previous Occurrences and Impact

While there are no reported instances of earthquakes centered in Coosa County, Figure 9 displays rare instances of tremors/quakes that happened hundreds of miles away that may have been felt in the area. Table 3.10 reflects previous earthquakes in Alabama/Southeast which the Geological Survey of Alabama feels may have been felt in this region.

Table 3.10 Previous Earthquake Events that could be felt in this region

Epicenter	Date	Magnitude at Epicenter	Mercalli Intensity in the Region	Shaking	Damage	Inj/Dth
Memphis, TN	02/07/1812	>7.0	IV	Light	None	None
Charleston, SC	08/13/1886	7.3	IV	Light	None	None
Irondale, AL	10/18/1916	5.1	III	Weak	None	None
Fort Payne, AL	04/29/2003	4.9	III/IV	Weak/Light	None	None

Source: USGS, Earthquake Hazards Program

Two earthquakes were reported on February 4th, 1886, and on February 13th, 1886 in Sumter and Marengo. While residents felt the tremors from the earthquakes no damages were reported. In August of 1886, a destructive earthquake near Charleston, South Carolina, was felt and caused minimal damage in Alabama's northeast. In 1916 a strong earthquake shook east of Birmingham causing damage near Easonville. The damages reported were as followed: chimneys knocked

down, windows were broken, and frame buildings "badly shaken." An earthquake of 2.4 magnitude occurred in Clanton, Alabama, but this event has no reports of damages or injuries. In 2003 an earthquake with a magnitude 4.9 struck Fort Payne, Alabama, which could have been felt by persons and properties in the region. There was no damages or injuries Coosa County, but the earthquake could have been felt by some individuals living in northern portions of Coosa County.

Figure 10 shows the locations of earthquakes in this areas of Alabama, which showcases zero earthquakes origins in Coosa County. Figure 11 shows the locations of all the fault lines for Coosa County. Most fault lines run through north and north western portion of Coosa and the south eastern portion of Coosa County.

Figure 10: Earthquake Epicenter as of March 2019

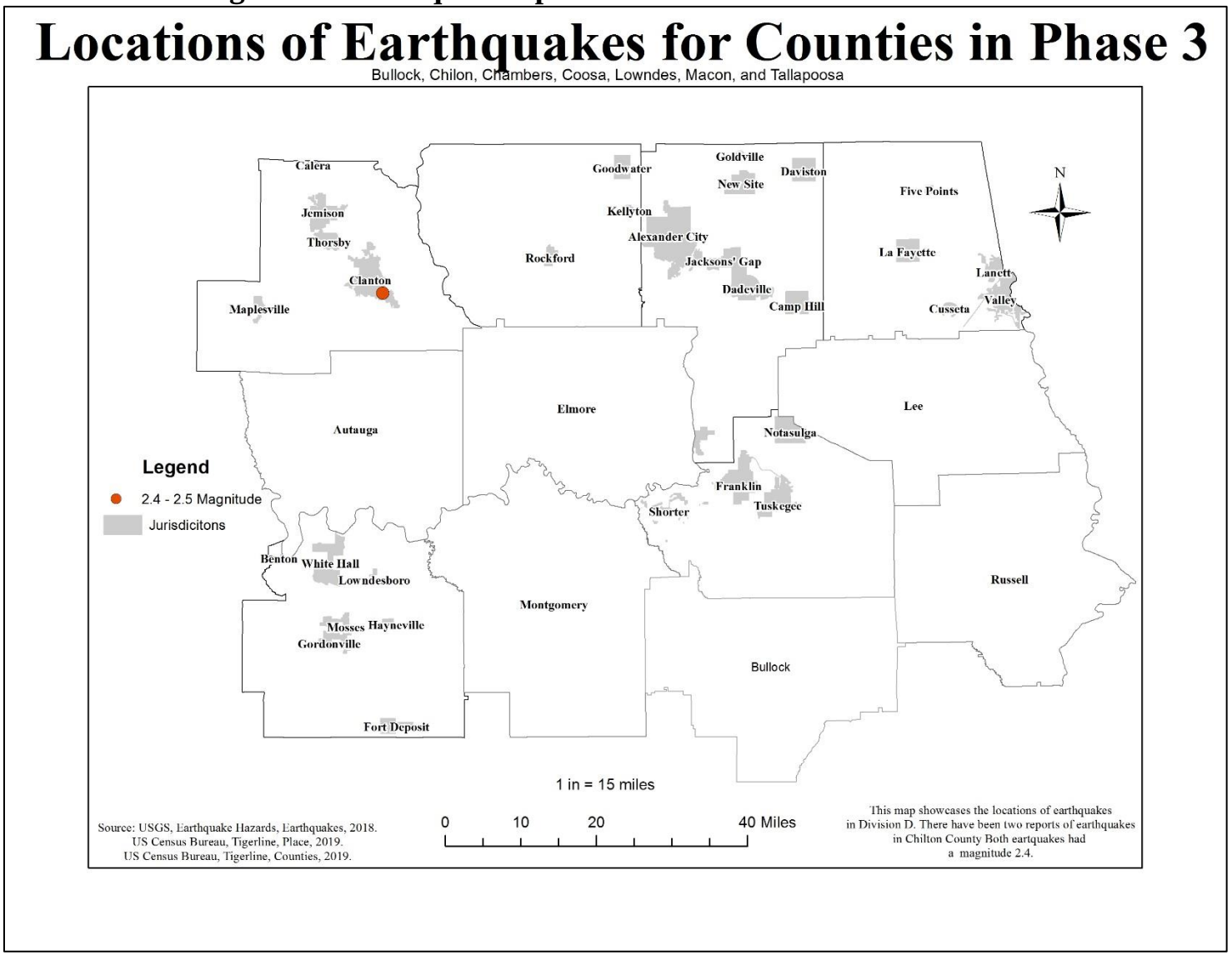
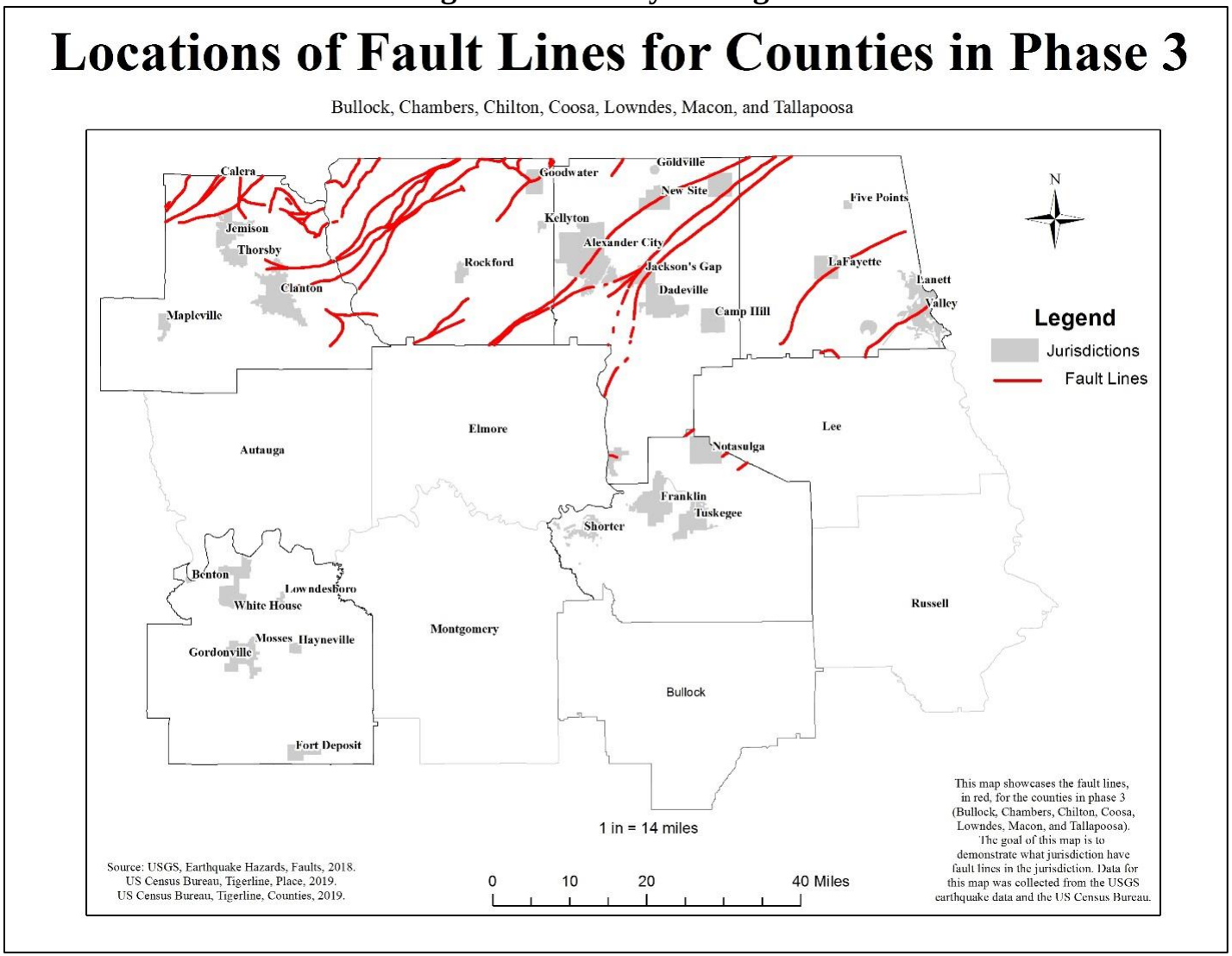


Figure 11: County Geologic Fault Line

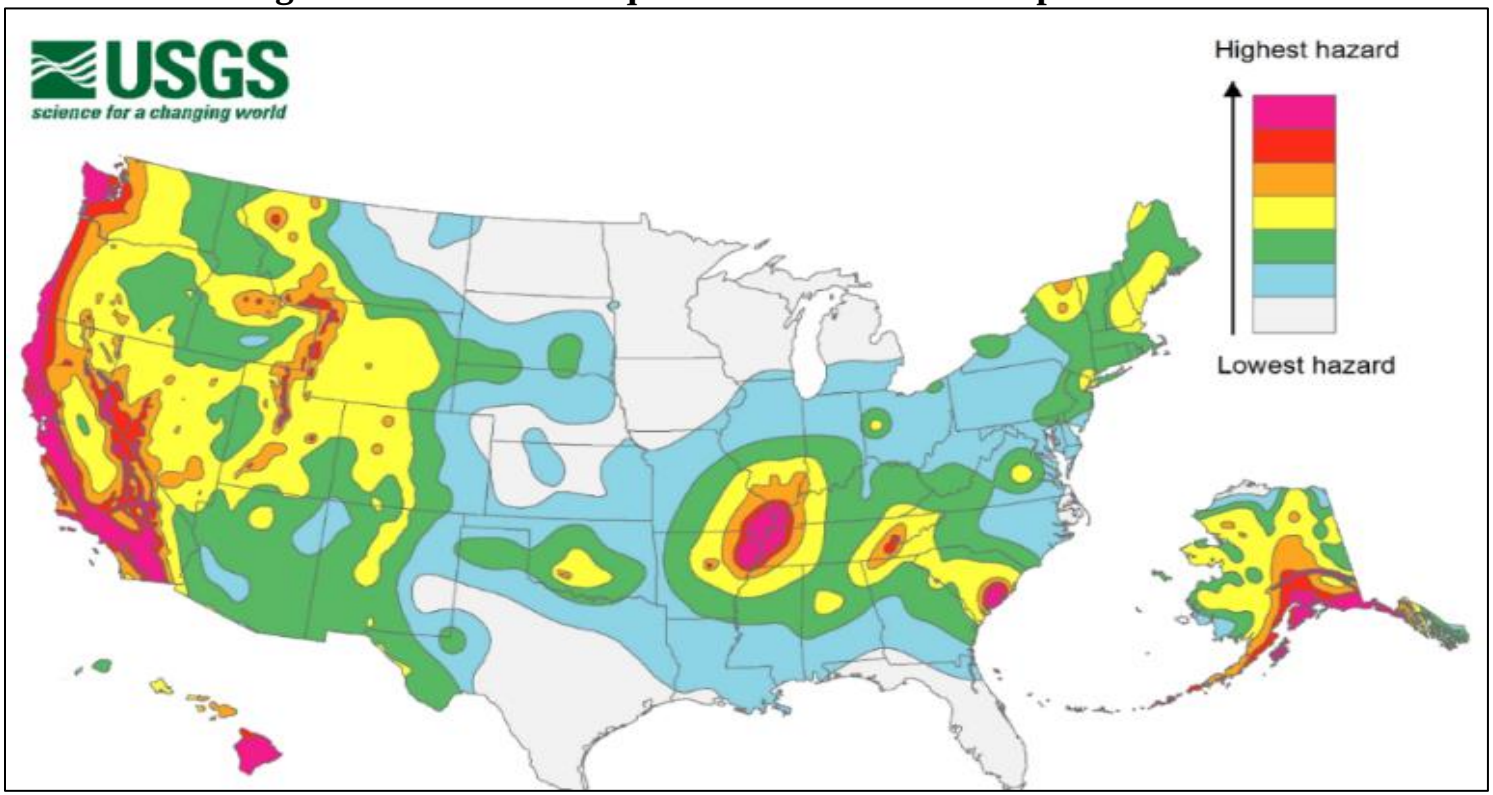


3.5.4 Probability of Future Occurrences

The probability of an earthquake occurring in this region was determined to be very low with less than a 1% annual probability with a very minor impact if one were to occur. Therefore, the probability of an impactful earthquake in the region is very low and will not be profiled any further, which can be seen in Table 3.11.

The United States Geological Survey (USGS) publishes simplified earthquake seismic hazard maps that quickly give earthquake hazard probabilities, which can be seen in Figure 12.

Figure 12: USGS Earthquake Seismic Hazard Map



Source: USGS Earthquake Hazard Probability, 20

Table 3.14: Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Dam Failure	**Coosa County (entire)**	0	13	0
Dam Failure	Town of Goodwater	0	13	0
Dam Failure	Town of Kellyton	0	13	0
Dam Failure	Town of Rockford	0	13	0
Dam Failure	Unincorporated County	0	13	0

Source: USGS, Search Earthquake Catalog, Coosa County, 2021.

3.6 Extreme Temperatures

3.6.1 Description

Extreme temperature is a hazard that encompasses instances of both extreme heat and extreme cold. Both extremes are profiled in this section.

Extreme Heat

Extreme heat is abnormally high temperatures that disproportionately affect the elderly, very young, and those with health concerns if exposed to the conditions, especially those without effective climate control systems. The State of Alabama Hazard Mitigation Plan, 2018, discusses extreme heat as temperatures above 100 F. Heat stress can be indexed by combining the effects of temperature and humidity, as shown in Table 3.15. The heat index estimates the relationship between dry bulb temperatures (at different humidity) and the skin's resistance to heat and moisture transfer. The higher the temperature or humidity, the higher the apparent temperature. The major human risks associated with extreme heat are:

Heat/Sun Stroke: Considered a medical emergency, heat/sunstroke is often fatal. It occurs when the body's responses to heat stress are insufficient to prevent a substantial rise in the body's core temperature. While no standard diagnosis exists, a medical condition is usually diagnosed when the body's temperature exceeds 105 F due to environmental temperatures. Rapid cooling is necessary to prevent death, with an average fatality rate of 15 percent even with treatment.

Heat Exhaustion: While much less serious than heatstroke, heat exhaustion can cause victims to complain of dizziness, weakness, or fatigue. Body temperatures may be normal or slightly too moderately elevated. The prognosis is usually good with fluid treatment.

Heat Syncope: This refers to a sudden loss of consciousness and is typically associated with people exercising who are not acclimated to warm temperatures. It causes little or no harm to the individual.

Heat Cramps: May occur in people unaccustomed to exercising in the heat and generally ceases to be a problem after acclimatization.

Table 3.12: Heat Index and Disorders

Danger Category	Heat Disorders	Apparent Temperatures (F)
I Caution	Fatigue possible with prolonged exposure and physical activity	89-90
II Extreme Caution	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity	90-105
III Danger	Sunstroke, heat cramps, or heat exhaustion likely, heatstroke possible with prolonged exposure and physical activity.	105-130
IV Extreme Danger	Heatstroke or sunstroke imminent	>130

Source: FEMA, 1997, NWS, 1997, State of Alabama HMP, 2018

In addition to affecting people, severe heat places significant stress on plants and livestock. The effects of severe heat on agricultural products may include reduced yields and loss of crops, State of Alabama HMP, 2018.

From the State of Alabama Hazard Mitigation Plan, 2018, extreme cold temperatures also impact Alabama weather, although not as likely. Prolonged exposure to the cold can cause frostbite or hypothermia and become life-threatening. Frostbite occurs when the extremities become

excessively cold, and hypothermia is a serious health condition where a person's body temperature falls below 90 F. Both conditions are influenced by wind conditions. Various wind chill indices have been developed to predict cold temperature's effect on humans. For instance, a temperature of 5 F will have a wind chill of -19F if the wind is blowing 30 mph. Cold weather can also impact crops and livestock. Cold air has the potential to freeze produce, which can damage or kill it.

Older adults are more prone to being impacted by extreme heat and extreme cold events. This is because they do not adjust well as other demographics to drastic changes in temperature, they are more likely to have a medical condition that changes normal body responses to heat and cold, and they are more likely to take prescription medications that impact the body's ability to react to changes in temperatures. Access to climate control, such as air conditioning and heating systems, provides protection from the impacts of extreme heat and cold events and is one way to mitigate against the potential impacts of an extreme temperature event.

3.6.2 Extent by Jurisdiction

Table 3.13: Extreme Temperatures Extent

Hazard	Extent (All Jurisdictions)
Extreme Temperatures	Extreme highs above 100 deg. F increases the risk of injury from exposure and drought risk. Low-temperature extremes around 0 deg. F for several days at a time causing water shortages and injury.

All of Coosa County counties are susceptible to annual extreme heat due to its central location in Alabama. Although not as common, the planning area could have instances of extreme cold.

3.6.3 Previous Occurrences and Impacts

Typically, daytime high temperatures can reach the upper 90's to low 100's during the summer months. The combination of humid air, the heat index can climb to 105 to 110 degrees across Coosa County. In August of 2007 temperatures reached between 100 to 109 degrees from August 4to August 1. Zero injuries or deaths were reported in Coosa County as a result of the extreme heat, but it is possible these events were not recorded by NOAA. NOAA did not record any crop damages for this event, but it is possible there were some damages.

Coosa County had zero instances of extreme cold since 2006, nor were any injuries or deaths reported due to extreme cold.

3.6.4 Probability of Future Occurrences

The probability of extreme temperatures in theses counties is rated as a low to medium, but this is primarily for extreme heat. The impact of an extreme heat/cold event is rated as low to critical largely based on duration. The events in the region have been short-lived, according to the NOAA datasets. Table 3.14 shows the future probability of the occurrence of extreme temperature.

3.14: Future Probability of Extreme Temperatures

Hazards	Jurisdiction	Number of previous Events	2006-2019	Frequency Event per Year
Extreme Temperature	Coosa County	3	13	23.07%
Extreme Temperature	Town of Goodwater	NA	13	0
Extreme Temperature	Town of Kellyton	NA	13	0
Extreme Temperature	Town of Rockford	NA	13	0
Extreme Temperature	Unincorporated Coosa County	NA	13	0

Source: National Weather Service, Storm Event Database, 2020)
*** (Extreme Temperatures is only recorded at a County level)****

3.7 Flooding

3.7.1 Description

Flooding is considered one of the most frequent and costly natural hazards that occurs in the United States. Most communities in the United States have experienced flooding, including those in the Coosa County. Flooding normally occurs due to excessive precipitation, but many factors can have an impact on flooding such as drainage basin characteristics, antecedent soil moisture conditions, weather patterns, and land cover. There are two primary types of flooding that affect this planning area: riverine flooding and flash flooding.

Riverine flooding occurs when substantial levels of precipitation ensue over a long period of time, causing rivers and streams to flow outside of their natural channels and negatively affecting surrounding areas. Flash flooding is normally instigated by intense amounts of precipitation over a short time period in a localized area. Coosa County can experience both types of flood events. Flash floods are generally more prevalent in the urbanized areas with abundant impervious surfaces and other areas of obstructions to water runoff. The Coosa River, which runs through Coosa County, is a primary factor in riverine flooding in western portion of the County.

The unincorporated Coosa County, Town of Rockford, and the Town of Goodwater have mapped Flood Hazard Areas. The town of Kellyton does not have any floodplain in the town limits. Figures 12 to Figure 15 show the areas of susceptibility to riverine flooding events, and flash flooding. When a large amount of rainfall occurs during a short period or over days, flash flooding therefor can occur anywhere under the right circumstances. Figures show the location of currently mapped special flood hazard areas for the Coosa County, which based on the most recent FEMA National Flood Hazard Layer Available. This map includes areas designated Zone A (one-percent annual chance flood) and Zone AE (one percent annual chance flood with elevation). The data made available by FEMA is not without error, therefore, and some flooding may occur outside of these mapped areas. The following maps show where the floodplain goes in each jurisdiction.

Figure 12: Coosa County

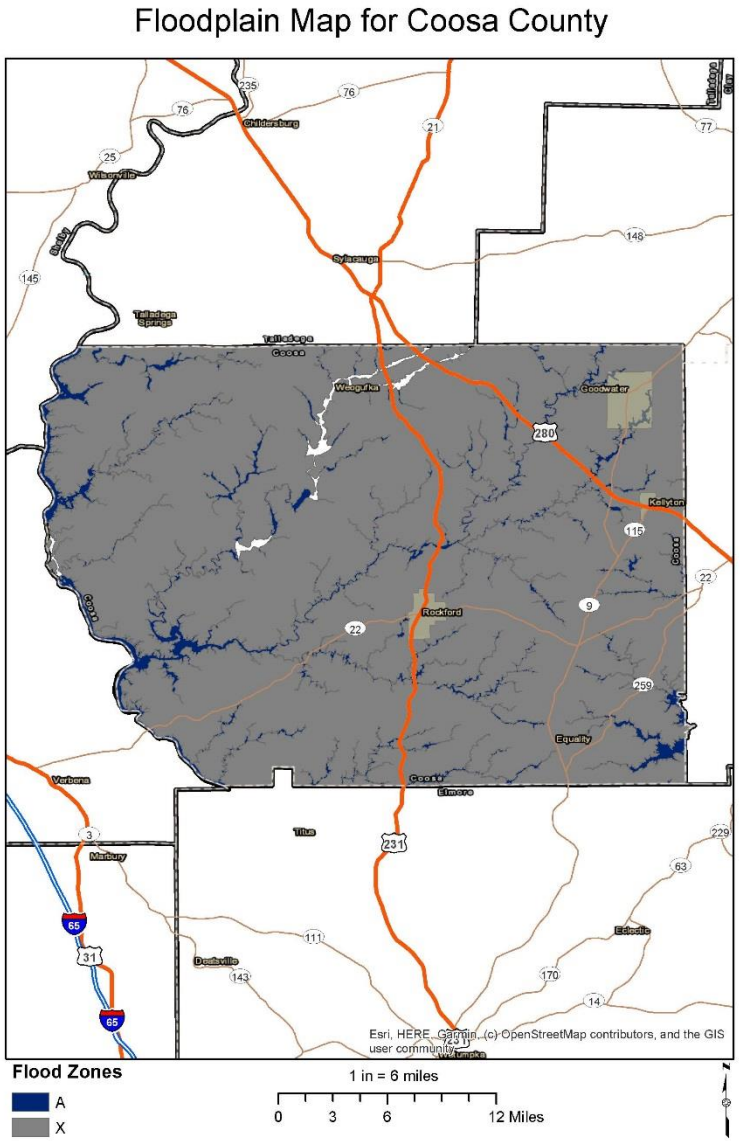


Figure 13: Town of Goodwater

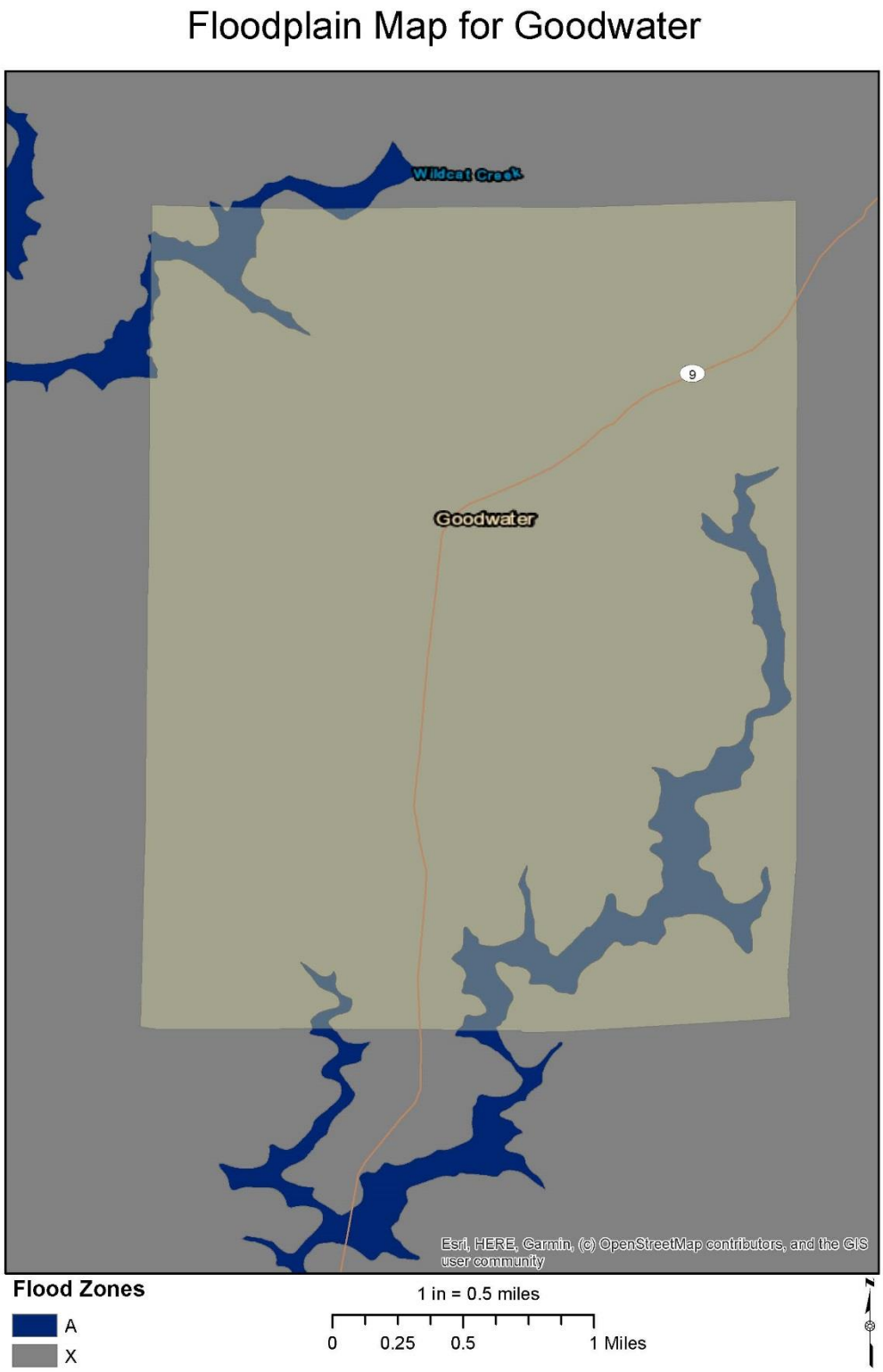


Figure 14: Town of Kellyton



Figure 15: Town of Rockford



3.7.2 Extent by Jurisdiction

The severity of a riverine flood event is typically dependent on several factors, including drainage basin topography, recent precipitation and weather occurrences, and land surface. Periodic riverine flooding on adjacent lands is a natural occurrence. The most common method used to express flood frequency is a percent chance of occurrence in a giver year, or annual probability with a FEMA identified floodplain. A 100-year flood event has a one percent (1%) chance of occurring in any year within that floodplain. However, these type floods can occur multiple times during a 100-year period.

The extent of a flash flooding event varies depending on the local geography, rainfall intensity, and duration. Typically, flash flooding does not have as widespread of an impact on communities as a riverine floorings event. Due to the lack of advance warning before a flashflood event many streets and properties can become damage during these events.

Table 3.15 Flooding Extent by Jurisdiction

Jurisdiction	Flooding
Coosa (entire)	Flooding to depths from 1 ±10 feet affecting agricultural lands, persons, structures, and infrastructure
Town of Goodwater	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure
Town of Kellyton	There are no flood zones in Kellyton
Town of Rockford	Localized flooding to depths from less than 1 feet minimal impact on persons, structures, and infrastructure

3.7.3 Previous Occurrences and Impact

Coosa County has experienced two recorded flood events. There have been one disaster declarations due to extensive flooding in Coosa in 2011 Typically, the flash floods recede very quickly without significant disruption to the public but there have been instances of flash flooding that were registered with the National Climatic Data Center (at the time) and caused property and crop damage. According to the EMA director of Coosa County it is typical for the rural roads to flood during large rain events. The County maintains an inventory of road barrels to close roads down on demand when these events take place. Due to the normality of flooding in the rural areas the County does not keep a formal recorded of road closures during these events.

On September 19th, 2009 the Town of Kellyton experienced localized flash flooding due to a severe thunderstorm. The rain caused CR-119, Cr-16, CR-112, and CR-37 to close until the waters receded. No person were injured during this event, and not damages were recorded by NOAA.

On March 9th, 2011 a flash flood took place when a large rain event took place resulting in creeks to rise outside of their beds. This lead to at least two county roads (56 and 16) to shut down the flooding of Weogufka Creek according to NOAA.

3.7.4 Probability of Future Occurrences

Since 2006, NOAA has recorded two flooding events in Coosa County. It is estimated that these flood events may have caused damages in the Coosa County, but this number could be much higher due has not report any monetary values of damages since 2011. The event frequency for flooding is 0.15 events per year, which is based on the two events that occurred in thirteen years. The probability of a flooding event is medium.

3.14: Future Probability of Floods

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flash Flood	**Coosa County (entire)**	2	13	15%
Flash Flood	Town of Goodwater	0	13	NA*
Flash Flood	Town of Kellyton	1	13	7.6%
Flash Flood	Town of Rockford	0	13	NA*
Flash Flood	Unincorporated County	1	13	NA*

Source: National Weather Service, Storm Event Database, 2020)

3.8 Hail

3.8.1 Description

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.

Annually, hail causes over 1 billion dollars in damage to crops and property nationwide. All jurisdiction in Coosa County is susceptible to the occurrence of hail and numerous instances reported according to NOAA.

3.8.2 Extent by Jurisdiction

The size of hailstones is related to the intensity of the thunderstorms that produce them, and to the temperature at the surface. The average size of hailstone that falls to earth is 6.35 mm. 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. Table 3.16 demonstrates the extent of hail damage all jurisdictions can experience.

Table 3.16: Hail Extent of All Jurisdictions

Hazard	Extent (All Jurisdictions)
Hail	Hail larger than 50-76 mm diameter resulting in property damage

Table 3.17: TORRO Hail Intensity Scale

Intensity	Typical Hail Diameter (mm)	Intensity Category	Probable Damage
H0	5	Hard Hail	No damage
H1	5-15	Potentially Damaging	Slight general damage to plants, crops
H2	10-20	Significant	Significant damage to fruit, crops, vegetation
H3	20-30	Severe	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	25-40	Severe	Widespread glass damage, vehicle bodywork damage
H5	30-50	Destructive	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	40-60	Destructive	Bodywork of grounded aircraft dented; brick walls pitted
H7	50-75	Destructive	Severe roof damage, risk of serious injuries
H8	60-90	Destructive	Severe damage to aircraft bodywork
H9	75-100	Super Hailstorms	Extensive structural damage: risk of severe or even fatal injuries to persons caught in the open
H10	Greater than 100	Super Hailstorms	Extensive structural damage: risk of severe or even fatal injuries to persons caught in the open

Source: State of Alabama HMP, 2018

The TORRO Hailstorm Intensity Scale, Table 3.17, relates the size of hailstones to the probable crop and property damage. The damage caused by hail is often compounded by the other hazards that tend to accompany hailstorms, tornadoes or thunderstorms. It is common to have large hail north of a tornado track.

3.8.3 Previous Occurrences and Impact

Hail events are very common in Coosa counties. Since 2006, there have been 15 recorded instances of hailstorms.

On April 10th, 2009 a supercell thunderstorm brought large amount of severe weather to Central Alabama. During this weather event the communities of Nixburg in Coosa County and in Our Town in Tallapoosa, County suffered significant damage from hail. In Nixburg and Our Town, NOAA reported hail with the diameter of 44.05 mm (1.75 inches), which destroyed roofs, windows in housing, and automobile damage. According to the NOAA, there was $20,000 of damages associated with this hail storm in Coosa County. This was the only event that NOAA had recorded monetary damages.

3.8.4 Probability of Future Occurrences

The probability of future hail events has been determined to be high for the planning area signifying 100% annual probability for occurrence. The probability of a hail event in Coosa County was to be Minor to Limited with minimal disruption. Table 3.18 shows the future probability of future occurrences for hail event.

Table 3.18: Probability of Future Occurrences Hail

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Hail	**Coosa County (entire)**	22	13	1.69
Hail	Town of Goodwater	4	13	0.31
Hail	Town of Kellyton	1	13	0.078
Hail	Town of Rockford	5	13	0.38
Hail	Unincorporated County	12	13	0.92

Source: National Weather Service, Storm Event Database, 2020

3.9 High Winds & Thunderstorms

3.9.1 Description

Coosa County is highly susceptible to high winds and thunderstorms. High wind events may occur any time of year, but occur more often in spring, summer, and fall seasons. Thunderstorms are weather events that form through the clash of different air masses, which may cause storms that occur singularly, in lines, or in clusters – sometime with very little warning. The effects of thunderstorms may impact a small area or multiple jurisdictions. Thunderstorm events may cause straight-line winds, hail, and lightning, and if long-lasting or severe, may cause flooding or tornadic activity. Severe thunderstorms may produce damage equivalent to tornadoes over a larger spatial area. Severe thunderstorm events may occur year-round in the region, but the peak of severe thunderstorm events is in spring with a smaller peak in fall.

The Division D Emergency Management Directors chose to address tornadoes as a separate hazard event.

3.9.2 Extent by Jurisdiction

Severe thunderstorms are defined by the National Weather Service as having wind speeds of 58 miles per hour or higher, producing hail at least ¾" in diameter, or possessing tornadic capabilities. The effects of severe thunderstorms will have varying spatial effects throughout the region area from widespread to localized impacts. Table 3.19 showcases the extent of damage that can occur from high winds/thunderstorms for all jurisdictions.

Table 3.19: High Winds and Thunderstorms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
High Winds & Thunderstorms	The National Weather Service defines high winds as "Sustained wind speeds of 40 mph or greater lasting for 1 hour or longer, or winds of 58 mph or greater for any duration." The National Weather Service defines a severe thunderstorm as "A thunderstorm that produces a tornado, winds of at least 58 mph **(**50 knots or ~93 km/h), and/or hail at least 1" in diameter**.** Structural wind damage may imply the occurrence of a severe thunderstorm. A thunderstorm wind equal to or greater than 40 mph (35 knots or ~64 km/h) and/or hail of at least ½" is defined as approaching severe."

3.9.3 Previous Occurrences and Impact

Each jurisdiction in Coosa County are vulnerable to the effects of high winds/thunderstorms and each county will experience multiple occurrences of this hazard every year. There have been 20 documented severe Thunderstorm/Wind events between January 1st of 2006 and March 31st, 2020. During these events, there was $50,000 in property damages, $0 in crop damage, 0 injuries from severe Thunderstorm/Wind events in the County. Due to the isolated nature of these events, it is probable that many other damaging occurrences of high winds/thunderstorms have occurred but have gone unreported or unrecorded.

All of Coosa County is uniformly susceptible to the occurrence of severe thunderstorms and high winds. High winds/severe thunderstorms can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific areas of storm effects. The average wind speeds are around 55 mph with guest up to 80 during these severe thunderstorm events. The following events are examples of impacts felt by various jurisdictions Coosa County due to high winds and thunderstorm events.

On April 4th 2011, a line of thunderstorms moved crossed the region producing strong winds, heavy rains, and large hail. NOAA as recorded 1 mobile home received roof damage and a tree destroyed a boat, which caused at least $20,000 in damages. On July 7th, 2008, a strong line of thunderstorms torn down trees and power lines near the unincorporated community of Weogufka. During an unseasonably warm winter a strong thunderstorm passed though Coosa County resulting in uprooted trees and downed power lines along CR-56 and Marble Valley Road.

3.9.5 Probability of Future Occurrences

Severe thunderstorm/high wind events that cause property damage and potential injuries/death may affect the planning area throughout the year and have averaged multiple occurrences a year in recent history. The probability of these events has been identified as High, with a 100% annual probability. The impact has been determined to be Limited.

Table 3.19: Probability of Future Occurrences Hail

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Flash Flood	**Coosa (entire)**	20	13	1.53
Flash Flood	Town of Goodwater	1	13	0.076
Flash Flood	Town of Kellyton	0	13	0.0
Flash Flood	Town of Rockford	1	13	0.076
Flash Flood	Town of Cusseta	18	13	1.38

Source: National Weather Service, Storm Event Database, Thunderstorm Winds 2020

3.10 Landslides

3.10.1 Description

A landslide is a gravity-aided downward and outward movement of soil, rock, and vegetation that lies normally on a sloped surface. Landslides can occur from both natural and human-induced events. Common causes are composition changes on the surface, excessive rain, and construction practices.

Typically, areas that are prone to landslides are on or at the base of steep slopes, base of drainage channels, developed hillsides where leach field septic systems are used, and near previous landslide areas.

3.10. Extent by Jurisdiction

The Geologic Survey of Alabama has developed a map of landslide susceptibility based on state data, on Alabama rock types and USGS data on topography. Coosa County generally have a Very Low to No landslide susceptibility risk, with very isolated pockets of high risk. Up to this point there have not been any landslides recorded by the EMA offices in Coosa County.

There is not a magnitude scale for landslides. Therefore, defining the extent of landslides is subjective and difficult to predict. Due to the lack of susceptibility throughout the planning area, the extent of landslide incidents is estimated to be primarily isolated damages to structures and infrastructure.

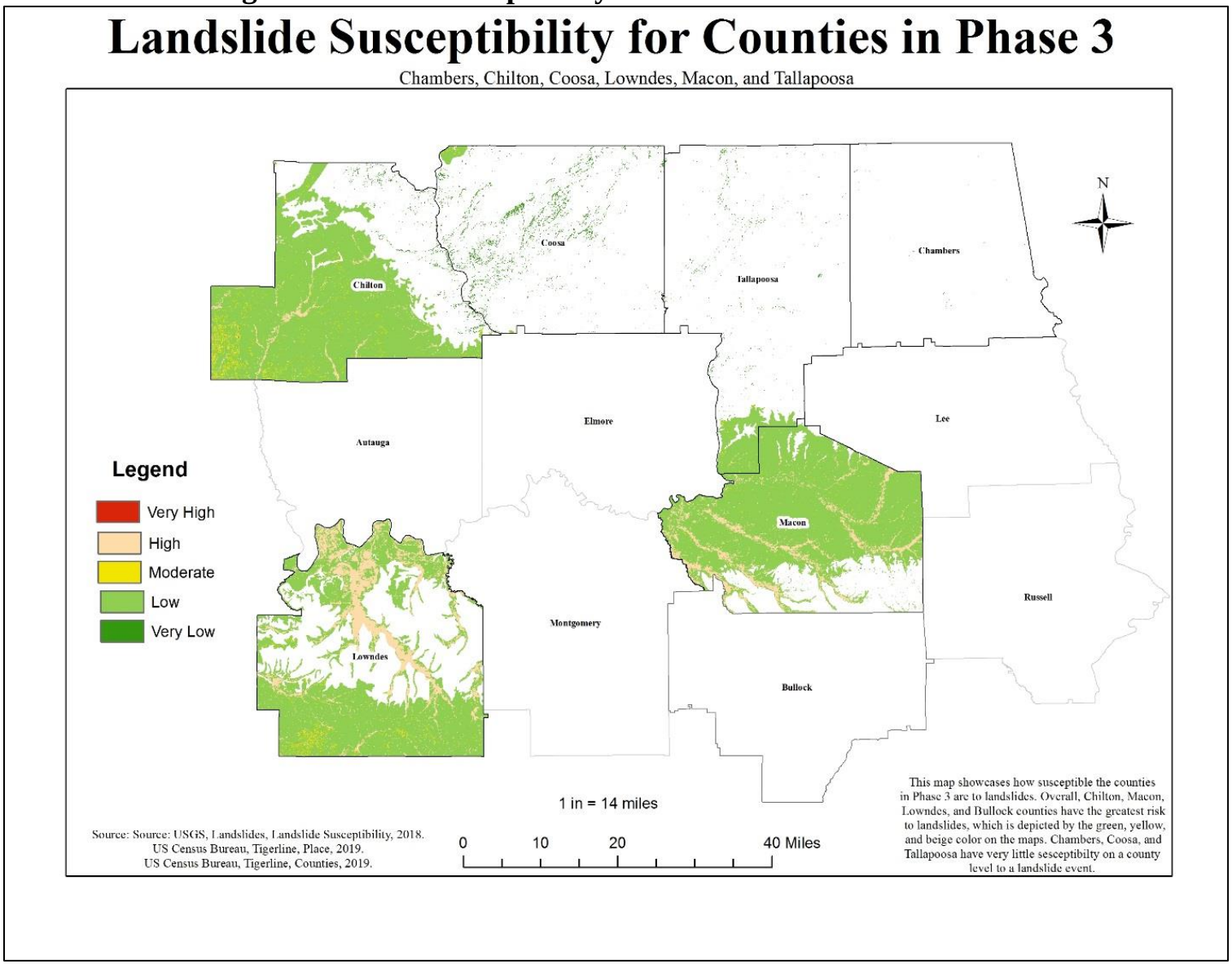
Table 3.20: Landslides Extent of All Jurisdictions

County	Extent
Coosa County (entire)	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Town of Goodwater	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Town of Kellyton	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Town of Rockford	Minimal movement of land. Potentially impacting a home, business, or agricultural lands
Unincorporated County	Minimal movement of land. Potentially impacting a home, business, or agricultural lands

3.10.3 Previous Occurrences

The GSA map does not have dates listed detailing time frame, so it is from an indeterminate amount of time. There are zero landslides reported in historical record Coosa County since the last update. No injuries, deaths, or damage estimates were reported. Figure 13 depicts that a majority Coosa County has a very low susceptibility to landslides, and these areas are located near rivers, creeks, or streams.

Figure 13: Land Susceptibility



3.10.4 Probability of Future Occurrences

Based on historical information and local knowledge, the probability of landslides in Coosa County was ranked as Moderate to None.

3.11 Lightning

3.11.1 Description

Lightning is a discharge of electrical energy that creates a "bolt" that may stretch from clouds to the ground. An actual lightning strike only affects a small area, though many storms have thousands of lightning strikes that occur during an event. According to the National Weather Service, lightning will follow a path of least resistance, typically striking the tallest object in a given area, which could include a person, a power pole, or trees. Lightning may cause building damage due to starting a fire, deaths through striking a person directly or in the immediate vicinity, and may cause wildfire in some cases.

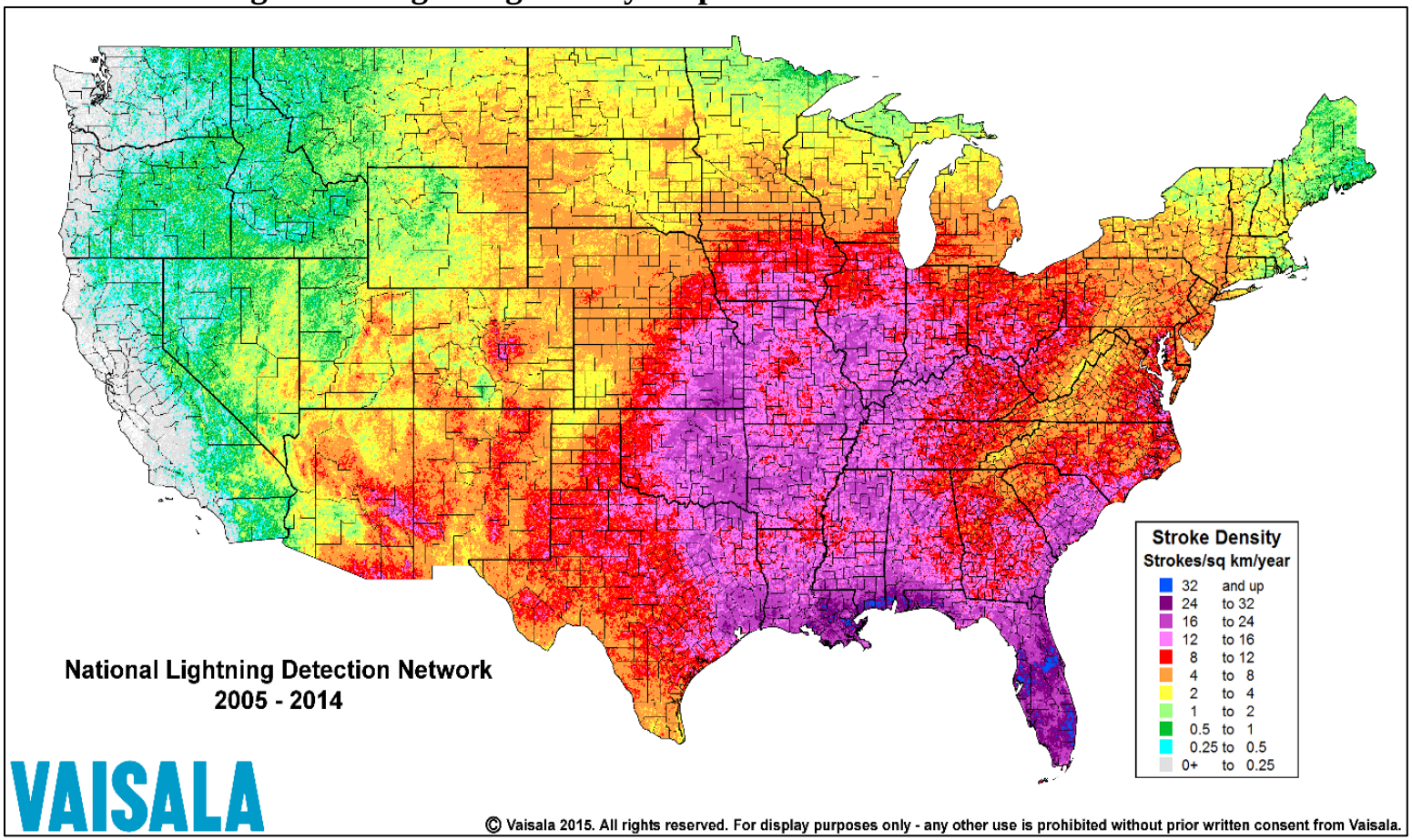
3.11.2 Extent by Jurisdiction

There are some 16 million lightning storms in the world every year. The rapid heating and cooling of air near the lightning cause thunder. Lightning is a major threat during a thunderstorm. In the atmospheric electrical discharge, a leader of a bolt of lightning can travel at speeds of 130,000 mph and can reach temperatures approaching 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. Table 3.21 shows the extent to which all jurisdictions in Coosa County are susceptible to frequent lightning. Figure 14 is a lightning density map, which showcases that Coosa County receive 8 to 24 strikes of lightning per km per year.

Table 3.21: Lightning Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Lightning	Lightning considered frequent when 4 to11 flashes take place per square km

Figure 14: Lightning Density Map



3.11.3 Previous Occurrences and Impact

Coosa County have been subjected to storms and lightning strikes. Since 2006 1 injuries, 0 deaths, or no monetary damage has been recorded by NOAA, but the damage could have gone unreported. All jurisdictions in Coosa County are uniformly susceptible to the occurrence of lightning, which can result in injury to a person, damage or destruction to a home, damage to electronics, and start fires. The following examples show how lightning could impact each jurisdiction in Coosa County. According to NOAA, on August 12th, 2013 1 person was injured when they were struck by lightning during an isolated thunderstorm.

3.11.4 Probability of Future Occurrences

Lightning events that have the potential to cause property damage and potential injury/casualty may affect Coosa County throughout the year. The probability of these events is high for all four counties, however, the impact ranges between minor and limited. Table 3.21 shows the probability of future lightning occurrences in Coosa County.

Table 3:21 Probability of Future Occurrences for Lightning

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Lightning	**Coosa County (entire)**	1	13	0.076923
Lightning	Town of Goodwater	1	13	0.076923
Hail	Town of Kellyton	0	13	0
Hail	Town of Rockford	0	13	0
Hail	Unincorporated County	0	13	0

Source: National Weather Service, Storm Event Database, 2020)

3.12 Sinkholes

3.12.1 Description

According to the Geological Survey of Alabama (GSA), the most common cause of land subsidence in Alabama is the development of sinkholes in areas that have underlying soluble limestone, dolomite, or salt rocks, such as karst terrain. Activities that can cause land subsidence, or sinkholes, include a change in the water table level, change in groundwater flow characteristic, and surface loading that puts pressure on the land surface, including human-induced causes.

3.12.2 Extent by Jurisdiction

The Alabama State Hazard Mitigation Plan states that the GSA considers sinkholes to be more prevalent in northern Alabama due to geology. The state plan also indicates that groundwater withdrawal is an important driver of sinkhole development in Alabama. A previous study estimated that more than 4,000 human-induced sinkholes and areas of subsidence have occurred in Alabama since 1900. Most have occurred since 1950, and most have resulted from a decline in the water table associated with groundwater withdrawals. Sinkholes related to wells tend to be located within 150 meters of the site of the withdrawal, while sinkholes related to quarry operations tend to be located within 600 meters of the site of withdrawal. According to the Alabama State Hazard Mitigation Plan, recent sinkholes associated with groundwater withdrawal have ranged from 1 to 90 meters in diameter, and from 0.3 to 30 meters in depth.

There is no magnitude scale for land subsidence or sinkholes. Therefore, defining the extent of these hazards is subjective and difficult to predict.

Table 3.22: Sinkhole Extent by Jurisdiction

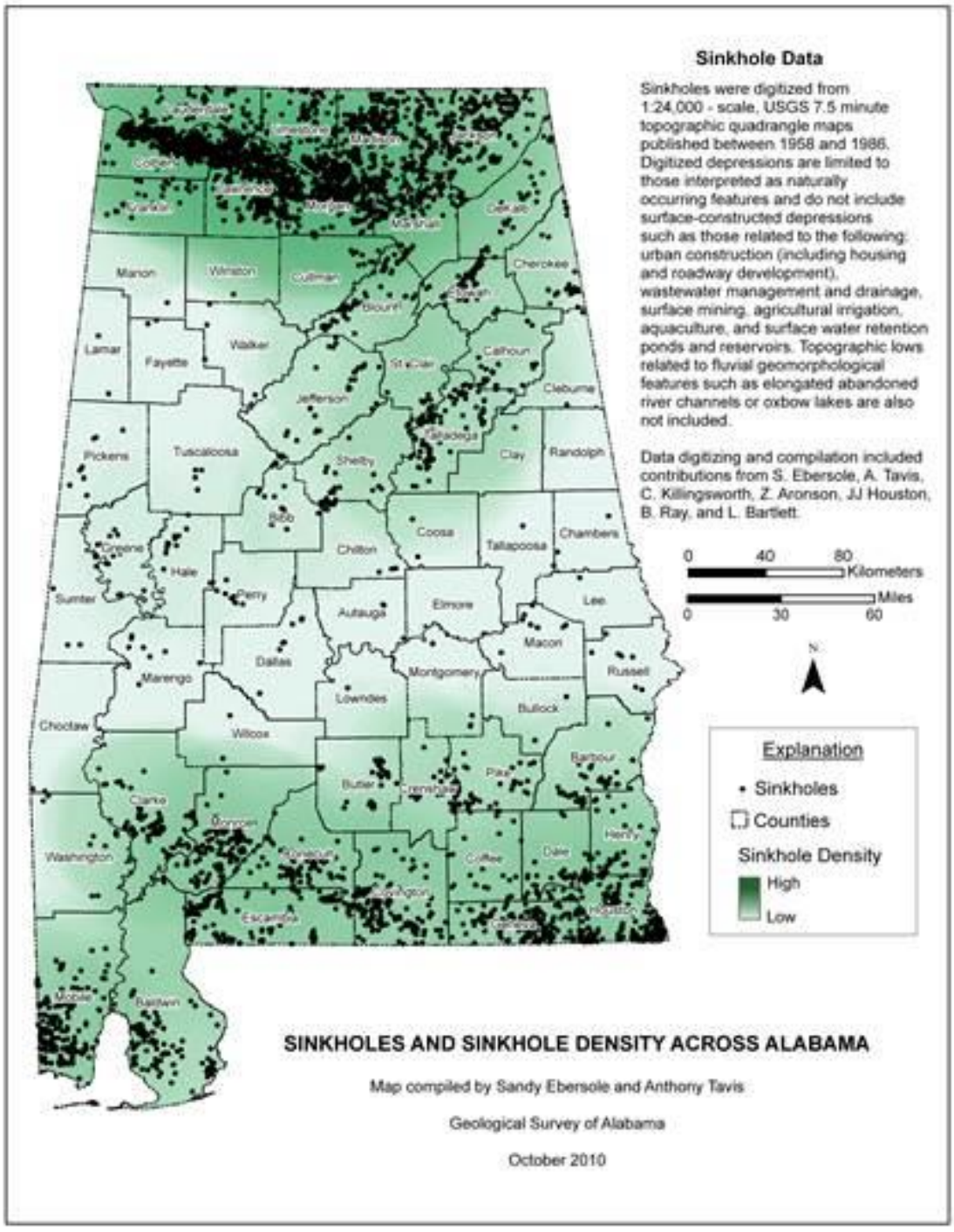
Hazard	Jurisdiction	Extent
Sinkholes	**Coosa County (entire)**	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Goodwater	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Kellyton	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Town of Rockford	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse
Sinkholes	Unincorporated County	Collapse of the land resulting in cave in, structural damage to buildings or infrastructure such as cracks, bulges, sags, or complete collapse

3.12.3 Previous Occurrences and Impact

Sinkholes can occur as a result of drainage issues and past mining operations (rock quarry). Damages that can occur would be related to structural damage, septic systems, vehicles, and possibly injuries involved.

Figure 15 shows the historical sinkholes that have occurred in Coosa County prior to 1987. In 1980 there were nine sinkholes reported. These were all clustered in the northeast corner of the county. It is unclear if these sinkholes were natural or manmade due the lack of information in the historical record.

Figure 15: Historic Sinkholes Locations



Source: USGS, GSA, Alabama, Geological, Hazards, Historic Sinkholes, 2021

3.12.4 Probability of Future Occurrences

Although sinkholes in the planning area are possible, they have been rated as a very low probability of occurrence. The impact has been determined to be minor.

Table 3.23: Probability of Future Occurrences Sinkholes

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Sinkholes	**Coosa County (entire)**	0	13	0
Sinkholes	Town of Goodwater	0	13	0
Sinkholes	Town of Kellyton	0	13	0
Sinkholes	Town of Rockford	0	13	0
Sinkholes	Unincorporated County	0	13	0

Source: Geological Survey of Alabama, Sinkhole Data, 2020.

3.13 Tornadoes

3.13.1 Description

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 the year. 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 weather event. According to NOAA, 13 minutes is the average amount of time a person must find a safe place from a tornado.

Tornadoes are most prevalent in the United States and occur mostly in the Midwest, Southwest, and Southeast. Alabama ranks 4th nationally for the number of killer tornadoes experienced, and 5th for the number of fatalities as a result of a tornado. The entire state and Coosa County are susceptible to tornadoes. Tornadoes can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific area of tornado strikes.

3.13.2 Extent by Jurisdiction

Tornado intensity is classified using the Enhanced Fujita (EF) Scale, which is an update to the original Fujita Scale, implemented in February 2007. The EF Scale is still primarily a wind estimate indicator that is based on three-second gust derived by the levels of damage that occur during a tornado event. Table 3.24 shows the breakdown of the Enhanced Fujita Scale, and Table 3.25 shows the extent of damage all jurisdictions can receive.

Table 3.24 Tornado Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tornado	All jurisdictions can be impacted by tornadoes. Tornadoes can be as minor as EF0, which would product limited damage such as broken branches, minor roof damage, small or trees were blown down. These events can be as deadly and dangerous as an EF5, which would produce destruction of foundational homes, trees snapped/uprooted, or total destruction of vehicles.

Table 3.25: Enhanced Fujita Scale

EF/F Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	Damage Description
0	45-78	0	65-85	Light Damage: Some damage to chimneys; tree branches broken off; shallow-rooted trees pushed over; sign boards damaged.
1	79-117	1	86-110	Moderate Damage: The lower limit is the beginning of hurricane wind speed. Roof surfaces peeled off; mobile homes pushed off foundations or overturned; moving autos pushed off roads.
2	118-161	2	111-135	Considerable Damage: Roofs torn off from houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.
3	162-209	3	136-165	Severe Damage: Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown; large missiles generated.
4	210-261	4	166-200	Devastating Damage: Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown; large missiles generated.
5	262-317	5	Over 200	Incredible Damage: Strong framed houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through air in excess of 100 yards; trees debarked.

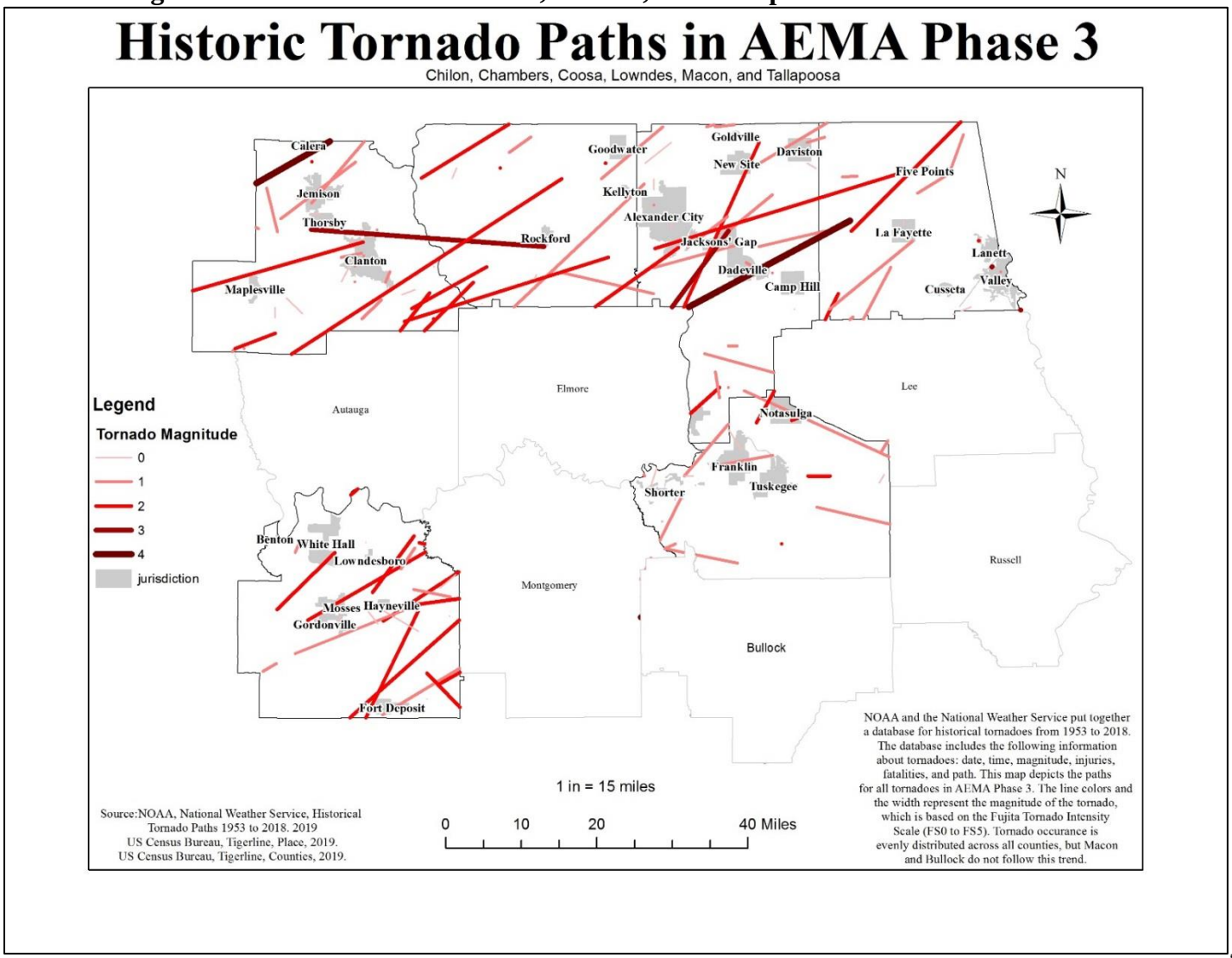
Source: NOAA, NWS, Weather Forecast Office Norman, Oklahoma, Enhanced Fujita Scale

3.13.3 Previous Occurrences and Impact

According to the National Centers for Environmental Information, Storm Events Database, since 2006 there have been 11 documented tornado events Coosa County, resulting in $294,000 damages and 2 injuries. According to the historical record the most costly tornado struck Coosa County on February 6th, 2006 at 6:25 am. NOAA reported that this tornado touched down in the Hidden Valley areas of Coosa County and traveled about 2 miles northeast. Majority of the major destruction took place near County Road 56. Power lines snapped, mobile homes flipped, and hundreds of trees snapped or uprooted. The recorded destructive cost at least $115,000 in property damages On April 4th 2015, an EF-2 tornado crossed into Coosa County from Elmore County and moved northeast towards Lake Martin. One home suffered significant damage during this event and resulted in 2 people being injured. The event cost at least $14,000 in property damages.

Over the last 13 years of the 11 tornadoes that have crossed in Coosa County, 2 classified as EF-2, 4 as EF-1, and 5 were EF-1.

Figure 16: Tornadoes in Chambers, Chilton, and Tallapoosa counties



Source: NOAA, National Centers for Environmental Information, Storm Events Database, Chilton, Chambers, Lowndes, Macon, and Tallapoosa counties 1996-2019.

3.13.4 Probability of Future Occurrences

All jurisdictions in Coosa County are vulnerable to tornadoes. Based on historical data, the annual probability of a tornado event has been deemed high. The impact of tornadoes in this region is identified as Catastrophic. Table 3.26 shows the future probability that a tornado will occurrence in each jurisdiction.

Table 3.26 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Tornado	**Coosa (entire)**	11	13	0.84
Tornado	Town of Goodwater	0	13	0.08
Tornado	Town of Kellyton	0	13	0.00
Tornado	Town of Rockford	1	13	0.077
Tornado	Unincorporated Coosa County	10	13	0.77

Source: National Weather Service, Storm Event Database, Tornado, 2020)

3.14 Tropical Depression/ Tropical Storm / Hurricane

3.14.1 Description

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 Strom:** A tropical cyclone with maximum sustained winds of 39-73 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 are 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 rotating low-pressure weather system that has organized thunderstorms with constant wind speeds of 74 mph. At the center of a hurricane is an eye, which is a peaceful break from the storm. As a hurricane approaches shores, the sky will darken, winds will pick up, and the water will be pushed inland. Once a hurricane moves onto land it will quickly weaken due to the lack of access to warm water, which is the energy source of the storm. Since Coosa County are hundreds of miles from the Atlantic Ocean or the Gulf of Mexico, these jurisdictions are not at have only expired tropical storms or tropical depressions because hurricanes cannot maintain their strength this far inland.

Historically Coosa County have never been hit by a hurricane, only the degraded remnants of a hurricane, tropical storm, or tropical depression, but Coosa County have been impacted. All jurisdictions in Coosa County are susceptible to the occurrence of sustained high heavy rainfall, and tornadoes that are associated with a tropical storm, or tropical depression.

3.14.2 Extent by Jurisdiction

Hurricane Intensity is classified using the Saffir-Simpson Hurricane Wind Scale, which categorizes hurricane events primarily using maximum sustained winds, but also examining barometric pressure readings and potential storm surge. This gives an estimate of the potential damage that will occur from a hurricane. The Saffir-Simpson Scale is shown in Table 3.34.

Table 3.27: Saffir-Simpson Hurricane Wind Scale

Category	Sustained Wind Speed	Type of Damage Due to Hurricane Winds
1	74-95	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, and 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	Extremely dangerous winds will cause extensive damage: 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	Devastating damage will occur: Well-build framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4	130-156	Catastrophic damage will occur: 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.
5	157 or higher	Catastrophic damage will occur: 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.

Source: National Weather Service National Hurricane Center (2014)

Table 3.28 demonstrates the extent of damage all jurisdictions in Coosa County could expect if a tropical event like a tropical storm or tropical depression occurs.

Table 3.28: Tropical Depression and Tropical Storm Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Tropical Depressions/ Tropical Storms/ Hurricanes	A tropical storm with the maximum sustained surface winds ranging from 39-73 mph or a Category 1 (or higher) hurricane with maximum sustained winds 74

	mph (up to +157 mph) will produce damage to homes, persons, utilities, close roads/bridges, structures, crops, and timber. These events can also bring localized flooding.

3.14.3 Previous Occurrences and Impact

According to NCDC/NOAA historical records, there have been two documented tropical depressions/tropical storms that have impacted Coosa County, not including Hurricane Opal which resulted in the State of Alabama being a presidential disaster declaration. This declaration included Coosa County.

The tropical depressions/Storms that have impacted the area resulted in at least $2,000 in property damage as of the 2006 reporting. The property damage has not been listed for the 2017 Tropical Storms that affected the area.

Tropical Depression Fay arrived in Coosa County on August 25th, 2008 bringing heavy rains, sustained winds of 35mph, wind gust up to 49 mph. It is estimated overall 800,000 customers lost power in central Alabama, according to NOAA. Dozens of trees were downed trees resulting in in property damage. Hurricane Fay produced tornadoes throughout Alabama, but this was addressed in section 3.13.

Tropical Depression Ida arrived in Coosa County on September 11th, 2009, resulting in $2,000 worth of damages in each county. Winds up to 40 mph, heavy rains, and uprooted trees were reported. No deaths or injuries were reported in these counties as a result of this storm.

3.14.4 Probability of Future Occurrences

Coosa County is vulnerable to the effects of any tropical events as the storm moves inland. Typically, tropical events will be downgraded to tropical storms and tropical depressions by the time the storm arrives in the region. Tropical depressions and tropical storms have a low to medium probability of occurring, however, the impact in the region has been deemed to be Critical. Table 3.29 shows the probability of future occurrences in of a tropical depression, tropical storm and hurricane in Coosa County.

Table 3.29 Probability of Future Occurrences

Hazard	Jurisdiction	Number Previous Events	2006 to 2009	Frequency Event per Year
Tornado	**Coosa (entire)**	2	13	0.15
Tornado	Town of Goodwater	NA	13	0
Tornado	Town of Kellyton	NA	13	0.
Tornado	Town of Rockford	NA	13	0
Tornado	Unincorporated Coosa County	NA	13	0

*Source: National Weather Service, Storm Event Database, 2020) ** (Tropical Storms/ Tropical Depressions are only recorded at the county level*

3.15 Wildfires

3.15.1 Description

According to the Alabama State Hazard Mitigation Plan, 2018, a wildfire can be defined as any non-structural fire that occurs in the wild. Wildfires are uncontrolled blazes fueled by weather, wind, and dry underbrush that can burn a significant amount of land in a very short period of time. Three conditions need to be present for a wildfire to burn: fuel, oxygen, and a heat source.

A Wildland-Urban Interface Fire is a fire in a geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

Wildfires have a significant impact on the United States. Over 100,000 wildfires clear up to 5 million acres of US land every year. Wildfires can destroy everything in their path. Three distinct types of wildland fires have been defined and include: naturally occurring wildfire, human-caused wildfire, and prescribed fire. Wildfires are typically human caused, which distinguishes them from other natural disasters.

Based on an analysis by the Alabama Forestry Commission, there are 1,350 potential wildland-urban interface communities at risk of wildfire damage in Alabama, and the number of these communities is projected to increase with time, according to the Alabama HMP.

3.15.2 Extent by Jurisdiction

The magnitude of wildfire events is often classified as total number of acres burned and destructive impacts to people and property, including house fires and casualties. These elements are greatly dependent on other factors, such as weather conditions, available fuel, topography, and existing wildfire mitigation capabilities. Table 3.30 shows the extent or damage a wildfire could have on each jurisdiction.

Table 3.30: Wildfire Extent by Jurisdiction

Jurisdiction	Extent
Coosa (entire)	Property and timber damage over large acreage (100+)
Town of Goodwater	Property and timber damage over very small acreage (5+)
Town of Kellyton	Property and timber damage over very small acreage (5+)
Town of Rockford	Property and timber damage over very small acreage (5+)

Over the last 13 years, there have been 285 fire and 4,200 acres burned in Coosa County. The most common cause of wildfires in this region is debris burning by residents.

In Coosa County 502 acres were burned on November 30th, 2019 when a fire broke out, but it was contained in three hour later. This was the largest fire reported in Coosa County since 2009. The average fire size over the last 10 years in Coosa County burned 14.7 acres. For the locations of wildfires please refer to the wildfire Table in the 7.4 Appendix.

3.15.4 Probability of Future Occurrences

The jurisdictions in Coosa County counties are vulnerable to wildfires. The Alabama Forestry Commission classifies the jurisdictions in Coosa County as having a range of low fire occurrence to Extreme as indicated on the map. The overall probability of this hazard risk has been determined

to be very low to medium depending upon the amount of urbanization. Although the Wildland-Urban Interface is high at these same locations. The impact has been deemed to be minor/limited. Please refer to Table 3.31 for the probability of future wildfire occurrences.

Table 3.31: Probability of Future Occurrences Wildfires

Hazard	Jurisdiction	Number Previous Events	Acres Burned	2009 to 2019	Frequency Event per Year	Average Acres Burned a Year
Wildfire	**Coosa County (entire)**	285	4,202.31	10	28.5	0.153846
Wildfire	Town of Goodwater	NA*		10	NA*	0
Wildfire	Town of Kellyton	NA*		10	NA*	0
Wildfire	Town of Rockford	NA*		10	NA*	0
Wildfire	Unincorporated County	NA*		10	NA*	0

Source :(Alabama Forestry Commission, Autauga, Elmore, and Montgomery counties, 2020)
*** (This data is not recorded by the Alabama Forestry Commission by jurisdiction, but only at the county level)*

3.16 Winter Storms

3.16.1 Description

Winter storms normally cause heavy amounts of frozen precipitation (snow, freezing rain, and ice), windy conditions, and extreme cold. The effect of winter storms on a community depends on how equipped the community is to handle the storm, as winter storms can cause owner outages, transportation problems, and collapsed roofs on structures. These events may make roads impassable and disrupt power. Loss of communications is a common occurrence during a severe winter storm. In Alabama, a snowfall of two inches or more is considered heavy snow, especially the further south you get in the state at the storm southern end of the state.

The related emergencies include hypothermia and other cold-related maladies. Fires break out due to improvised heating apparatuses is common, as is carbon monoxide poisoning. There usually is sufficient warning for the public to take protective steps. The facilitation of emergency heating and food is critical, with emergency heating centers and the rescuing of stranded motorists becoming priorities. These events are typically short-lived in the Coosa County. The immediate threat from a winter storm, heavy snow or ice storm is traffic accidents, people trapped in their homes without supplies or hear, power outages, frozen water lines, and physical overexertion. The long-term damages of a multiple-day storm are extreme hardship on special populations, death from exposure to cold temperatures, interruption of services, and power outages.

Areas in this region of Alabama receive winter storms infrequently and have only minor recorded damages. The entire Coosa County are susceptible if a winter storm developed in the region, but these are typically short-lived.

3.16.2 Extent by Jurisdiction

Winter storms may have varying effects on the planning area dependent upon the severity and length of time. There is limited documentation on winter storms in Coosa County because these events do not take place annually. Table 3.32 demonstrates the extent of damages that can take place during a winter storm in all jurisdictions.

Table 3.32: Winter Storms Extent by Jurisdiction

Hazard	Extent (All Jurisdictions)
Winter Storms	Snow (six or more inches) and ice cause damage to homes, utilities, car accidents, close roads/bridges, and down trees.

3.16.3 Previous Occurrences and Impact

Since 2006, Coosa County has experienced 2 winter weather events and 2 winter storms, which resulted in snow, ice, or mixture. There were no injuries or deaths as well as zero number of monetary damages recorded from any of the winter weather/ storms.

In January of 2014, Coosa counties received a one to four inches of snowfall during a winter storm. Due to the accumulation of ice and snow on roadways causing travel to be dangerous throughout all counties. Typically, these events caused road closures, vehicle accidents, and limited visibility in the region, but zero damages, injuries or deaths were directly caused by a winter storm.

On December 15th, 2010, a weak winter storm arrived in Alabama, which resulted in temperatures near or below freezing in Coosa County. According to NOAA this winter storm brought widespread freezing and sleet, which resulted in the accumulation of ice on the roads making driving conditions hazardous. These conditions resulted in many vehicles accidents on Interstate 65 due to ice on the road. No damages, injuries, or deaths were reported to NOAA.

3.16.4 Probability of Future Occurrences

Based on previous episodes of winter storms in Chambers, Chilton, Coosa Lowndes, Macon, and Tallapoosa counties the probability of future storms is relatively low/medium. However, the impact can be critical based on historical events. Please refer to Table 3.33 for the probability of each winter storm occurrence in each jurisdiction.

Table 3.33: Probability of Future Occurrences Winter Storms

Hazard	Jurisdiction	Number Previous Events	2006 to 2019	Frequency Event per Year
Winter storm	**Coosa County (entire)**	3	13	0.230769231
Winter storm	Town of Goodwater	NA*	13	NA*
Winter storm	Town of Kellyton	NA*	13	NA*
Winter storm	Town of Rockford	NA*	13	NA*
Winter storm	Unincorporated County	NA*	13	NA*

*Source: National Weather Service, Storm Event Database, 2020) ** (winter storms are only recorded at the county level)*

3.17 Technological and Human Caused

Coosa County has a susceptibility to technological and human-caused hazards. General discussions of hazards that may affect the area are described in the subsections below.

3.17.1 Structural Fire

The building codes and zoning ordinances prevent and control structures in most jurisdictions. Structures in commercial districts are the most vulnerable to fire separate from wildfires. This vulnerability can be attributed to more urban building patterns where these structures are located. Rural jurisdictions are typically served by volunteer fire departments, which continuously improve the services to the community. Larger jurisdictions in the planning area are better equipped to deal with responding to structural fires.

3.17.2 Hazardous Material

A hazardous material is handled at some industrial and commercial businesses located in the planning area, which is an ongoing hazard due to the transportation of material. An accident with hazardous material could have negative impacts on the nearby areas. This section will be updated when more information regarding hazardous material is received

3.17.3 Terrorism

FEMA classifies terrorism as using illegal force or violence against persons or property for the purpose of intimidation or ransom, performed by a domestic or international group. The threat of terrorism places certain facilities at greater risk, including government facilities, high profile areas, and utility infrastructure. Please refer to the examples below about different types of terror acts.

Biological or Chemical Attack: Liquid or other containments that can be dispersed to cause causalities and negative psychological impact

Conventional Attacks: Active shooter, an individual or small group, which actively engaged in killing or attempting to kill people in a populated area.

Cyber Attacks: Normally used to gain information or negatively affect operations fuel to intrusion into a computer system or server.

Hostage Situation: Holding people against their will in order to achieve demands, which can be on the realm from international political situations to local domestic situations.

State and local agencies regularly conduct exercises and plan for these hazards.

SECTION 4. Vulnerability

4.1 Jurisdictional Vulnerability by Hazard
4.2 Risk Index
4.3 Probability of Future Occurrences
4.4 Total Population and Property Valuation Summary by Jurisdiction
4.5 Critical Facilities/ Infrastructure by Jurisdiction

4.1 Jurisdictional Vulnerability by Hazard

4.1.1 Dams

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

People and communities in flood hazard areas and other low areas downstream from major dams have the greatest vulnerability from dam failure. Although the likelihood of dam failure is very low, a failure could cause serious injury to persons, loss of life, damage, and destruction of buildings, structures, and infrastructure. Persons living in manufactured homes or homes older than 30 years near these dams are at risk if the dams fail. Currently, we do not have the specific number of persons, buildings, and structures that are vulnerable to a dam failure for any jurisdiction in Coosa County. This information will be provided in the next Hazard Mitigation Plan in five years. In Coosa County, one dams' hazard potential are classified as significant, A W Rayfield dam. Two dams located on the Coosa River are classified as high, Lay Dam, and Mitchell Dam, but these are regulated by Alabama Power.

This section focuses on 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. High-risk dams are those with the capacity to cause both property and casualties in the downstream areas should the dam fail. There are several high-risk dams located in each of the counties for Phase III of the Hazard Mitigation plan. Damage to structures, injury, and potential loss of life are all possibilities if the dams were to fail due to a catastrophic flood event or an earthquake. All these possible events are highly unlikely. A structural failure, such as leakage, cracking, or erosion is more likely to occur. Water may move beneath a structure during seasonal rainfall events or as headwaters are backed up to higher elevations behind the dam. Slow and continuous leakage may undermine structural integrity. Earthen dams are the most susceptible, which is the most common type of dam found in Coosa County. Concrete structures with spillways and controls would be less susceptible. The larger dams like Lay Dam and Mitchell Dam on the Coosa River are operated by Alabama Power and are guided by Emergency Actions Plan and Emergency Management Plans that address conditions of dam failure.

4.1.2 Drought

There is not a risk of losses for droughts based on a calculation from the historical record because zero damages have been reported for Chambers, Chilton, and Tallapoosa counties. The lack of evidence does not dismiss the risk associated with drought since qualitative records exist to show evidence of significant crop losses and risk to public water supply during drought. Droughts are potentially damaging to local agriculture and place the public at risk through water shortages in all jurisdictions in central Alabama. A significant drought could impact the drinking water supply from the following sources: Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton.

When a severer drought occurs the water, levels are depleting any jurisdiction (public water system or private well) resulting in a water shortage for the communities, which would impact all 11,470-

person water supply or private wells. A drought would impact the Agricultural, Fishery, Forestry, and Hunting industries, which would impact 4.0% Coosa County's economy. The livestock, agricultural and forestry lands are mostly in unincorporated portions of Coosa County. The rivers and lakes such as Lake Martin and Coosa River provide large areas for recreation for locals and tourist. The people bring in outside dollars for the local economies, but when a drought takes place the local economy suffers due to water shortages.

A drought can potentially impact all 11,470 residents living in any jurisdiction in Coosa County. The impacts felt by the communities would be as followed: diminished ground and surface water; loss of crops; decrease in drinking water supply; private and public wells dry up. A drought can lead to shortages of water, strain public utilities, and major agriculture and tourism losses. The risk of drought is low to medium.

4.1.3 Earthquakes

While damage from a major earthquake could be catastrophic, the risks are very low for Coosa County. According to the USGS historical records, zero earthquakes have been reported in Coosa County.

Earthquakes could potentially impact all 118,392 residents and all structures in Coosa County. If a large earthquake from the New Madrid, South Carolina seismic zone, or the southern Appalachian seismic zone. A significant earthquake is highly unlikely while an improbable one could result in minor damage and possible minor injury in the counties. Since the overall risk of an earthquake is very low, the risk to lives and buildings minimal. While the risk is very low, it is important that the mitigation practices for earthquakes compliment other mitigation strategies and should be reviewed and incorporated into the mitigation plan.

The losses from earthquakes cannot be calculated based on the historical recorder since there have been zero earthquakes recorded in Coosa County This evidence does not dismiss the risk associated with earthquakes. The probability of any type of losses from an earthquake in any jurisdiction in Coosa County is very low.

4.1.4 Extreme Temperature

Extreme temperatures in Coosa County can impact all 11,470 residents. Prolonged periods of high or low temperatures are not likely to impact the structures and facilities. However, these events might work in tandem with droughts or winter storm events. The probability of extreme temperatures in the planning area is rated as a low to medium, but this is primarily for extreme heat. The impact of a cold event is rated as low to critical largely based on duration these events in the region have been short-lived. The following persons, industry, and assets are vulnerable to extreme temperatures in Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: elderly population (75+), children, water sources (public and private), livestock/animals, agricultural products, persons living in manufactured homes, a person under the poverty line, bridges (extreme cold), fisheries, forestry, as well as utilities such as power lines and water lines/pipes (extreme cold.). It necessitates a review of mitigation planning techniques to avoid injury to vulnerable populations, in particular the elderly population.

4.1.5 Flooding

Flooding is localized to areas close to surface water. Flood hazard areas are most readily identifiable when they appear on a flood hazard map produced by FEMA. However, flooding can impact a larger area than the properties shown of the FEMA Flood maps when unpredictable weather patterns occur or changes to drainage features take place. Due to lack of data, it is unclear how many persons are vulnerable to flooding across Coosa County. There are 34 NFIP policies in Coosa County. Based on the FEMA Flood Map persons living in flood zones in the Unincorporated Coosa County, Town of Goodwater, and the Town of Rockford are the most at risk compared to those living in the flood zones.

The unincorporated areas of Coosa County do have potions of each county that are in a floodplain. These floodplains are scattered across the entire jurisdiction along rivers, streams, and rivers from Lake Martin. When flooding occurs residential homes, businesses, roads, utilities, bridges, agricultural lands, and animals/livestock are vulnerable. The most vulnerable would-be persons in poverty, manufactured homes, and the elderly are the most vulnerable to a flood event because it would be a financial burden to recover, to relocate, or to evacuation. The infrastructure in the unincorporated areas of Tallapoosa County can be vulnerable to flooding such as roads, bridges, or utilities. Due to the limited income, these jurisdictions have fixing infrastructure failures can be a long process. The risk associated with flooding was assessed to be high for Coosa County.

Please refer to Table 4.0 to see the NFIP repetitive loss information for Coosa County counties.

Table 4.0 NFIP Repetitive Loss Properties

State	County Name	Occupancy	FMA RL Properties	Insured FMA RL Properties	Total Paid in Claims on FMA RL Properties	NFIP RL Properties	Insured NFIP RL Properties	Total Paid in Claims on NFIP RL Properties
AL	COOSA COUNTY	SINGLE FMLY	-	-	$ -	1	-	$ 158,193

Source: FEMA, Repetitive Loss Properties, 2020

4.1.6 Hail

Hail can impact all 11,470 residents living and all structures in Coosa County. The following persons, industry, and assets are vulnerable to hail in Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: vehicles (damage), home roofs (damage/destruction), windows (break/crack), person (injury or kill), livestock/animals (injury or kill), damage to crops and timber, manufactured homes, buildings walls (not brick), and power lines. The vulnerability to hail is sporadic due to the nature of damages incurred from hail, such as roofs, windows, homes, and automobiles. The overall risk from hail is low to medium, but due to the community's capacity to implement mitigation strategies against hail is nearly impossible. Protection is largely limited to property design, maintenance, and insurance, which are individual

responsibilities. Unfortunately, due to the isolation of hail events, it is not feasible to conduct through public education and community investments.

4.1.7 Landslides

Zero landslide have been recorded by the any of the EMA offices in Coosa County. Since these counties have not experienced a landslide it is difficult to estimate the future damages or the probability of future occurrences. The Primary effects of a landslides in Coosa County would include property damages, road closures, erosion of soil, and infrastructure damages. The overall risk for landslides is low.

4.1.8 Lightning

Lightning strikes can impact all 11,470 residents living, all structures in Coosa County. Vulnerability to lightning is limited to scattered injury or loss of life as well as damages to properties such as homes, electronics, structures, and data losses. The following persons, industry, and assets are vulnerable to lightning in the in Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: elderly persons, children, persons outside during lightning events, power lines, timber/trees, manufactured homes, crops, homes, structures, data not backed up, livestock/animals, electronics plugged into an outlet (computers, household appliances, or data servers), and any person in or on water (pool or boat). The overall risk from lightening is medium, it is necessary to review potential and current mitigation strategies due to how common and highly destructive lightning can be to a community.

4.1.9 Sinkholes

Sinkholes are a minor threat to all jurisdictions Coosa County because these sinkholes are typically manmade. Since sinkhole events are sporadic and rare, these events can potentially cause damage to life or property on a small scale. Homes, manufactured homes, structures, roads, utilities, persons, livestock /animals, and vehicles in all jurisdictions could be vulnerable to a manmade sinkhole. Due to the lack of data on sinkholes in the Coosa County currently, it is not possible to know how many persons, structures, buildings, and infrastructure are vulnerable to sinkholes in each jurisdiction. However, a mitigation plan is provided for sinkholes based on the ability of local jurisdictions to encourage thoughtful land use regulation and good infrastructure design.

4.1.10 Tornadoes

All 11,470 residents living and all structures in Coosa County are vulnerable to tornadoes. Although the location of where tornadoes take place is sporadic, losses from these tornado events can impact a wide variety of persons, assets, and infrastructure in each jurisdiction. The following persons, assets, and industry in Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: elderly person, children, education institutions, medical facilities, persons in vehicles, vehicles, group homes, apartment complexes, manufactured homes, power lines, timber/trees, livestock/ animals, manufacturing facilities, residential homes, dilapidated homes, buildings, structures, roofs, and any power plant.

All 2,105 manufactured homes in Coosa County are at risk of tornado depression because these homes are not built to withstand winds greater than 70 mph. These homes can be toppled, walls roofs can be ripped, or the home can be completed destroyed in a tornado. Persons living in manufactured homes, elderly persons, persons living in apartment complexes, persons living in poverty, and children at home alone may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a tornado event, which can put their lives at risk. These persons are found in every jurisdiction in Coosa County. The economy is also vulnerable to tornadoes if jurisdiction is hit hard enough destroying major retail stores, residential areas, schools, major employers, or utilities. Losing these assets will take a community year to recover and lots of money, which puts negative strains on the economy and causes the local jurisdiction to lose tax revenue. The overall risk from tornadoes is high, it is necessary to review potential and current mitigation strategies due to how sudden and destructive tornadoes can be to a community.

4.1.11 Tropical Depression / Tropical Storm/ Hurricane

A tropical depression, tropical storm, or hurricane can impact all 11,470 residents living and all structures in Coosa County. Losses from high winds, heavy rains, and tornadoes from a tropical depression, tropical storm, or hurricane can impact homes, crops, timber, and infrastructure in all jurisdictions in Coosa County. Risk tropical depression, tropical storm, or hurricane are high and require mitigating responses from all levels of government and from individuals throughout the region.

The potential areas of vulnerability during a tropical depression or tropical storm would be similar to those felt during a severe thunderstorm, flash flooding, or a tornado. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to high winds/thunderstorms in the Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: elderly persons, persons driving vehicles, vehicles, manufactured homes, power lines, power, crops and timber, injury to a person, buildings constructed of wooden or vinyl, dilapidated homes/structures, vehicles, persons living below the poverty line, and windows. Each jurisdiction can have issues due to the damages that high winds and thunderstorms can cause such as roads may be closed due to debris blocking the roads, downed “live” power lines can cause injury or death to persons, loss of power, loss of working traffic signals, disrupted utilities from uprooted trees, and communication issues due to loss of power.

All 2,015 manufactured homes in Coosa County are at risk during a tropical depression or tropical storm because the building materials can suffer from severe damage due to a strong straight line. These homes can be toppled as well as walls and roofs can be ripped off if the straight-line winds are strong enough. Those people may not have a safe place to go or may not be physically able (due to age or disability) to evacuate during a high wind and thunderstorm event, which can put their lives at risk.

4.1.12 Wildfire

Wildfires are a potentially damaging hazard that is experienced in Coosa County. The areas that are closest to fuel sources such as uncleared forestland and timberland can be impacted negatively if a wildfire breaks out. While wildfires can impact all 11,470 residents living and all structures in Chambers, Chilton, and Tallapoosa counties. All persons living in rural areas, 4,032 households in unincorporated Coosa County are at a greater risk to wildfires than those living in urban areas

because of the long emergency response times and longer report times. The elderly living in each jurisdiction is vulnerable to wildfire because these persons may not be able to evacuate, or they may start the fire on accident. Timber, property, wildlife, and injury or loss of human life are all vulnerable to wildfires in each jurisdiction.

4.1.13 Winter Storm

Although winter storms are infrequent, these storms threaten all 11,470 residents living and all structures in Coosa County. Although a catastrophic loss is unlikely, all the jurisdictions in Coosa County are at risk from winter storms. These storms can damage structures that cannot properly bear the weight of ice and snow and can cause injury and loss of life where extended power outages and poor heating conditions may lead to exposure to the elements. The potential areas of vulnerability during the winter storm would be similar to those felt during extremely cold temperatures. As mentioned above in previous sections the following persons, industry, and assets are vulnerable to winter storms Coosa County unincorporated, Town of Goodwater, Town of Rockford, and the Town of Kellyton: elderly persons, utilities (water lines, power, power lines), persons driving vehicles, animals/ livestock, and trees/timber. Each jurisdiction's roads, bridges, traffic signals, and utilities can be vulnerable to winter storms if ice and/or snow accumulated in the jurisdictions. Persons living in poverty are more vulnerable to winter storms because they may not have the means to keep themselves and family members warm with or without power.

4.2 Risk Index

The result of this process was the creation of a risk index, which established numeric ratings for each hazard relative to one another at the end of this section. Based on this analysis, the Stakeholder identified the following Tables 4.1 to 4.4 show the natural hazards as ones that continuously impact the jurisdictions of Coosa County:

Table 4.1: Probability of Future Occurrence and Estimated Damages for Coosa County

Coosa County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	P	M	L	S	3	Failure of Dam on Hatchet Creek West of Goodwater could cause flooding, primarily affecting farms and timber land. Failure of Lay Dam on the Coosa

						River could have similar consequences.
Drought	L	L	CR	L	9	Major impact on agricultural and cattle industries. Residential water supplies, public systems and private wells adversely impacted.
Earthquake	U	S	L	L	2	Fault lines in the area could have modest impact area wide.
Extreme Temperatures	HL	L	CR	M	6	Outside work and play seriously disrupted. Elderly population at risk.
Flooding	P	S	L	S	4	Coosa County Roads 56 and 112 proximate to Weogufka and 16 proximate to Moriah and 119 NE of Ray; Intersection of Alabama Hwys 22 and 231 in Rockford are areas that are routinely vulnerable
Landslides	P	S	L	M	3	Possible land and roadway damage in the County
Lightning	HL	L	CR	M	8	Loss of power, structural damage and, personal injury with widespread potential
Sinkholes	P	S	N	S	3	Possible land and roadway damage in the County

Tornado	L	L	CR	L	10	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.
Thunderstorm	HL	M	L	S	7	Loss of Power, dangerous travel, remote locations all-inclusive danger to individuals and industry.
Tropical Storm /Tropical Depression / Hurricane	HL	L	CR	M	8	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.
Winter Storm	P	M	L	S	5	Serious threat to elderly, many homes not built to withstand the cold.
Wildfire	P	M	CR	M	4	Danger area wide; serious threat to Timber Industry. Major portion of residences are surrounded by timberland.

Table 4.2: Probability of Future Occurrence and Estimated Damages for the Town of Goodwater

Coosa County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	P	M	L	S	3	Failure of Griffin Harris Lake, Bakers Creek Lagoon, Peoples Lake, and Peoples Lake 2 would impact the Town of Goodwater to a minimal capacity due to the size.
Drought	L	L	CR	L	9	Major impact on agricultural and cattle industries. Residential water supplies, public

						systems and private wells adversely impacted.
Earthquake	U	S	L	L	2	Fault lines in Goodwater are located in the northwest corner. These modest impact near the fault line.
Extreme Temperatures	HL	L	CR	M	6	Outside work and play seriously disrupted. Elderly population at risk. The entire Town is vulnerable to extreme temperatures such as heat.
Flooding	P	S	L	S	4	Properties near the floodplains in the Town of Goodwater, which are located in the northwest and southeast portion of Goodwater.
Landslides	P	S	L	M	3	Possible land and roadway damage Town wide
Lightning	HL	L	CR	M	8	Loss of power, structural damage and, personal injury with widespread potential
Sinkholes	P	S	N	S	3	Possible land and roadway damage Town wide
Tornado	L	L	CR	L	10	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise

						a challenging recovery environment.
Thunderstorm	HL	M	L	S	7	Loss of Power, dangerous travel, remote locations all-inclusive danger to individuals and industry.
Tropical Storm /Tropical Depression / Hurricane	HL	L	CR	M	8	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.
Winter Storm	P	M	L	S	5	Serious threat to elderly, many homes not built to withstand the cold.
Wildfire	P	M	CR	M	4	Danger area wide; serious threat to Timber Industry. Major portion of residences are surrounded by timberland.

Tropical Storm /Tropical Depression / Hurricane	HL	L	CR	M	8	Same as Tornado
Winter Storm	P	M	L	S	5	Serious threat to elderly, many homes not built to withstand the cold.
Wildfire	P	M	CR	M	4	Danger areawide; serious threat to Timber Industry.

						Major portion of residences are surrounded by timberland.

Table 4.3: Probability of Future Occurrence and Estimated Damages for the Town of Kellyton

Coosa County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	P	M	L	S	3	Failure of Griffin Harris Lake, Bakers Creek Lagoon, Peoples Lake, and Peoples Lake 2 would impact the Town of Goodwater to a minimal capacity due to the size.
Drought	L	L	CR	L	9	Major impact on agricultural and cattle industries. Residential water supplies, public

						systems and private wells adversely impacted.
Earthquake	U	S	L	L	2	There are no fault lines in Kellyton. The risk of an impact from an earthquake is very minimal.
Extreme Temperatures	HL	L	CR	M	6	Outside work and play seriously disrupted. Elderly population at risk. The entire Town is vulnerable to extreme temperatures such as heat.
Flooding	P	S	L	S	4	There are no floodplains in Kellyton, but localized flooding is possible in roadways.
Landslides	P	S	L	M	3	Possible land and roadway damage Town wide
Lightning	HL	L	CR	M	8	Loss of power, structural damage and, personal injury with widespread potential
Sinkholes	P	S	N	S	3	Possible land and roadway damage Town wide
Tornado	L	L	CR	L	10	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.

Thunderstorm	HL	M	L	S	7	Loss of Power, dangerous travel, remote locations all-inclusive danger to individuals and industry.
Tropical Storm /Tropical Depression / Hurricane	HL	L	CR	M	8	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.
Winter Storm	P	M	L	S	5	Serious threat to elderly, many homes not built to withstand the cold.
Wildfire	P	M	CR	M	4	Danger area wide; serious threat to Timber Industry. Major portion of residences are surrounded by timberland.

Table 4.4: Probability of Future Occurrence and Estimated Damages for the Town of Rockford

Coosa County						
Hazard	Frequency	Magnitude	Severity	Duration	Vulnerability	Geographic Locations Vulnerability
	● Highly Likely	● Large	● Catastrophic (C)	● Long	Rank	What specific areas/persons /infrastructure are at risk to this hazard
	● Likely	● Moderate	● Critical (CR)	● Med.	From 1-10 10=High 1=Low (Median)	
	● Possible	● Small	● Limited (L)	● Short		
	● Unlikely	● Very Small	● Negligible (N)			
Dam failure	P	M	L	S	3	Failure of Griffin Harris Lake, Bakers Creek Lagoon, Peoples Lake, and Peoples Lake 2 would impact the Town of Goodwater to a minimal capacity due to the size.
Drought	L	L	CR	L	9	Major impact on agricultural and cattle industries. Residential water supplies, public

						systems and private wells adversely impacted.
Earthquake	U	S	L	L	2	There are no fault lines in Rockford. The risk of an impact from an earthquake is very minimal.
Extreme Temperatures	HL	L	CR	M	6	Outside work and play seriously disrupted. Elderly population at risk. The entire Town is vulnerable to extreme temperatures such as heat.
Flooding	P	S	L	S	4	There are no floodplains in Rockford but localized flooding is possible in roadways.
Landslides	P	S	L	M	3	Possible land and roadway damage Town wide
Lightning	HL	L	CR	M	8	Loss of power, structural damage and, personal injury with widespread potential
Sinkholes	P	S	N	S	3	Possible land and roadway damage Town wide
Tornado	L	L	CR	L	10	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.

Thunderstorm	HL	M	L	S	7	Loss of Power, dangerous travel, remote locations all-inclusive danger to individuals and industry.
Tropical Storm /Tropical Depression / Hurricane	HL	L	CR	M	8	Loss of Power, severe damage, remote locations, fragile infrastructure, lack of medical facilities, threats of personal injury comprise a challenging recovery environment.
Winter Storm	P	M	L	S	5	Serious threat to elderly, many homes not built to withstand the cold.
Wildfire	P	M	CR	M	4	Danger area wide; serious threat to Timber Industry. Major portion of residences are surrounded by timberland.

4.3 Probability of Future Occurrences and Damage Estimates

Tables 4.5 estimates hazard event frequency of occurrence cumulatively for Coosa County. These estimates were calculated from events recorded over approximately a 13-year time period, 2006 to 2019 based on data from NOAA and local EMA. There is no guarantee the recorded level of hazard events will continue into the future at the same rate. However, the figures below will provide at least a possible estimate of potential damages.

Table 4.5: Probability of Future Occurrence and Estimated Damages for Coosa County

Hazard	Occurrences	Time (Years) 2006-2019	Damages Recorded (Property and Crop)	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	No Information	13	No Information	N/A	N/A
Drought	10 years in this time frame have been associated with a drought event	13	N/A	0.769 event per year	N/A
Earthquakes	0	13	0	Less than 1%	N/A
Extreme Temperatures	11 events (Heat & Cold)	13	$150,000	0.85	$13,636
Flooding***	15 events	13	$1,800,000	1.15 events per year	$120,000
Hail	18 events	13	$0	1.38 events per year	$0
High Winds/Thunderstorms	63	13	$232,000	7.08 events per year	$2,521
Landslides	N/A	13	N/A	N/A	N/A
Lightning	0 Lightning events resulting in damage/injury/death	13	$	N/A	$0
Sinkholes/Land Subsidence*	N/A	13	N/A	N/A	N/A
Tropical Storms/Tropical Depressions/Hurricanes	4 events	13	$13,000	0.31 event per year	$3,250
Tornadoes	14 events	13	$2,192,000	1.08 events per year	$156,571
Wildfire**	210 events	13	2,353.60 acres burned	15.23 events per year	12.44 acres
Winter Storms	4 event days	13	$0	0.31 event per year	$0

The sinkholes were local in nature and are thought to be the result of a now inactive quarry and drainage issues in an existing subdivision. **Due to the historical record on monitory figures for wildfires in Alabama this information was left blank.*Flooding figures may not be accurate due to information available.*

4. 4 Total Population and Property Valuation Summary by Jurisdiction

This data in Table 4.6 to 4.9 is derived from local municipal government and tax valuation from the local revenue offices, as well as the 2010 Census population. This data is for Tax Year 2019. This data provides an estimate of total exposure in the planning area

Table 4.6: Critical Facilities Asset Inventory and Estimates Values- County Assets

COOSA COUNTY				
PARCEL NUMBER	**TOTAL APPRAISED**	**IMPROVEMENTS**	**OWNERSHIP**	
03 05 15 0 000 001.000	11,900.00	0.00	COOSA COUNTY COMMISSION	(OLD STEWARTVILLE SCHOOL)
03 05 15 0 000 015.000	54,500.00	0.00	COOSA COUNTY COMMISSION	(OLD STEWARTVILLE SCHOOL)
03 06 14 0 000 010.000	68,600.00	47,500.00	COOSA COUNTY COMMISSION	WEST COOSA SENIOR CENTER
09 03 07 0 000 011.000	313,700.00	304,200.00	COOSA COUNTY	ENGINEERING COMPLEX
13 06 13 4 003 001.000	2,060,300.00	2,046,700.00	COOSA COUNTY COURTHOUSE & EXTENSION SERV	COURTHOUSE/EXTENSION
13 06 13 4 003 007.000	100,500.00	97,400.00	COOSA COUNTY JAIL/HEALTH DEPT/	DRIVER LICENSE CENTER
13 06 13 4 003 007.001	12,300.00	0.00	COOSA COUNTY	
13 06 13 4 003 009.000	2,900.00	0.00	COOSA COUNTY	
13 06 13 4 003 011.001	2,065,200.00	2,054,300.00	COOSA COUNTY COMMISSION	SHERIFF CENTER/JAIL
13 06 13 4 003 013.003	1,624,400.00	1,615,800.00	COOSA COUNTY COMMISSION	(NEW DEPT HUMAN RES/BD OF ED
13 06 13 4 003 029.001	464,900.00	453,200.00	COOSA COUNTY EMERGENCY COMMUNI	EMA / E911
13 06 13 4 003 029.002	71,100.00	68,800.00	COOSA COUNTY	(ROCKFORD SENIOR CENTER)
13 06 13 4 003 029.003	700.00	0.00	COOSA COUNTY EMERGENCY COMMUNI	
TOTAL	**6,851,000.00**	**6,687,900.00**		

Table 4.7: Critical Facilities Asset Inventory and Estimates Values- Volunteer Fire Department Assets

VOLUNTEER FIRE DEPARTMENTS			
PARCEL NUMBER	**TOTAL APPRAISED**	**IMPROVEMENTS**	**OWNERSHIP**
20 09 31 0 000 017.000	273,900	267,400	EQUALITY VOLUNTEER FIRE DEPART
20 09 31 0 000 030.001	11,400	0	EQUALITY VOLUNTEER FIRE DEPART
20 09 31 0 000 036.000	59,800	58,700	EQUALITY VOLUNTEER FIRE DEPART
20 09 31 0 000 038.001	200	0	EQUALITY VOLUNTEER FIRE DEPART
17 01 12 0 000 011.003	2,300	0	RICHVILLE VOLUNTEER FIRE DEPAR
18 03 07 0 000 006.001	203,500	202,000	RICHVILLE VOLUNTEER FIRE DEPAR
13 06 24 1 001 012.003	73,700	72,500	ROCKFORD VOLUNTEER FIRE DEPART
11 06 23 0 000 007.000	77,700	74,900	RAY VOLUNTEER FIRE DEPARTMENT
11 06 14 0 000 029.000	57,300	54,200	RAY COMMUNITY WATER & FIRE PRO
11 06 13 0 000 001.002	1,000	0	RAY COMMUNITY WATER & FIRE PRO
11 05 16 0 000 008.001	600	0	RAY COMMUNITY WATER & FIRE PRO
10 08 28 0 000 009.002	186,500	179,100	KELLYTON FIRE DEPARTMENT
10 09 32 0 000 011.003	2,000	0	KELLYTON WATER SYSTEM
10 09 32 0 000 011.008	4,100	0	KELLYTON VOLUNTEER FIRE & RESC
10 06 14 0 002 056.001	12,000	0	KELLYTON VOLUNTEER FIRE & RESC
10 06 14 0 002 035.001	18,200	0	KELLYTON VOLUNTEER FIRE & RESC
10 06 14 0 002 045.000	153,600	152,900	KELLYTON FIRE DEPARTMENT

09 05 16 0 000 001.007	45,500	22,500	KELLYTON VOLUNTEER FIRE & RESC
09 03 07 0 000 018.004	74,400	70,300	HANOVER FIRE DEPT
03 06 14 0 000 010.001	260,700	248,000	STEWARTVILLE WATER & FIRE DEPA
03 07 25 0 000 001.001	1,500	0	STEWARTVILLE WATER & FIRE DEPA
03 07 26 0 000 002.000	4,100	0	STEWARTVILLE WATER & FIRE DEPA
03 01 11 0 000 044.000	120,000	113,100	STEWARTVILLE WATER & FIRE DEPA
03 01 11 0 000 045.001	89,000	86,000	STEWARTVILLE FIRE STATION
03 09 31 0 000 035.002	5,000	0	WEOGUFKA VOLLUNTEER FIRE DEPAR
03 09 31 0 000 048.000	7,600	0	WEOGUFKA VOLLUNTEER FIRE DEPAR
03 09 31 0 000 049.000	39,500	38,300	WEOGUFKA VOLLUNTEER FIRE DEPAR
03 09 31 0 000 050.001	3,900	0	WEOGUFKA VOLLUNTEER FIRE DEPAR
05 06 13 0 000 003.001	44,100	42,400	MARBLE VALLEY VOLUNTEER FIRE D
05 06 13 0 000 003.003	1,800	0	MARBLE VALLEY VOLUNTEER FIRE D
06 03 08 4 004 014.000	3,000	0	MARBLE VALLEY VOLUNTEER FIRE D
02 01 01 0 000 002.001	1,000	0	HOLLINS WATER & FIRE PROTECTION AUTHORIT
01 05 22 1 001 012.000	15,300	0	HOLLINS VOL FIRE & RESCUE DEPT
01 05 22 1 001 013.000	2,300	0	HOLLINS VOL FIRE & RESCUE DEPT
TOTAL VALUES	**1,856,500**	**1,682,300**	

Table 4.8: Critical Facilities Asset Inventory and Estimates Values- Municipalities Assets

MUNCIPALITIES				
PARCEL NUMBER	TOTAL APPRAISED	IMPROVEMENTS	OWNERSHIP	
01 01 11 0 000 004.001	100	0	WATER WORKS & SEWER BOARD TOWN	
01 02 04 0 000 007.000	93,300	0	CITY OF GOODWATER ALABAMA	
01 02 04 0 000 008.001	31,000	0	CITY OF GOODWATER ALABAMA	
01 02 09 1 000 001.000	11,300	0	CITY OF GOODWATER ALABAMA	
01 02 09 4 002 003.000	173,900	127,400	CITY OF GOODWATER ALABAMA	
01 05 15 1 001 007.000	100	0	TOWN OF GOODWATER	
01 05 15 1 001 007.001	4,100	0	WATER WORKS & SEWER BOARD TOWN	
01 05 15 1 001 014.000	100	0	GOODWATER WATER WORKS/SEWER BD	
01 05 15 2 001 007.000	15,300	0	CITY OF GOODWATER HOUSING AUTHORITY	
01 05 15 3 009 006.000	10,300	0	CITY OF GOODWATER ALABAMA	
01 05 15 3 009 007.000	182,900	175,100	CITY OF GOODWATER ALABAMA	
01 05 15 3 009 008.000	60,000	56,200	CITY OF GOODWATER ALABAMA	
01 05 15 3 009 009.000	67,600	63,800	CITY OF GOODWATER ALABAMA	
01 05 15 3 009 012.000	9,000	0	CITY OF GOODWATER ALABAMA	
01 05 15 3 010 014.000	395,400	378,100	CITY OF GOODWATER ALABAMA	
01 05 15 4 001 003.000	28,700	13,400	CITY OF GOODWATER	
01 05 15 4 001 035.000	243,000	242,500	CITY OF GOODWATER	
01 05 21 1 001 012.000	100	0	CITY OF GOODWATER ALABAMA	
01 05 22 2 001 006.001	256,000	0	GOODWATER WATER WORKS/SEWER BD	
01 05 22 2 001 006.002	53,900	0	CITY OF GOODWATER ALABAMA	

01 05 22 2 001 006.003	10,300	0	CITY OF GOODWATER ALABAMA	
01 05 22 2 001 008.000	1,400	0	WATERWORKS & SEWER BD TOWN OF GOODWATER	
01 05 22 2 001 009.000	248,000	243,500	CITY OF GOODWATER ALABAMA	
01 05 22 2 001 010.000	90,000	0	CITY OF GOODWATER ALABAMA	
01 05 22 2 001 014.001	500	0	CITY OF GOODWATER ALABAMA	
01 06 14 3 001 003.000	698,800	698,700	CITY OF GOODWATER	
01 08 27 1 001 002.004	5,400	0	WATER WORKS & SEWER BOARD TOWN	
01 08 27 1 001 004.000	26,700	0	GOODWATER WATER WORKS/SEWER BD	
10 06 14 0 002 030.000	20,400	0	TOWN OF KELLYTON	
10 06 14 0 002 032.001	30,500	0	TOWN OF KELLYTON	
10 06 14 0 002 059.000	73,800	72,000	KELLYTON WATER SYSTEM	
13 06 13 1 001 004.000	53,400	0	TOWN OF ROCKFORD A MUNICIPAL C	
13 06 13 1 001 005.000	17,400	0	TOWN OF ROCKFORD A MUNICIPAL C	
13 06 13 3 002 005.001	3,800	0	WATER WORKS & SEWER BOARD TOWN	
13 06 13 3 002 006.000	7,400	0	TOWN OF ROCKFORD	
13 06 13 4 001 002.000	2,300	0	TOWN OF ROCKFORD	
13 06 13 4 002 009.000	7,500	0	TOWN OF ROCKFORD A MUNICIPAL C	
13 06 13 4 002 009.002	8,200	0	TOWN OF ROCKFORD A MUNICIPAL C	
13 06 13 4 003 010.000	200	0	TOWN OF ROCKFORD WATER WORKS BOARD	
13 06 13 4 003 011.000	19,600	0	TOWN OF ROCKFORD	
13 06 13 4 003 013.000	22,300	0	TOWN OF ROCKFORD	
13 06 13 4 003 022.001	200	0	TOWN OF ROCKFORD	

13 06 13 4 003 029.000	642,800	627,300	TOWN OF ROCKFORD	
13 06 13 4 004 009.000	145,200	141,900	TOWN OF ROCKFORD	
13 06 13 4 004 010.000	800	0	TOWN OF ROCKFORD	
13 06 24 1 002 009.000	8,000	0	ROCKFORD UTILITIES BOARD INC	
19 01 12 0 000 010.001	100	0	ROCKFORD GAS & WATER BOARD	
TOTAL	**3,781,100**	**2,839,900**		

Table 4.19: Critical Facilities Asset Inventory and Estimates Values- School Assets

SCHOOLS / INDUSTRIAL PARK				
PARCEL NUMBER	**TOTAL APPRAISED**	**IMPROVEMENTS**	**OWNERSHIP**	
01 05 21 1 001 002.000	108,600	108,500	ALABAMA STATE OF (SCHOOL)	GOODWATER HEAD START
01 05 22 2 005 001.000	100	0	ALABAMA STATE OF (SCHOOL)	
09 03 05 0 000 012.000	621,600	571,800	STATE OF ALABAMA	STADIUM / GYM
09 03 06 0 000 007.000	4,302,100	4,231,700	COOSA COUNTY	(CENTRAL ELEMENTARY SCHOOL)
09 03 06 0 000 007.001	89,800	0	STATE OF ALABAMA	
09 03 06 0 000 007.002	1,651,200	1,642,600	STATE OF ALABAMA	CENTRAL HIGH SCHOOL
09 03 07 0 000 010.000	462,700	449,000	STATE OF ALABAMA	VOCATIONAL SCHOOL
10 06 14 0 002 082.000	42,400	0	LAKE MARTIN AREA INDUSTRIAL	DEVELOPMENT AUTHORITY
10 06 23 0 000 028.000	534,100	0	LAKE MARTIN AREA INDUSTRIAL	DEVELOPMENT AUTHORITY
10 06 23 0 000 028.007	3,000	0	LAKE MARTIN AREA INDUSTRIAL	DEVELOPMENT AUTHORITY
10 06 23 0 000 028.009	804,000	777,400	LAKE MARTIN AREA INDUSTRIAL	DEVELOPMENT AUTHORITY
12 07 25 0 000 022.000	10,300	0	STATE OF ALABAMA	
12 07 36 0 000 008.000	6,500	0	STATE OF ALBAMA	
13 06 13 4 004 040.000	57,100	39,700	COOSA COUNTY BOARD OF EDUCATIO	BUS GARAGE
13 06 13 4 004 043.000	17,600	0	COOSA COUNTY BOARD OF EDUCATIO	
TOTAL	**8,711,100**	**7,820,700**		

4.6 Vulnerable Populations in Chambers, Chilton, and Tallapoosa Counties .6.1 Background

According to the CDC social vulnerability refers to a community's resilience after an external hazard has taken place. These hazards may be natural-caused or human-caused disasters. When a community's social vulnerability is reduced human and economic losses are less likely. The CDC created a Social Vulnerability Index to measure how vulnerable a county or census tract is to any hazard. The measurement is based on a calculation that uses fifteen census variables, which help identify the vulnerable portion of a population. The CDC uses a scale of 0 to 1. A score of 0 indicates that a community has no vulnerable to any hazard, but a score of 1 means a community is extremely vulnerable to any hazard

4.6.2 Overall Vulnerability

The Figure 16 is based on the data collected from the CDC's Social Vulnerability Index (SVI), which depicts the overall social vulnerability for Coosa County. The overall SVI score for Coosa County is 0.53, which is based on a scale 0 to 1.

Each county has a range of vulnerability from low to high at the census tract level. Majority of Coosa County's population is considered to be socially vulnerable. The northeastern portion of unincorporated Coosa County near Goodwater and Kellyton have the highest rate of vulnerability of 0.87. The remainder of Coosa County's vulnerability is moderate to low of 0.29.

Due to the medium to high vulnerability populations in Coosa counties each jurisdiction should create plans and policies to protect these individuals from injury or death during any hazard. Additional information about those individuals who are the most vulnerable will be added to the update for the Hazard Mitigation Plan. Understanding where the vulnerable population pockets are in each jurisdiction will help identify what hazards will or are more likely to impact these vulnerable people. Even though some areas of Coosa County have a low to medium vulnerability risk, these areas should be aware where these vulnerably population live.

The CDC breaks down the fifteen variables into four themes that summarize how an area is socially vulnerable to a hazard. The themes focus on education, socioeconomic, housing, language skills, housing, ethnicity, family characters, and access to vehicles. Please refer to Figure 17 to Figure 20 for the details regarding vulnerability based on the specific themes.

4.6.3 Housing and Transportation

The housing and transportation are based on data from the American Community Survey for 2012-2016 for following variables: multi-unit housing, mobile homes, home crowing, no access to vehicles, and group quarters. Figure 17 shows that there is major despair for portions population living in Coosa County to living conditions and access to transportation, thus making these people more vulnerable to natural hazards. Small towns, Town of Goodwater, Town of Kellyton, Town of Rockford, and other unincorporated areas in Coosa County are more likely to have vulnerability to hazards than those persons living in more urban areas. Persons living in multi-unit housing, manufactured homes, or in a crowded home are vulnerable to natural hazards such as tornadoes,

flooding, hail, high winds/ thunderstorms, winter storms, tropical storms, and dam failure because these types of homes do not provide a safe environment to ride out a hazard. These types of homes are not built to the same standards as standalone home, for example manufactured homes are built to withstand maximum winds of 70 mph. These structures will not survive high winds or tornadoes. Persons who do not have access to transportation are vulnerable to dam failure, flooding, high winds/ thunderstorms, tornadoes, wildfire, winter storms because the option to leave their home is at the mercy of obtaining a way to leave such as by vehicle, public transportation, bike, or walking. These modes of transportation are not viable for all individuals due to a lack of access or physical abilities. These persons who do not have the ability to leave are at risk because certain natural hazards provide little warnings such as a wildfire, dam failure, or tornado. If persons do not have a safe place in their home or access to transportation (of any type) then their lives will be vulnerable/ risked during the event of a natural hazard. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.4 Housing Composition and Disability

Figure 18 shows where people live in Coosa County who are more vulnerable to hazards based on housing composition and the number of persons with disabilities. The housing composition and disability map is based on data from the American Community Survey for 2012-2016 for the following variables: aged 65+, aged 17 and under, single-parent household, aged 5 and over with a disability. All four counties have a range of vulnerability from low to medium census tracts based on the housing composition and individuals with disabilities. All of Coosa County has the same vulnerability based on housing composition and disability In terms of hazard mitigation, the housing composition is important to understand because children and the elderly are more vulnerable to succumb injuries during a hazard such as extreme heat or tornado event than a young or middle-aged adult. Natural hazards are also dangerous if a child or elderly is home alone during the event because they may not have the knowledge or ability to address or react to a hazardous situation. For example, if a child is home alone during a tornado event, he or she may not have the knowledge or experience to know where their safe place during a tornado, which makes that child vulnerable. Persons who have a disability (physical or mental) are extremely vulnerable to hazards of any type because they may be socially or logistically isolated when a hazard such as a dam failure, flooding, winter storm, or tornado. These persons may not be able to evacuate quickly or may not even know the natural hazard event is taking place. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

4.6.5 Socioeconomics

Figure 19 shows what census tracts in Coosa County where people live who are more vulnerable to hazards based on the socioeconomic status of the population living in the planning region. Vulnerability data based on socioeconomic status is gathered from the American Community Survey for 2012-2106 for following variables: poverty, unemployment, per capita income, and no high school diploma. The northeastern portions of Coosa County, the Town of Goodwater, the Town of Kellyton have the highest vulnerability based on the population's socioeconomic status. The southern portion of Coosa County, which includes the Town of Rockford, has a low-medium vulnerability. Vulnerability to natural hazards due to socioeconomics can make a person or a family vulnerable to all hazards. These persons may not have the financial ability to prepare for hazards before the event happens such as winter storms or droughts, but they may not also have the financial ability to recover once a natural hazard event has taken place. The ability to evacuate

during or before a hazard happens may not be an option for those persons who have socioeconomic difficulties. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events take place.

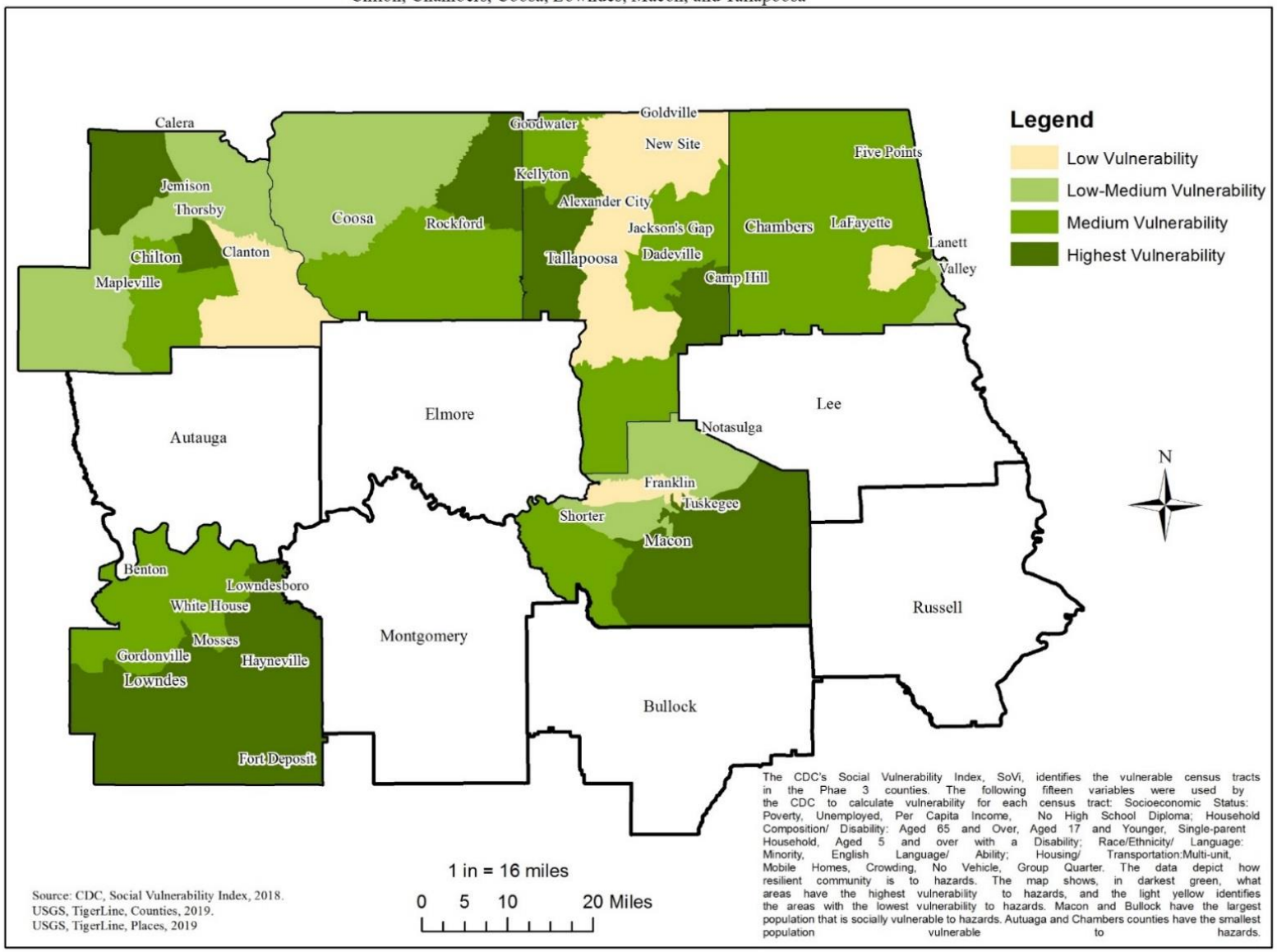
4.6.6 Minority and English Language Proficiency

Figure 20 shows where in Coosa County people live who are vulnerable to hazards based on the population's minority status and English language proficiency. The minority and English language proficiency map are based on data from the American Community Survey for 2012-2016 for the following variables: Ethnicity and English language proficiency. The south and eastern portions of Coosa County are highly vulnerable based on minority status and English language proficiency. This includes the Town of Goodwater, Town of Rockford, the Town of Kellyton, and unincorporated Coosa County. Providing information out in multiple languages is important because not everyone can read, write, or understand verbal English. For those individuals who are not English proficient obtaining useful information about natural hazards is essential to their survival. If a person is unaware that a hazardous event is/going to take place due to a language barrier their life is at stake to all-natural hazards. These persons will essentially be taken by surprise when a tornado, wildfire, winter storm, flood, or dam failure take place in their community. Communities need to know where these vulnerable persons live in order to help save lives from hazards before the events.

Figure 16: Social Vulnerability

Social Vulnerbility for AEMA Phase 3

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa



Source: CDC, Social Vulnerability Index, 2018.
USGS, TigerLine, Counties, 2019.
USGS, TigerLine, Places, 2019

The CDC's Social Vulnerability Index, SoVi, identifies the vulnerable census tracts in the Phae 3 counties. The following fifteen variables were used by the CDC to calculate vulnerability for each census tract: Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma; Household Composition/ Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability; Race/Ethnicity/ Language: Minority, English Language/ Ability; Housing/ Transportation:Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarter. The data depict how resilient community is to hazards. The map shows, in darkest green, what areas have the highest vulnerability to hazards, and the light yellow identifies the areas with the lowest vulnerability to hazards. Macon and Bullock have the largest population that is socially vulnerable to hazards. Autuaga and Chambers counties have the smallest population vulnerable to hazards.

Figure 17: Social Vulnerability Themes

Social Vulnerbility Based on Housing & Transportation

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

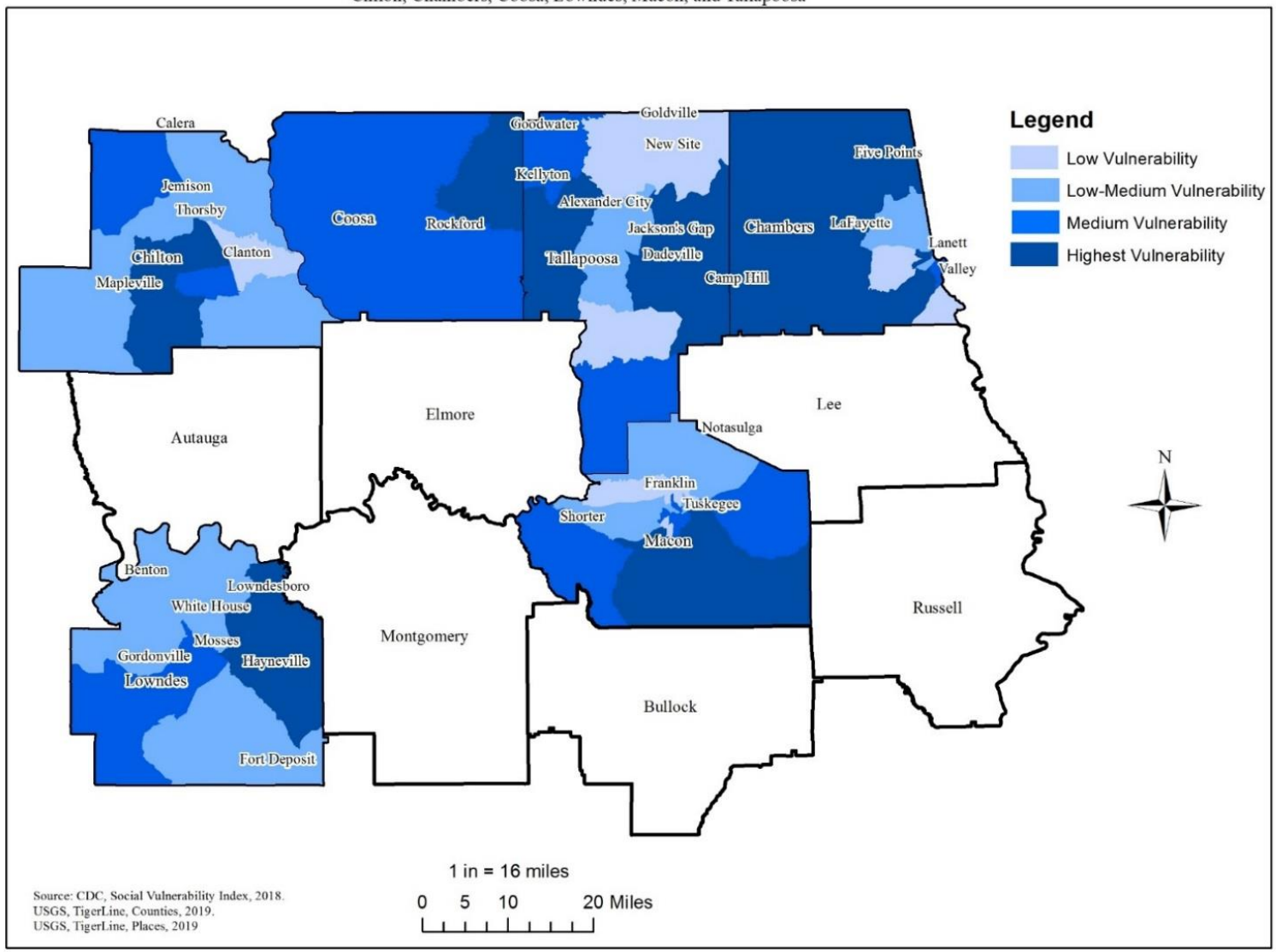


Figure 18: Social Vulnerability Themes

Social Vulnerbility based on Housing & Disability

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

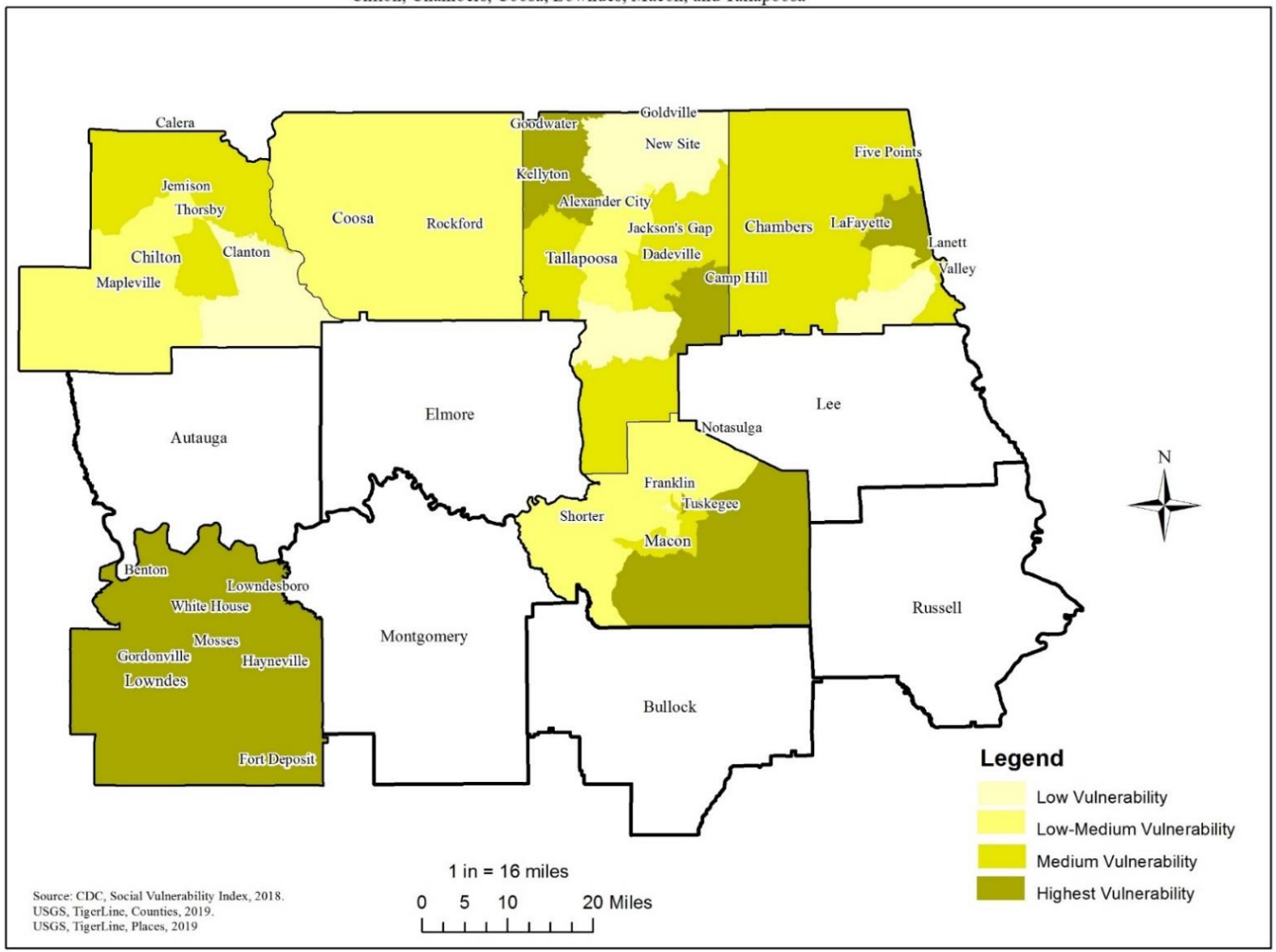


Figure 19: Social Vulnerability Themes

Social Vulnerbility Based on Socieconomics

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa

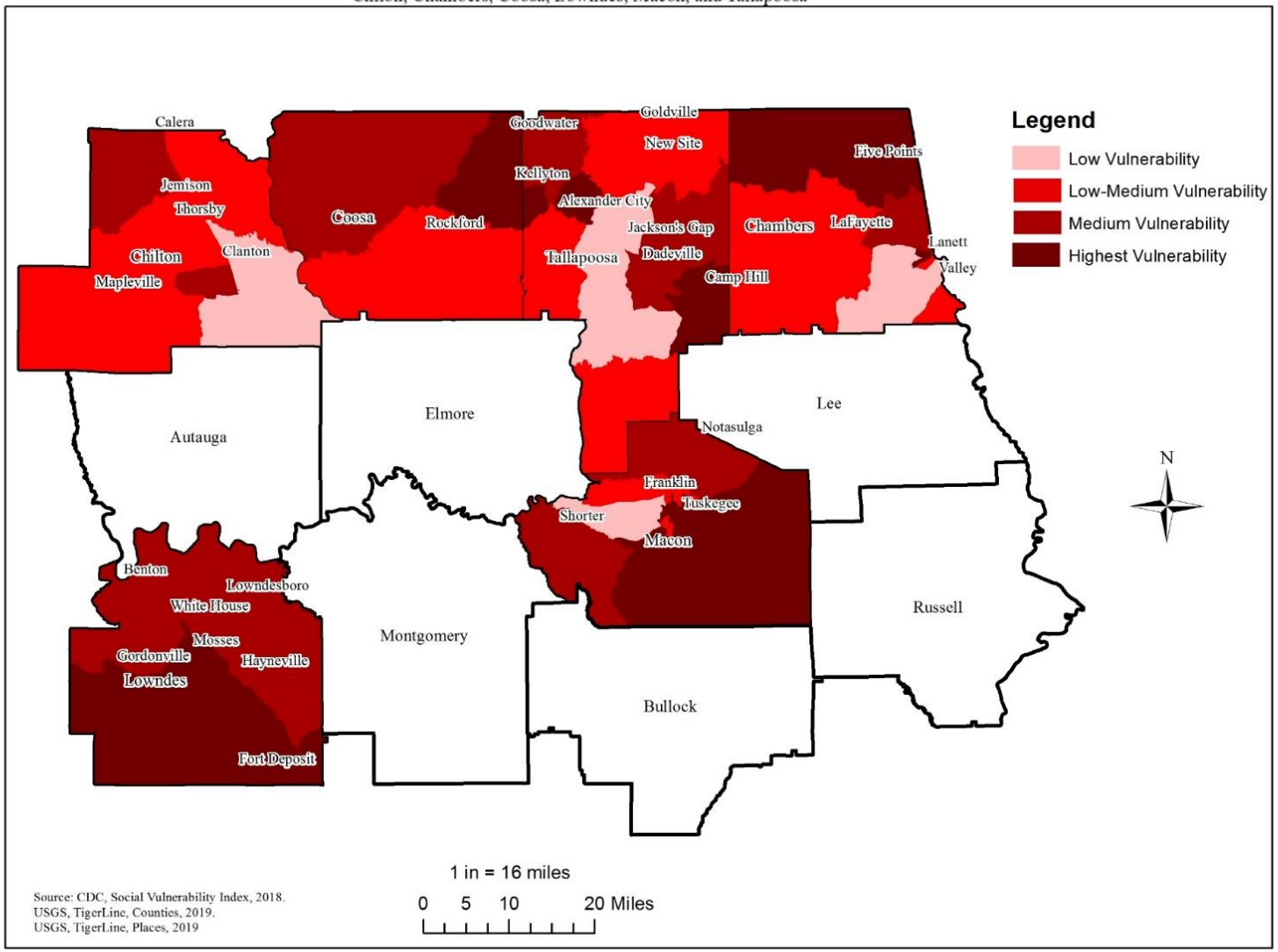
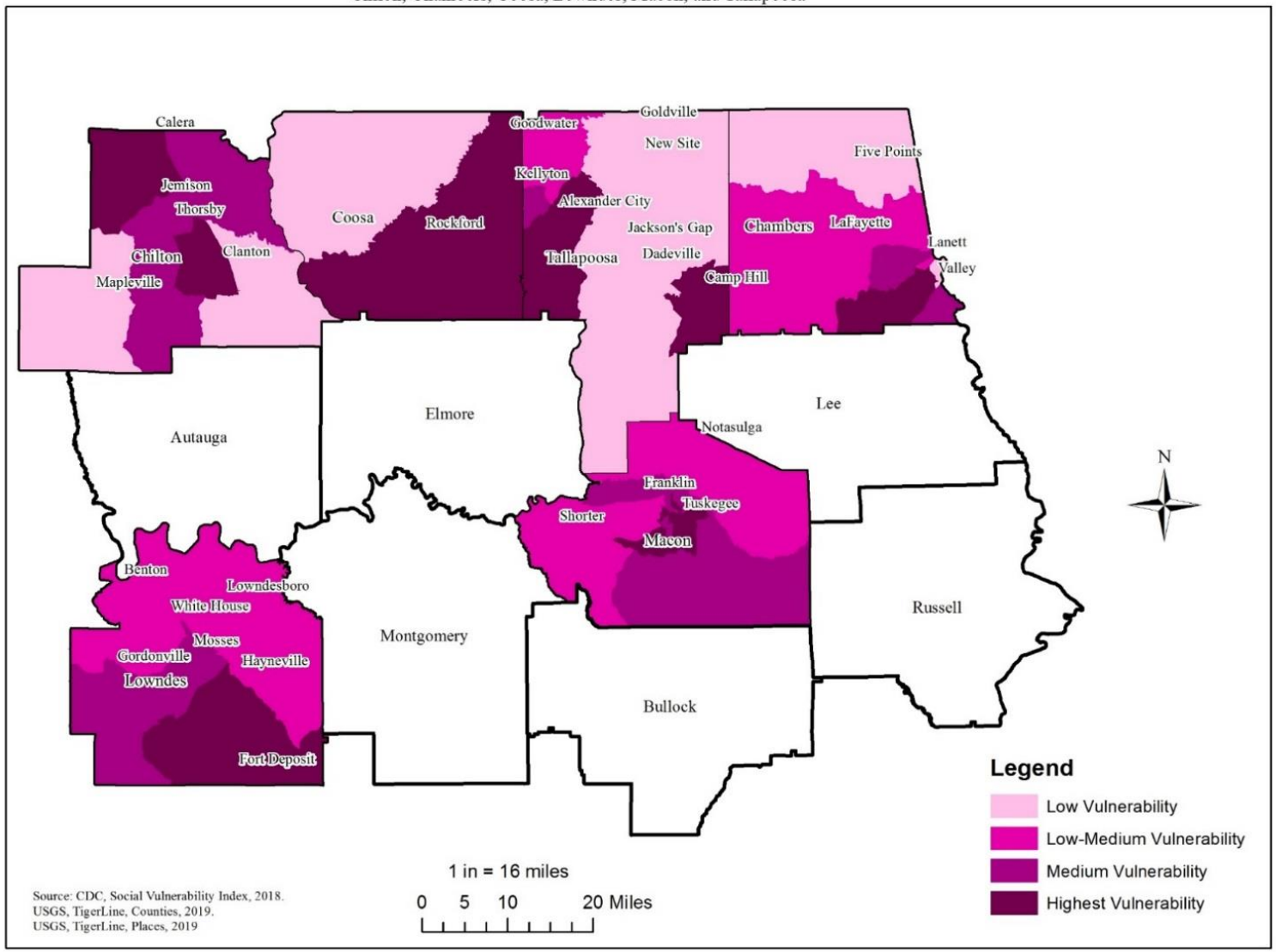


Figure 20: Social Vulnerability Themes

Social Vulnerbility based on Minority Status

Chilon, Chambers, Coosa, Lowndes, Macon, and Tallapoosa



SECTION 5 – MITIGATION STRATEGY

Mitigation Planning Process

5.2 Regional Mitigation Goals

5.3 Regional Mitigation Strategies

5.4 Capabilities Assessment for Local Jurisdictions

5.5 Jurisdictional Mitigation Action Plans

- 5.5.1 Lee-Russell Council of Governments Mitigation Action Plans
- 5.5.2 Chambers County Jurisdiction Actions
- 5.5.3 Chilton County Jurisdiction Actions
- 5.5.4 Tallapoosa County Jurisdiction Actions

5.1 Mitigation Planning Process

Local planning stakeholders were asked to review the progress of their previously adopted mitigation goals and to reevaluate those strategies based on updated information from the Risk Assessment and vulnerability to each profile hazard. The goals and strategies were viewed in light of the impact and extent of hazard occurrences in local jurisdictions and the region.

5.2 Mitigation Goals

Mitigation goals are broad statements that focus on long-term visions to reduce or avoid vulnerabilities to identified hazards within the region. Through the planning process, six primary goals were developed from corresponding goals in previous local mitigation plans. The mitigation goals expected to be achieved by development, adoption, and continuation of this plan include:

1. **PREVENTION**: Manage the development of land and buildings to minimize the risk of life and property loss due to hazard events.
2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.
3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
4. **STRUCTURAL MITIGATION**: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
5. **EMERGENCY SERVICES**: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

5.3 Mitigation Strategies

Mitigation strategies are broad, yet more defined actions that help to further define mitigation goals. A wide range of activities that are aligned with the six-goal categorizations was considered in order to help achieve the established mitigation goals, in particular emphasizing mitigation concerning new and existing buildings and infrastructure. These strategies also provide additional background to addressing any specific hazard concerns. The six-goal categorizations used for mitigation strategies include Prevention, Property Protection, Natural Resource Protection, Structural Mitigation, Emergency Services, and Public Awareness and Education. These are discussed in detail below, as well as identifying appropriate hazard(s) that are mitigated through these approaches.

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment of development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)

4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program-NFIP (Flooding)
7. Capital improvements planning (All Hazards)
8. Railroad Crossing Study

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of flood-prone properties (Flooding)
2. Relocation of flood-prone properties (Flooding)
3. Elevation of flood-prone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as a floodplain, wetlands, and steep slopes. Examples of natural resource protection activities include:

1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Sinkholes/Land Subsidence, Wildfire)

Goal #4: Structural Mitigation

Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing the construction of appropriate structures. Examples of structural mitigation protection activities include:

1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (Tornadoes, Extreme Temperatures, Winter Storms)
6. Underground Utilities (Tornadoes, Wildfire, Lighting, Hurricane/Tropical Storm/Depression)

Goal #5: Emergency Services

Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:

1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)

5. Provision of alternative power, e.g., generators (All Hazards)
6. Debris removal (All Hazards)

Goal #6: Public Education and Awareness

Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:

1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)

5.4 Capabilities Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive mitigation strategy by examining existing programs, regulations, resources, and practices. This determination allows a jurisdiction to assess whether mitigation actions are feasible, due to financial resources, political climate, administrative capacity, and other jurisdictional capabilities.

The Alabama Emergency Management Agency (AEMA) Division D is a twelve-county region composed of municipalities with a myriad of governmental powers. The specific area for this Phase III-B included Coosa County Hazard Mitigation Plan is one County with three municipalities. All counties governments are governed by an elected commission.

The mitigation strategies listed in Section 5.5 are framed by the capacity and capabilities of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources.

Communities work together through the county Emergency Management Agency for assistance related to planning for mitigation and to implement specific strategies. Authority overspending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent feather of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, tow communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority.

Table 5.1 summarizes the statutory authority and resources of each jurisdiction and its present use or intended future use of these powers to implement potential actions and types of actions listed in the hazard mitigation plan. The table describes powers or policies that are granted to different types

of jurisdictions in general terms, describes the jurisdictions that currently apply those policies in their mitigation efforts, describes the jurisdictions that intend to apply those authorities and policies for future implementation and describes the means by which each jurisdiction will incorporate the mitigation action into its existing powers, authorities, policies, and capabilities.

Table 5.1: Statutory Authority and Resources

Multi-Jurisdictional Hazard Mitigation Plan: Capability Assessment	Authorized for:	Practiced by:	Incorporated through:
Police power: ability to regulate activities of individuals in the jurisdiction for purposes of health, safety, and public welfare	Municipalities	All	Council or Commission action to enact and enforce regulations
Control of public expenditures: ability to acquire property and improve property owned by the jurisdiction; capacity to borrow and expend funds	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Building code enforcement: ability to enforce codes related to building materials and construction standards outside of flood hazard areas	Municipalities	All	Council or Commission action to enact and enforce regulations
Floodplain management authority: ability to regulate development in areas of special flood hazard in compliance with NFIP standards; includes authority to regulate land use and subdivisions inside of flood hazard areas	Municipalities, Counties	All	Council or Commission action to enact and enforce regulations
Purchase properties subject to flooding and maintain as permanent open space	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Capital improvements: ability to plan and implement public infrastructure to mitigate hazards	Municipalities, Counties, School Boards, Utilities	All	Action to approve expenditures by local county commission, city council, school board, or utility board
Zoning authority: ability to divide political jurisdiction into districts for purposes of regulation buildings and their use, both inside and outside of flood hazard areas	Municipalities	All	Council action to enact and enforce regulations
Subdivision regulations: ability to regulate new developments involving new parcels and infrastructure, both inside and outside flood hazard areas	Municipalities, Counties	All	County Commission or Council action to enact and enforce regulations
Storm water management program: ability to regulate retention, detention, and release of storm water runoff	Municipalities	All	Council action to enact and enforce regulations

Table 5.2 below provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in the Chambers, Chilton, Coosa, and Tallapoosa counties. A "Yes" (Y) indicates the item is currently in place and being implemented. A "No" (N) indicates the item is not in place or being implemented. An asterisk (*) indicates the item is currently being developed for future implementation.

Table 5.2: Relevant Plans, Ordinances, and Programs

Jurisdiction	Zoning Ordinance	Code Enforcement	Master Plan (Date)	Initial FBHM Identified	Certified Floodplain Manager	NFIP Participation	Subdivision Regulations
Coosa County (entire)	**No**	**Yes**	**No**	**Yes**	NA	**Yes**	Yes
Town of Goodwater	No	Yes	No	Yes	NA	Yes	Yes
Town of Kellyton	No	No	No	**No**	NA	**No**	Yes
Town of Rockford	No	Yes	No	Yes	NA	Yes	Yes

*NA, According to the Association of State Floodplain Managers there are not any people in Coosa who are certified Floodplain Managers. The County most likely uses a manger from outside Coosa County.

5.5 Mitigation Actions

This section identifies and analyzes a range of mitigation actions and projects under consideration to achieve the regional mitigation goals for reducing the effects of hazard events for the region at large, as well as each of the jurisdictions within the region. Local planning stakeholders used knowledge and expertise in dealing with natural hazards was invaluable in updating the strategy. The primary considerations used to update and prioritize the action plan included: social impact, technical feasibility, funding availability, administrative capabilities, political and legal effects, development trends, and economic, environmental issues, and local capabilities to determine the most appropriate plan of action for their jurisdictions. Each action or project listed has accessory information, such as designation of a lead agency, hazard(s) addressed, and potential funding source(s). The following table describes the key elements of the Mitigation Action Plans.

Table 5.3: Mitigation Actions and Projects for Consideration

Jurisdiction Name	
Goal	Category of goal that is met: #1: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events (PREVENTION) #2: Protect structures and their occupants and contents from the damaging effects of hazard events (PROPERTY PROTECTION) #3: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands (NATURAL RESOURCE PROTECTION) #4: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable (STRUCTURAL MITIGATION) #5: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events (EMERGENCY SERVICES) #6: Educate and foster public awareness of hazards and techniques available for mitigation (PUBLIC EDUCATION AND AWARENESS)
Action	Title and description of action to be undertaken
Hazards Addressed	Hazard which the action addresses
Lead Agency	Entity responsible for undertaking the action
Funding Source	Level of funding required for action, where applicable

Priority/Status	Categorization based on the following projected criteria:

Benefit/ Cost Score	The Benefit/Cost score included in the jurisdictional Mitigation Action Plans are considered at the planning level and does not include a full analysis of all costs and benefits associated with action implementation. For example, a mitigation action that scores "High" in benefits and "Low" in costs will be listed as "Moderate" in the plan due to providing a long-term solution, but with a high implementation cost. For some projects, such as routine or ongoing operations conducted with local operating funds and existing staff, this may be the only explicit comparison of costs and benefits. For projects of which grant funding or bond issues may be sought, more in-depth evaluations of costs and benefits may be required. As specific project scopes are detailed, the benefits and costs of an action can be identified with more precision and the benefit-cost ratio (BCR) that results from a full benefit-cost analysis may differ from the planning level Benefit/Cost score presented in the plan. It should be noted that higher scores do not necessarily correspond to high priorities, nor do low scores correspond to low priority projects. An important action with a high priority to a jurisdiction may have a lower Benefit/Cost score because of its complexity, assumed high expense, and other potential costs. Jurisdictions should not be discouraged or deterred from further consideration of actions which have low scores until additional, more specific, evaluations of the costs and benefits has been undertaken. **Low**: Benefits: Projects that only benefit a limited population or provides short-term benefits / Costs: projects likely to cost over $100,000 and requiring additional funding or staffing outside of normal operations and is complicated to implement. **Moderate**: Benefits: Projects that would be felt by moderate amount of population in jurisdiction or solves a problem for several years / Costs: projects that may need additional funding or continued study or staffing outside of normal operations, with estimated costs between $10,000 and $100,000. **High**: Benefits: Projects that benefit many in the jurisdiction that are long-term solutions / Costs: projects that can be implemented by existing personnel with little additional burden on budget and uncomplicated to implement.

Table 5.4: Mitigation Action Plan Coosa County

Coosa County Mitigation Action Plan								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority-Status	Benefit/Cost Score	Jurisdiction	Status
5	Installation of outdoor alert and warning systems	Tornado	County EMA	AMEA, Local	High	Med	Coosa County	Continuous
4	Construction safe rooms with public buildings, such as new schools, libraries, and community centers when feasible	Tornado	County EMA, Local	AMEA, Local	Medium	Medium	Coosa County	Continuous - 2025 Due to funding
4	Replace series of three pipes with concrete culverts for Foshee Road	Flooding	County Commission and Engineer	CDBG, ALDOT, DOT, HMGP, PDM	Medium	High	Coosa County	Continuous - 2025 Due to funding

4	Flagging or barricades by highway department on regular basis	Flooding	County Commission and Engineer	CDBG, ALDOT, DOT, PDM	Medium	Low	Coosa County	Continuous - 2025 Due to funding
4	Investigate the feasibility of retrofitting the Coosa County Courthouse to withstand winds of 200 MPH	Tornado, Tropical Storms, Hurricanes, Tropical Depression	County Commission, Engineer, and EMA	HMGP, PDM	Medium	Low	Coosa County	Continuous - 2023 Due to funding

Table 5.5: Mitigation Action Plan Goodwater

Goodwater								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority-Status	Benefit/Cost Score	Jurisdiction	Status
4	Construction a storm shelter for community wide use	Tornado, Winter Weather, and Hurricane	City Council	HMGP, PDM, CDGB	Medium	Moderate	Goodwater	Continuous - 2023 Due to funding
4	Installation of 4 severe weather-warning sirens to cover the city and police jurisdiciton	Tornado	City Council	HMGP, PDM, CDGB	Medium	Moderate	Goodwater	Continuous - 2025 Due to funding

4	Areas of this road within City limits experiences repeated flooding. Existing drainage pipe requires enlargements	Flood	Town of Goodwater	HMGP, PDM, CDGB, FMA, Local	Medium	Moderate	Goodwater	Continuous - 2025 Due to funding
4	Areas of this road within City limits experiences repeated flooding. Existing drainage pipe requires enlargements. Brownville Road	Flood	Town of Goodwater	HMGP, PDM, CDGB, FMA, Local	Medium	Moderate	Goodwater	Continuous 2025 Due to funding
4	This Road is susceptible to flooding. The Flooding is exacerbated by beavers building dams in the pipe under the road which serves as a drainage canal. The town proposes to enlarge the pipe	Flood	Town of Goodwater	HMGP, PDM, CDGB, FMA, Local	Medium	Moderate	Goodwater	Continuous - 2025 Due to funding

	as well as institute a beaver eradication program.							

Table 5.6: Mitigation Action Plan Kellyton

Kellyton								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority-Status	Benefit/Cost Score	Jurisdiction	Status
1	Identification of flood hazard in communities that do not have Flood Studies or Flood Insurance Rate Maps	Flood	County EMA	AEMA, Local	High	High	Kellyton	2025
4	Construct a storm shelter for community wide use Purchase a backup generator for Kellyton Municipal Building. All utility service buildings are located outside of the city limits. In the event of a disaster, the town would need a meeting place.	Tornado, Winter Weather, and Hurricane	City Council	HMGP, PDM, CDBG	Medium	Moderate	Kellyton	2023-Continuous based on funding
1		All	Town Council	HMGP, CDBG	High	Medium	Rockford	2023 - Continuous based on funding

Table 5.7: Mitigation Action Plan Rockford

Rockford								
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority-Status	Benefit/Cost Score	Jurisdiction	Status
4	There is an area along State Highway 231 and 22 that floods constantly. Drainpipes require replacement. Floodwaters run down School Street. Since these are State Highways, negotiations with the Alabama Departments of Transportation need to be initiated to take steps in eliminating this hazard to the community.	Flood	City Council	HMGP, PDM, CDGB, DOT, ALDOT	Medium	Moderate	Rockford	Continuous - 2025 Due to funding
4	Community wide-Construct a storm shelter to community wide use	Tornado, Winter Weather, and Hurricane	City Council	HMGP, PDM, CDBG	Medium	Moderate	Rockford	Continuous - 2025 Due to funding
1	Purchase a backup generator for Rockford Water Authority. At this time if the power supply is interrupted for the water authority the water supply for the community is limited to 16 hours. The purchase of a backup generator will ensure to operations of this critical facility for residents as well as energy services.	All	Rockford Water Authority	HMGP, PDM	Medium	Moderate	Rockford	Continuous - 2023 Due to funding

Section 6 – Plan Maintenance Process

This section of the plan addresses requirements of Interim Final Rule (IFR) Section 201.6(C) (4).

Section Contents

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process
6.2 Hazard Mitigation Plan Incorporation
6.3 Public Awareness/Participation

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process

The Lee-Russell Council of Governments (LRCOG) will facilitate plan maintenance activities with assistance from the AEMA Division D Regional Coordinator, local EMA directors, and other regional planning agencies as their county plans are phased in through the five-year framework of the Hazard Mitigation Plan. Local EMA directors will serve as a liaison to participating jurisdictions with their respective counties through their local processes, such as Local Emergency Planning Committee (LEPC) or similar stakeholder groups. The plan monitoring review process shall be chaired by the elected AAEM representative, from AEMA Division D. Election of an AAEM representative occurs every summer on an annual basis. Periodic review and revision of the Hazard Mitigation Plan are important to ensure the plan's currency and compliance with applicable regulations and to assess the progress of local mitigation actions. Review and revision of the Hazard Mitigation Plan may occur through the following two procedures:

Annual Review Process

On at least an annual basis, each participating county EMA official shall facilitate a meeting in their respective county and include local jurisdictions and other stakeholders, such as the Local Emergency Planning Committee. The exact meeting process in each participating county will be slightly different. At a minimum, the scope of the annual county-level plan review meeting will be to review and evaluate completed mitigation actions for effectiveness, review status of high-priority or ongoing mitigation actions, discuss possible changes to hazard vulnerability or other elements of the risk assessment, assess any major land-use changes, and discuss any other relevant issue pertaining to the Hazard Mitigation Plan. The general public will be invited to attend this meeting through public outreach, as further described in Section 6.3 below, and encouraged to provide their input into the annual review.

Subsequently, area regional meeting between LRCOG, local EMA officials, AEMA Division D Coordinator, and regional stakeholders will be held to review information collected at the county-level meetings and revise the plan. It is viewed appropriately by the local EMA directors that this meeting shall normally coincide with and AEMA Division D quarterly meeting. Any major revision made to the Hazard Mitigation Plan that affects the region as a whole will be distributed to all jurisdictions for adoption in a public session. Otherwise, any project added to a specific Jurisdictional Mitigation Action Plan will be adopted by that specific jurisdiction in a public session.

Emergency Review Process

In certain instances, such as a disaster occurrence impacting a participation jurisdiction, the full Annual Review Process may not be timely enough to address unforeseen issues created by a particular event in these situations, a county EMA official may facilitate a county-level plan review meeting, similar to the process described above in the Annual Review Process, with the requisite public outreach. Once this meeting is completed, a local amendment may be adopted by a participating jurisdiction that only pertains to the revision of their specific Jurisdictional Mitigation Action Plan in a public session. After any local amendment, the local county EMA official shall submit documentation of the local amendment to the Chair of the plan monitoring and review process.

Five-Year Plan Update

Before the five-year expiration of the Hazard Mitigation Plan, a thorough review, beginning approximately 18 months prior to plan expiration, shall be held to determine any significant changes in the AEMA Division D planning area that may affect the region's vulnerability to hazard impacts, and an evaluation of the mitigation strategy and jurisdictional mitigation action plans developed as part of this process. The remaining AEMA Division D counties will be included in this Regional Plan in a phased process with the goal of having the initial full AEMA Division D plan completed by 2025. This plan update shall incorporate any changes to federal or state regulation that may affect the Hazard Mitigation Plan contents. The plan update process will follow a local-driven, public process, similar to the plan review processes outlined above.

Initial steps will include:

- Attend City Council, Town Commission, and County Commission meetings to provide updates to the jurisdictions on the five-year update. Request their participation in the update process.
- Identify and contact key personnel to be a part of the Stakeholder and Technical Advisory Committee
- Conduct effective public engagement strategies.
- Schedule committee and public meetings

The five-year update will include:

- Document the planning process including who was involved and their role in the process.
- Review the hazard mitigation plan and regulations.
- Review current plans, policies, studies, ordinances, and development trends.
- Detail the hazards that could potentially impact all jurisdictions.
- Assess and assign risk value for all hazards.
- Identify all assets and critical facilities in the region.
- Estimate the potential losses.
- Construct strategies, objectives, actions, and goals to address each hazard.
- Review participation in the National Flood Insurance Program
- Continue to maintain and update the document.

In addition, multiple state, regional, and local partners will be consulted to provide data or comments in plan formation. These entities include the U.S. Army Corps of Engineers, Fort Benning, Electrical Cooperatives, Alabama Forestry Commission, Geological Survey of Alabama (GSA), Alabama Department of Public Health (ADPH), Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), Alabama Historical Commission (AHC), neighboring county EMA offices, regional academic providers, and private sector entities. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval.

6.2 Hazard Mitigation Plan Incorporation

Once Phase III-B Hazard Mitigation Plan is "approvable upon adoption" by FEMA, each jurisdiction shall proceed with adoption procedures. Each proposed action listed in the jurisdictional mitigation action plans is assigned to one or multiple lead agencies or departments in order to assign responsibility and accountability of action implementation to specific sources. In addition to the assigned local agency or department, each mitigation action plan also has a priority or status assigned that roughly coincides with an implementation timeline. The local jurisdictions in AEMA Division D will work to seek to provide operational funding to actions that are ongoing and seek outside funding for capital projects that are outside the realm of normal funding during both pre-disaster and post-disaster periods. In the past, all the jurisdictions in Coosa counties have not incorporated the Hazard Mitigation Plan into existing plans, policies, or ordinances.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning organization will provide technical assistance for incorporation, upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan and will not introduce additional hazard vulnerabilities to the local area and region at-large. Local EMA directors will incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including each county's Emergency Operation Plan and county THIRA. During county-level plan reviews,

participation communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The Hazard Mitigation Plan will also be provided to other affected regional planning agencies for consistency with regional planning and economic development activities, as well as local economic development councils

Coosa County planning process has included public involvement, a county assessment, drafting of a planning concept, vision, goals and recommendations, review and approval by the and County Commission in order to have the hazard mitigation incorporated.

6.3 Public Awareness/Participation

A critical part of maintaining an effective and relevant natural hazard mitigation plan is ongoing public review and comment. Public participation in the hazard mitigation planning process, including monitoring and review of the existing plan, and development and adoption of future plans, is a very important component. Efforts will continue to involve local, state and government agencies, businesses, academia and the general public in the ongoing mitigation planning process to the maximum extent possible.

As described in the Monitoring, Evaluation, and Update process, any significant changes, amendments, or updates to the Hazard Mitigation Plan shall be discussed in public meetings prior to any adoption procedures. Public meetings will be held when any plan modification or major revisions to the plan are required or when otherwise deemed necessary and will be adopted during a public session. The public will be informed prior to the public hearings and other Hazard Mitigation related meetings through a variety of media sources, including but not limited to local newspaper advertisements and notices, radio advertising, postings at high traffic community areas, booths at local Severe Weather Expo events, social media, websites, etc. It is important to ensure that the public has the opportunity to be involved with all updates and changes to the hazard mitigation plan as well as the opportunity to voice any comments, questions, and concerns. Consequently, LRCOG and local EMA Directors are dedicated to the direct involvement of its citizens in providing feedback and comments on the plan throughout the five-year implementation cycle. LRCOG and local EMA offices will keep public hard copies and provide hard copies of the Hazard Mitigation Plan to each County Commission office, seats of government in each municipality, and other appropriate public locations, i.e., library, senior citizens center. The plan will also be made available on appropriate websites such as County EMA and LRCOG. Press releases will be published via various media, such as local newspaper advertisements, radio advertising, postings at high traffic community areas, social media, and websites, to inform the general public and stakeholders that the Hazard Mitigation Plan is available for review, where to find the Hazard Mitigation Plan, and how the public can play a role in its creation and future revision. The public hearing will be held to present the final plan to the public before each jurisdiction adopts the plan. The public can voice additional comments and concerns outside of public hearings by emailing or call the staff at LRCOG Planning and Economic department until a better mechanism for recording the public input is created. In the future, workshops and/or lunch and learns will be hosted as a way to continue to engage and educate the public about natural hazard events. These types of events will be used to maintain public engagement, build a relationship with the public, collect information from the public, and inform the public about how to be involved in the next update.

Section 7 – Appendix

This section of the plan is dedicated to the Appendix.
Section Contents

7.1 Appendix A: Survey
7.2 Appendix B: Agendas and Documents
7.3 Appendix C: Briefs, Advertisement, Sign-in Sheets, and Newspapers
7.4 Appendix D: Hazard Events Tables

7.1 Appendix A: Surveys

LEE COUNTY ALABAMA HAZARD MITIGATION PLAN UPDATE 2019 PUBLIC SURVEY

The information from this survey will help Coosa 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 Coosa County do you live?**
   - ☐ Rockford ☐Goodwater ☐ Kellyton
   - ☐ Other area of Coosa County

☐ ☐ **Does it flood where you live?** ☐ ☐Y ☐ ☐ ☐ I don't

☐ **Do you have flood insurance?** ☐ ☐Y ☐ ☐ ☐ I don't

3. **How prepared do you feel for disasters such as tornadoes, floods or severe storms?**
   - ☐ Not prepared ☐ Somewhat Prepared ☐ Prepared ☐ Very Prepared

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

☐ Educational ☐ Community classes on natural hazards ☐ Safe

☐ Community shelters ☐ Relocate to a safer location ☐ Readiness

4. **Which information sources are the most effective at warning you of approaching storms or disasters in Lee County?** *(Check all that apply to you)*
   - ☐ Cell phone ☐ Facebook ☐ Internet Web Site ☐ IPad ☐ Newspaper ☐ Radio
   - ☐ Outdoor Sirens

7.2 Appendix B: Agendas and Documents

Division D Multi-Jurisdictional Multi-hazard Mitigation Plan
Overview

Grant Update:

- Lee-Russell Council of Governments (LRCOG) submitted the PDM grant on 12/15/18.
- Lee-Russell Council of Governments submitted requested revisions by AEMA on 1/4/19.
- The PDM grant was submitted to FEMA by the AEMA for review on 1/9/19.
- Alabama Emergency Management Agency has projected notification of funding in fall 2019.

Counties Participating in Division D Multi-jurisdictional Multi-hazard Mitigation Plan:

- Autauga (Feb. 2021), Chambers (June 2022), Chilton (Oct. 2021), Coosa (March 2022), Elmore (2020), Lee (2020), Lowndes (June 2021), Macon (Aug. 2021), Montgomery (Jan. 2021), Russell (2020), and Tallapoosa (June 2021) counties and municipalities as well as other jurisdictions within these 11 counties.

check on due dates

check

Division D Hazard Mitigation Plan Team Members:

- Lee-Russell Council of Governments staff will act as the Lead Organization to manage and facilitate the planning process by working with the Core Planning Team. A LRCOG staff person will serve as the administrator of the PDM grant if funded and will lead the overall mitigation planning effort by working with the core planning team, local subcommittees and other stakeholders to develop and adopt the Divisional Plan. Once the committee meetings and public meetings/surveys are completed and all data collection is finalized, LRCOG staff would compile and consolidate collected information and updates into the draft Divisional Multi-jurisdictional Multi-Hazard Mitigation Plan.
- Hazard Mitigation Core Planning Team will include the Division D Coordinator, the 11 EMA Directors or their designee and LRCOG staff in the development and adoption of the Division D Multi-jurisdiction Multi-hazard Mitigation Plan. The Division D Hazard Mitigation Core Planning Team would also help establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.
- County-level Hazard Mitigation Planning Sub-committee will include but not limited to individuals from local emergency management, education, public safety, utilities, engineering, planning/zoning, GIS, administration, public works, building, or highway departments. The County Hazard Mitigation Planning Sub-Committee meetings would be convened in each county to review and document what changes/impacts/progress has occurred in the past 5 years for inclusion in the updated divisional plan.

Division D Hazard Mitigation Core Planning Team Responsibilities:

- Serving on the Core Planning Team with Division D Coordinator and the 11 EMA Directors or their designee.
- Approving the final Work Program and Schedule.
- Assisting in organizing and attending regular meetings of the Core Planning Team and county-level planning sub-committees. If unable to attend, sending a designee or make myself available to discuss the agenda through phone conversation or in-person meeting with designated LRCOG staff.
- Assisting in developing and conducting an outreach strategy to involve other county-level planning sub-committee members, stakeholders, and the public, as appropriate to represent the Jurisdiction.
- Identifying community resources available to support the planning effort, including meeting spaces, facilitators, and media outlets.
- Representing the jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Providing information and feedback on the jurisdictional and division risk assessment and mitigation strategies and select a course of action to be followed for the communities.
- Providing an assessment of prioritized projects that have been completed or are ongoing, or changes to prioritization.
- Submitting the draft plan to the county-level planning sub-committee for review.
- Working with the members of the Core Planning Team to incorporate all Jurisdiction's comments into the draft plan.

- Submitting the Division D Multi-jurisdiction Multi-hazard Mitigation Plan to the respective governing body for consideration and adoption.
- After adoption, assisting in the coordination process to monitor, evaluate, and work toward plan implementation.
- Assist in documenting the in-kind labor of Core Planning and Sub-committee members for the local match requirement of the grant.

Hazard Mitigation Plan Update Evaluation Process:

1. **Complete grant start up requirements** once funding notification is received.

2. **Review current Hazard Mitigation Plans for each county** -The review of the current approved plans will provide a starting point for identifying areas for improvement that may require more time and resources. Each of the eleven plans will be reviewed for consistency of information within the divisional plan. Additionally, FEMA's Local Mitigation Plan Review Tools from each of the 11 previous plans will be reviewed and recommendations for improvement will be incorporated into the planning process.

3. **Organize Resources and Convene Core Planning Team -** The core planning team will manage the overall plan activities, contribute to the decision making process, review the previous local hazard mitigation plans, finalize requirements for participation in the planning process, and establish the county-level Hazard Mitigation Planning Sub-Committees to participate in the plan development.

4. **Organize the County Planning Sub-Committee** - The county-level Planning Sub-Committee would be organized in each county to review the community capabilities, hazard identification, risk assessments, mitigation and plan maintenance strategies of the existing local Hazard Mitigation Plan. During the review, the group would document what changes/impacts/progress has been made in each area for inclusion in the divisional plan.

5. **Create Outreach Strategy for Division D** – The Planning Process Section would be reviewed and evaluated to determine if the planning procedures were effective, was public outreach activities successful in gaining public participation, and is the current level of public support and/or decision maker priorities the same or has it changed related to hazard mitigation. Once reviewed, the planning team would identify any necessary changes or additional strategies that are needed in moving forward with the updated plan. Public outreach efforts will include but not limited to advertisement and invitation to all planning and community meetings, social media outreach, plan website, interactive surveys at stakeholder meetings (i.e. Pollev.com), online surveys (i.e. survey monkey), and phone interviews.

6. **Review Community Capabilities and Previously Approved Hazard Mitigation Plans – The** Capability Assessment Section would be reviewed to determine if community capabilities were documented sufficiently in the previous plans, were there any community capabilities that were missing in terms of administrative, human, technical, and financial resources and if the policies, plans, regulations, or reports listed in the plan were current and up to date.

7. **Conduct Risk Assessment – Hazard Identification, Assessing Risk, and Vulnerabilities** – Hazard Identification and Risks/Vulnerability Assessment would be evaluated to see if the listed hazards and hazard occurrences, probability of future occurrences and the impact on life, property and the community is sufficient or new data is available. Community assets, development trends, population changes, critical facilities, and local mitigation efforts will be updated by utilizing the technical expertise of planning committees, new data sources and existing local plans. Estimates of potential dollar losses and the methodology used to prepare the estimates will be updated from the previous plan.

8. **Identify Mitigation Goals, Action Plan, and Implementation Plan** - Mitigation Strategy Section would be evaluated to determine if the implementation of the community's mitigation strategy was effective and was the strategy revised following any disasters, if the existing mitigation actions were still relevant

and were there obstacles to successful implementation of these actions, if integration with other planning mechanisms occurred and if progress was made in implementing the mitigation action plan. Mitigation Strategy would evaluate each jurisdiction's mitigation strategy particularly in light of experiences gained from the implementation of the previous plan. The 5 year update will assess the previous stated goals and actions, evaluate progress in implementing the action plan, and adjust its actions to address current realities. The mitigation strategy will also be revised to add any new disasters to determine if recommended actions are still appropriate given the impacts of the event.

9. **Plan Maintenance Procedures** would be evaluated to determine how well the plan maintenance procedures established in the previously approved plan worked. An updated blueprint for monitoring, evaluating, updating the mitigation plan within the 5 year cycle, as well as the responsible parties, will be outlined. It will also include new and existing strategies for continued public involvement and incorporation into existing planning mechanisms in each jurisdiction.

10. **Develop and Review the Draft Plan** - The draft plan will be reviewed by Division D Core Planning Team, county subcommittees, other identified stakeholders, and the public during the draft process and prior to plan approval and adoption.

11. **Submission of Draft Plan by AEMA and FEMA for review and approval** - An approved draft plan will be submitted to AEMA/FEMA for their review and comment. All comments/revisions/suggestions received from AEMA/FEMA will be integrated into the final plan and would be in compliance with all current, applicable FEMA Local Planning Guidance and Policies.

12. **Adoption of the Division D Multi-jurisdictional Multi-hazard Mitigation Plan in each jurisdiction** - The final approved plan will be formally adopted by all participating local governments at a regularly scheduled commission/council meeting. Documentation of these approvals will be included in the final Division D Multi-Jurisdictional Hazard Mitigation Plan.

Next Steps:

1. Compile a list of potential members of the County Planning Sub-Committee from each County EMA Director.
2. Start reviewing existing data sources to include the following:
    a. Alabama State Hazard Mitigation Plan
    b. Local Hazard Mitigation Plans and the FEMA's Local Mitigation Plan Review Tools
    c. Emergency Operations Plans
    d. State and Federal Sources of Hazard Information
    e. Planning and Regulatory
    f. Changes in Development

Hazards Identitifed at Division D Meeting

Proposed Division D	Autauga/Chilton/Macon/Montgomery/Tallapoosa	Lee/Russell	Elmore	Chambers	Coosa	Lowndes	State of Alabama
Dam Failure	Thunderstorm	Drought/Heat Wave	Thunderstorms/Severe Thunderstorms	Flooding	Tornadoes	Dam Failure	Dam Failure
Drought	Lightning	Earthquakes	Lightning	Tornadoes	Severe Storms (discusses high winds, lightning)	Drought	Drought
Earthquakes	Hail	Flood	Hail	Severe Storms-hail, lightning	Flooding	Extreme Temperatures	Earthquakes
Extreme Temperature	Tornado	Hail	Tornadoes and High Wind Events	Hurricanes	Winter Storms	Floods	Extreme Temperatures
Flooding	Flood/Flash Flood	Lightning	Flooding (includes Flash Flooding, River Flooding)	Winter Storms/Freezes	Hurricanes	Hail	Flooding
Hail	Drought/Extreme Heat	Sinkholes	Hurricanes and Tropical Storms	Landslides	Droughts	High Winds	Hail
High Winds	Winter Storm/Frost/Freeze/Heavy Snow/Ice Storm/Winter Weather/Extreme Cold	Thunderstorms (Includes Strong Winds)	Extreme Temperatures – Heat and Cold	Sink Holes (Land Subsidence)	Not included: Dam Failure	Landslides	High Winds
Landslides	Hurricane/Tropical Storm/Tropical Depression/High Wind/Strong Wind	Tropical Depression/Tropical Storms/Hurricanes	Winter Storms	Earthquakes	Earthquake	Sinkholes and Subsidence	Landslides
Lightning	Sinkhole/Expansive Soil	Tornadoes	Drought	Droughts/Heat Waves	Extreme Temperatures	Wildfire	Lightning
Sinkholes and Land Subsidence	Landslide	Wildfire	Wildfire	Dam/Levee Failures	Landslides	Winter/Ice Storms	Sea Level Rise and Coastal Land Change
Tropical Storms/Tropical Depressions/Hurricanes	Earthquake	Winter Storms (Includes Ice Storms, Heavy Snow)	Landslides	Does not include: Wildfire	Sinkholes and Land Subsidence	Thunderstorms and Lightning	Sinkholes and Land Subsidence
Tornadoes	Dam/Levee Failure	Not included: Dam Failure	Sinkholes and Land Subsidence		Wildfire	Tropical Storms and Hurricanes	Tsunamis
Wildfire	Wildfire	Landslides	Earthquakes			Not Included:	Wildfire
Winter Storms			Dam Failure			Earthquake	Winter Storms
			Dense Fog				
			Celestial Impact (Includes Space Weather)				
			Hazardous Materials				
			Transportation System Failures				
			Epidemiological/Public Health				
			Civil Unrest				
			Adversarial Threats				

Proposed Goals from Division D Meeting

Division 'D' Hazard Mitigation Plan – Proposed Goals:

1. **PREVENTION**: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.

2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.

3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.

4. **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.

5. **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.

6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

7.3 Appendix C: Advertisement



Taylor Esco

Coosa County Hazard Mitigation plan Community Engagement

o Les Sellers; coosaema@yahoo.com

:c Monique Smith; Keith Barnett



Les,

How would you like to do the community engagement for Coosa County? For Phase 2 we posted a quick survey (link) to the EMA's and local towns/cities'Facebook page and Website. Due to COVID we did not hosting any public events. Let me know your thoughts or ideas. I have attached a copy of the survey questions we are going to use for Chilton County.

If you would to post the survey online here is a short message describing what the survey is about with a link to the survey.

Please click on the link (https://www.surveymonkey.com/r/JLCJVSM) to participate in the community engagement portion of the 2020 Hazard Mitigation Plan. The survey will take less than 2 minutes to complete. The information from this survey will help the Coosa County EMA develop effective strategies to reduce the effects of hazards such as floods, tornadoes and severe storms on life and property. Your participation in the Hazard Mitigation Plan is vital to preparing the plan. Please answer each question completely and honestly as your answers will help us address hazard mitigation actions in your county. All answers are confidential. Thank you for your participation.

Please do not hesitate to call or email me if you have any questions.

Taylor V. Esco

7.4 Appendix D: Hazard Events Tables

Droughts

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/18/2006	7:00	CST	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/1/2006	0:00	CST	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	5/22/2007	6:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	6/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/1/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K

COOSA (ZONE)	COOSA (ZONE)	AL	2/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	3/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	4/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	5/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	6/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/14/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/21/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	2/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	3/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K

COOSA (ZONE)	COOSA (ZONE)	AL	4/5/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	6/7/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/2/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	3/13/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	4/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	5/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K

COOSA (ZONE)	COOSA (ZONE)	AL	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	2/1/2013	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/18/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/1/2017	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	9/24/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	10/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/1/2019	0:00	CST-6	Drought		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

Extreme Temperatures

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/8/2007	12:00	CST-6	Heat		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	6/30/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	7/1/2012	12:00	CST-6	Heat		0	0	0.00K	0.00K
Totals:											

Hail

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	20.00K	0.00K
GOODWATER	COOSA CO.	AL	4/19/2006	18:38	CST	Hail	1.00 in.	0	0	0.00K	0.00K
KELLYTON	COOSA CO.	AL	4/19/2006	18:40	CST	Hail	1.00 in.	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	4/19/2006	19:54	CST	Hail	1.00 in.	0	0	0.00K	0.00K
GOODWATER	COOSA CO.	AL	5/13/2006	18:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	6/22/2006	14:27	CST	Hail	0.88 in.	0	0	0.00K	0.00K
NIXBURG	COOSA CO.	AL	4/11/2007	16:00	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
LAKE MITCHELL	COOSA CO.	AL	4/11/2007	18:15	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
LAKE MITCHELL	COOSA CO.	AL	2/17/2008	13:20	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HANOVER	COOSA CO.	AL	2/17/2008	13:30	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
GOODWATER	COOSA CO.	AL	2/17/2008	13:45	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
COTTAGE GROVE	COOSA CO.	AL	4/4/2008	15:45	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K

GOODWATER	COOSA CO.	AL	4/10/2009	17:20	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
SALTER	COOSA CO.	AL	4/10/2009	17:27	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
NIXBURG	COOSA CO.	AL	4/10/2009	17:45	CST-6	Hail	1.75 in.	0	0	20.00K	0.00K
SALTER	COOSA CO.	AL	3/26/2011	13:17	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	3/26/2011	13:30	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
COTTAGE GROVE	COOSA CO.	AL	5/26/2011	13:58	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	3/18/2013	15:16	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	3/23/2013	21:42	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HANOVER	COOSA CO.	AL	4/5/2017	18:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
Totals:								0	0	20.00K	0.00K

Flooding

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	80.00K	0.00K
KELLYTON	COOSA CO.	AL	9/19/2009	9:00	CST-6	Flash Flood		0	0	5.00K	0.00K
WEOGUFKA	COOSA CO.	AL	3/9/2011	7:30	CST-6	Flash Flood		0	0	75.00K	0.00K
Totals:								0	0	80.00K	0.00K

Thunderstorms

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	52.00K	0.00K
ROCKFORD	COOSA CO.	AL	8/30/2006	17:18	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
KELLYTON	COOSA CO.	AL	10/23/2007	1:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
ROCKFORD	COOSA CO.	AL	4/4/2008	14:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
SALTER	COOSA CO.	AL	6/9/2008	18:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
WEOGUFKA	COOSA CO.	AL	7/22/2008	16:15	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
MARBLE VLY	COOSA CO.	AL	5/3/2009	13:47	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
HISSOP	COOSA CO.	AL	7/5/2009	17:04	CST-6	Thunderstorm Wind	56 kts. EG	0	0	5.00K	0.00K
STEWARTSVILLE	COOSA CO.	AL	4/4/2011	20:05	CST-6	Thunderstorm Wind	55 kts. EG	0	0	20.00K	0.00K
SALTER	COOSA CO.	AL	5/26/2011	13:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K

COTTAGE GROVE	COOSA CO.	AL	5/26/2011	13:58	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
STEWARTSVILLE	COOSA CO.	AL	6/17/2011	12:13	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
WEOGUFKA	COOSA CO.	AL	12/25/2012	20:09	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
SALTER	COOSA CO.	AL	3/23/2013	22:38	CST-6	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
HANOVER	COOSA CO.	AL	3/23/2013	22:42	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
GOODWATER	COOSA CO.	AL	3/23/2013	22:53	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COTTAGE GROVE	COOSA CO.	AL	6/7/2014	22:57	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
STEWARTSVILLE	COOSA CO.	AL	4/25/2015	16:18	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
SALTER	COOSA CO.	AL	5/24/2015	17:48	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COTTAGE GROVE	COOSA CO.	AL	6/17/2016	16:03	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

MARBLE VLY	COOSA CO.	AL	6/28/2018	14:08	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
MARBLE VLY	COOSA CO.	AL	12/16/2019	22:30	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PENTONVILLE	COOSA CO.	AL	1/11/2020	14:22	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PARKDALE	COOSA CO.	AL	1/11/2020	14:26	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
Totals:								0	0	52.00K	0.00K

Hurricanes/ Tropical Storms/ Tropical Depressions

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	2.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	8/23/2008	12:00	CST-6	Tropical Depression		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	11/9/2009	14:00	CST-6	Tropical Depression		0	0	2.00K	0.00K
Totals:								0	0	2.00K	0.00K

Tornado

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	2	294.10K	0.00K
MARBLE VLY	COOSA CO.	AL	2/6/2008	6:25	CST-6	Tornado	EF2	0	0	115.00K	0.00K
SOCAPATOY	COOSA CO.	AL	2/17/2008	13:42	CST-6	Tornado	EF1	0	0	100.00K	0.00K
WETONA	COOSA CO.	AL	8/24/2008	13:12	CST-6	Tornado	EF0	0	0	0.00K	0.00K
EQUALITY	COOSA CO.	AL	4/15/2011	22:26	CST-6	Tornado	EF2	0	2	14.10K	0.00K
WETONA	COOSA CO.	AL	12/22/2011	14:25	CST-6	Tornado	EF1	0	0	65.00K	0.00K
WETONA	COOSA CO.	AL	3/2/2012	22:11	CST-6	Tornado	EF0	0	0	0.00K	0.00K
PENTONVILLE	COOSA CO.	AL	10/1/2012	3:47	CST-6	Tornado	EF0	0	0	0.00K	0.00K
COTTAGE GROVE	COOSA CO.	AL	1/19/2019	14:58	CST-6	Tornado	EF1	0	0	0.00K	0.00K
ROCKFORD	COOSA CO.	AL	2/24/2019	1:54	CST-6	Tornado	EF1	0	0	0.00K	0.00K
MARBLE VLY	COOSA CO.	AL	3/14/2019	18:52	CST-6	Tornado	EF0	0	0	0.00K	0.00K
WEOGUFKA	COOSA CO.	AL	3/14/2019	19:21	CST-6	Tornado	EF0	0	0	0.00K	0.00K
Totals:								0	2	294.10K	0.00K

Wild Fires

Fire #	County	Acres	Reported On	Contained On	Controlled On
20191130-3	Coosa	7	11/30/2019 12:22	11/30/2019 14:26	11/30/2019 14:26
20191011-21	Coosa	0.25	10/11/2019 15:23	10/11/2019 16:54	10/11/2019 16:54
20191004-10	Coosa	15	10/4/2019 13:43	10/4/2019 20:52	10/4/2019 20:52
20191001-28	Coosa	0.01	10/1/2019 15:14	10/1/2019 17:13	10/1/2019 17:13
20191001-27	Coosa	1	10/1/2019 15:13	10/1/2019 16:39	10/1/2019 16:39
20190930-25	Coosa	0.5	9/30/2019 18:02	9/30/2019 19:45	9/30/2019 19:53
20190924-24	Coosa	4	9/24/2019 17:00	9/24/2019 18:26	9/24/2019 18:27
20190920-21	Coosa	4	9/20/2019 15:35	9/20/2019 19:05	9/20/2019 19:05
20190919-6	Coosa	60	9/19/2019 11:08	9/19/2019 16:08	9/19/2019 16:08
20190910-8	Coosa	2	9/10/2019 18:33	9/10/2019 20:41	9/10/2019 20:41
20190823-1	Coosa	0.25	8/23/2019 14:29	8/23/2019 15:57	8/23/2019 15:57
20190816-4	Coosa	30	8/16/2019 12:59	8/16/2019 20:22	8/16/2019 20:22
20190729-10	Coosa	25	7/29/2019 17:31	7/29/2019 21:43	7/29/2019 21:43
20190727-6	Coosa	1	7/27/2019 22:44	7/28/2019 1:15	7/30/2019 8:35
20190705-2	Coosa	63	7/5/2019 10:21	7/5/2019 17:57	7/5/2019 19:12
20190704-7	Coosa	11	7/4/2019 19:11	7/4/2019 22:15	7/4/2019 22:15
20190629-1	Coosa	13.2	6/29/2019 17:48	6/29/2019 19:23	6/29/2019 20:19

20190417-2	Coosa	0.25	4/17/2019 14:58	4/17/2019 16:37	4/17/2019 16:37
20190402-5	Coosa	0.25	4/2/2019 15:14	4/2/2019 17:27	4/2/2019 17:27
20190327-11	Coosa	10	3/27/2019 22:44	3/28/2019 0:30	3/28/2019 13:58
20190320-13	Coosa	1	3/20/2019 15:45	3/20/2019 17:12	3/20/2019 17:12
20190319-9	Coosa	6	3/19/2019 15:47	3/19/2019 17:50	3/19/2019 17:50
20190319-6	Coosa	4	3/19/2019 13:50	3/19/2019 15:12	3/19/2019 15:12
20190122-4	Coosa	10	1/22/2019 18:28	1/22/2019 21:48	1/22/2019 21:48
20181227-2	Coosa	1.5	12/27/2018 10:13	12/27/2018 10:57	12/27/2018 10:57
20180922-9	Coosa	25	9/22/2018 15:26	9/22/2018 18:33	9/22/2018 18:57
20180922-8	Coosa	1	9/22/2018 14:57	9/22/2018 16:30	9/22/2018 16:30
20180730-2	Coosa	2	7/30/2018 15:33	7/30/2018 17:21	7/30/2018 17:21
20180514-8	Coosa	6	5/14/2018 15:09	5/14/2018 17:48	5/14/2018 18:29
20180514-5	Coosa	7	5/14/2018 14:34	5/14/2018 18:30	5/14/2018 18:30
20180514-4	Coosa	3.75	5/14/2018 14:30	5/14/2018 15:37	5/14/2018 15:37
20180418-6	Coosa	2.5	4/18/2018 15:38	4/18/2018 16:41	4/18/2018 16:41
20180413-10	Coosa	2	4/13/2018 18:36	4/13/2018 20:59	4/13/2018 20:59
20180413-6	Coosa	81.5	4/13/2018 16:15	4/19/2018 14:40	4/19/2018 14:40
20180403-20	Coosa	10	4/3/2018 22:43	4/4/2018 0:07	4/4/2018 0:40
20180402-2	Coosa	0.5	4/2/2018 14:10	4/2/2018 14:46	4/2/2018 17:42

20180401-7	Coosa	2	4/1/2018 16:30	4/1/2018 17:58	4/1/2018 18:34
20180315-11	Coosa	0.5	3/15/2018 15:31	3/15/2018 16:47	3/15/2018 16:47
20180222-6	Coosa	1.5	2/22/2018 13:51	2/22/2018 15:27	2/22/2018 15:27
20180121-11	Coosa	1	1/21/2018 14:24	1/21/2018 15:45	1/22/2018 13:29
20171127-3	Coosa	11	11/27/2017 12:33	11/27/2017 18:31	11/27/2017 20:58
20171007-2	Coosa	45	10/7/2017 11:30	10/7/2017 14:49	10/7/2017 14:49
20170930-3	Coosa	0.5	9/30/2017 13:02	9/30/2017 14:52	9/30/2017 15:11
20170719-2	Coosa	0.5	7/19/2017 23:07	7/20/2017 1:04	7/20/2017 15:50
20170420-25	Coosa	0.5	4/20/2017 22:07	4/20/2017 23:21	4/20/2017 23:23
20170418-4	Coosa	1	4/18/2017 16:08	4/18/2017 17:16	4/18/2017 17:43
20170413-1	Coosa	6	4/13/2017 11:03	4/13/2017 14:36	4/13/2017 16:02
20170407-12	Coosa	35	4/7/2017 16:40	4/7/2017 19:28	4/7/2017 19:56
20170321-35	Coosa	7.4	3/21/2017 17:55	3/21/2017 19:03	3/21/2017 19:28
20170320-27	Coosa	8	3/20/2017 16:53	3/20/2017 19:00	3/20/2017 19:08
20170306-19	Coosa	4	3/6/2017 14:47	3/6/2017 16:11	3/6/2017 16:11
20170305-11	Coosa	3	3/5/2017 18:24	3/5/2017 20:13	3/5/2017 20:13
20170305-5	Coosa	3	3/5/2017 13:17	3/5/2017 15:00	3/5/2017 15:22
20170304-29	Coosa	17	3/4/2017 14:34	3/4/2017 17:17	3/4/2017 17:30
20170225-30	Coosa	3	2/25/2017 19:23	2/25/2017 21:42	2/25/2017 22:00

20170225-6	Coosa	15	2/25/2017 12:34	2/25/2017 14:50	2/25/2017 14:50
20170220-21	Coosa	30	2/20/2017 16:05	2/20/2017 18:43	2/20/2017 18:43
20170220-6	Coosa	20	2/20/2017 12:26	2/20/2017 14:54	2/20/2017 15:15
20170215-1	Coosa	1	2/15/2017 1:02	2/15/2017 3:14	2/15/2017 3:14
20170214-11	Coosa	3	2/14/2017 15:36	2/14/2017 17:57	2/14/2017 18:04
20170129-2	Coosa	1	1/29/2017 12:07	1/29/2017 15:25	1/29/2017 15:25
20161223-10	Coosa	7	12/23/2016 13:51	12/23/2016 16:27	12/23/2016 16:27
20161223-8	Coosa	3	12/23/2016 13:40	12/23/2016 16:17	12/23/2016 16:27
20161216-10	Coosa	0.5	12/16/2016 23:43	12/17/2016 1:25	12/17/2016 1:25
20161211-4	Coosa	2.5	12/11/2016 13:21	12/11/2016 16:08	12/12/2016 9:30
20161128-125	Coosa	15	11/28/2016 20:54	11/28/2016 23:41	12/5/2016 10:37
20161128-122	Coosa	2	11/28/2016 20:31	11/28/2016 22:50	11/28/2016 23:12
20161128-111	Coosa	1.5	11/28/2016 18:59	11/28/2016 21:13	11/29/2016 12:17
20161128-88	Coosa	49.8	11/28/2016 16:52	11/28/2016 23:19	12/5/2016 10:37
20161128-57	Coosa	1	11/28/2016 14:35	11/28/2016 16:25	12/5/2016 10:37
20161123-50	Coosa	2.5	11/23/2016 17:37	11/23/2016 19:22	11/23/2016 19:28
20161120-9	Coosa	47.5	11/20/2016 11:38	11/20/2016 17:51	11/20/2016 17:51
20161119-46	Coosa	3.7	11/19/2016 21:08	11/20/2016 0:06	11/20/2016 0:08
20161119-10	Coosa	0.25	11/19/2016 10:38	11/19/2016 10:39	11/19/2016 12:28

20161118-12	Coosa	14	11/18/2016 11:53	11/18/2016 15:06	11/18/2016 15:42
20161113-13	Coosa	0.1	11/13/2016 14:26	11/13/2016 15:36	11/13/2016 15:36
20161106-15	Coosa	7.8	11/6/2016 11:47	11/6/2016 16:20	11/6/2016 16:51
20161102-30	Coosa	0.5	11/2/2016 18:00	11/2/2016 21:18	11/2/2016 21:19
20161102-25	Coosa	1	11/2/2016 16:57	11/2/2016 19:53	11/2/2016 21:18
20161101-51	Coosa	1.2	11/1/2016 19:02	11/1/2016 22:01	11/1/2016 22:08
20161030-17	Coosa	0.5	10/30/2016 13:33	10/30/2016 15:37	10/30/2016 15:37
20161029-1	Coosa	5	10/29/2016 7:18	10/29/2016 10:29	10/29/2016 11:36
20161023-17	Coosa	35	10/23/2016 12:41	10/24/2016 11:17	10/24/2016 14:50
20161023-12	Coosa	502.1	10/23/2016 11:23	10/24/2016 15:22	10/25/2016 17:00
20161022-26	Coosa	0.5	10/22/2016 12:59	10/22/2016 14:48	10/22/2016 14:48
20161022-7	Coosa	9.5	10/22/2016 8:18	10/22/2016 11:00	10/22/2016 11:19
20161021-34	Coosa	6	10/21/2016 14:25	10/21/2016 16:23	10/21/2016 16:23
20161020-42	Coosa	0.25	10/20/2016 18:11	10/20/2016 19:12	10/20/2016 19:23
20161019-9	Coosa	1	10/19/2016 13:03	10/19/2016 14:52	10/19/2016 19:03
20161019-2	Coosa	20.25	10/19/2016 6:50	10/19/2016 10:07	10/28/2016 18:40
20161018-35	Coosa	502.1	10/18/2016 22:46	11/17/2016 8:32	11/23/2016 17:37
20161017-32	Coosa	61	10/17/2016 18:35	10/22/2016 23:00	10/22/2016 23:36
20161017-12	Coosa	3.5	10/17/2016 14:29	10/17/2016 16:11	10/17/2016 16:11

20161017-7	Coosa	0.1	10/17/2016 12:13	10/17/2016 13:32	10/17/2016 17:25
20161015-5	Coosa	0.25	10/15/2016 10:30	10/15/2016 12:29	10/15/2016 12:38
20161011-47	Coosa	6	10/11/2016 16:46	10/11/2016 18:55	10/11/2016 18:55
20161010-43	Coosa	0.25	10/10/2016 15:23	10/10/2016 17:18	10/10/2016 17:18
20161009-78	Coosa	6	10/9/2016 18:12	10/9/2016 21:40	10/9/2016 22:16
20161009-59	Coosa	60	10/9/2016 15:53	10/9/2016 20:26	10/9/2016 20:27
20161009-37	Coosa	115	10/9/2016 14:05	10/9/2016 19:34	10/9/2016 19:34
20161008-44	Coosa	1	10/8/2016 16:55	10/8/2016 18:07	10/8/2016 18:44
20161008-8	Coosa	1	10/8/2016 11:12	10/8/2016 12:54	10/8/2016 13:22
20161007-65	Coosa	8	10/7/2016 23:38	10/8/2016 3:11	10/8/2016 3:31
20161004-24	Coosa	0.25	10/4/2016 15:07	10/4/2016 15:30	10/4/2016 15:33
20161004-5	Coosa	9	10/4/2016 8:50	10/4/2016 12:19	10/4/2016 19:22
20161003-31	Coosa	0.25	10/3/2016 16:06	10/3/2016 17:49	10/3/2016 17:54
20161003-22	Coosa	0.25	10/3/2016 14:49	10/3/2016 16:45	10/3/2016 16:45
20161002-22	Coosa	1	10/2/2016 16:29	10/2/2016 17:43	10/2/2016 17:43
20160927-2	Coosa	5	9/27/2016 7:31	9/27/2016 11:28	9/27/2016 11:53
20160923-21	Coosa	1	9/23/2016 21:51	9/24/2016 0:01	9/24/2016 0:15
20160701-20	Coosa	56	7/1/2016 19:07	7/1/2016 22:33	7/1/2016 22:33
20160701-3	Coosa	2	7/1/2016 11:08	7/1/2016 12:59	7/1/2016 12:59

20160627-10	Coosa	4	6/27/2016 16:16	6/27/2016 19:45	6/28/2016 11:31
20160525-2	Coosa	0.05	5/25/2016 10:40	5/25/2016 11:25	5/25/2016 11:25
20160307-3	Coosa	6	3/7/2016 12:17	3/7/2016 14:14	3/7/2016 14:14
20160305-5	Coosa	25	3/5/2016 19:41	3/5/2016 22:17	3/5/2016 22:17
20160213-1	Coosa	4	2/13/2016 3:57	2/13/2016 6:11	2/13/2016 6:11
20160212-2	Coosa	10	2/12/2016 10:56	2/12/2016 16:09	2/12/2016 17:12
20160211-12	Coosa	135	2/11/2016 15:06	2/11/2016 19:49	2/11/2016 19:49
ECR-20150914-002	Coosa	2	9/14/2015 17:45		9/14/2015 20:01
ECR-20150318-007	Coosa	7	3/18/2015 18:05		3/18/2015 19:35
ECR-20150318-004	Coosa	65	3/18/2015 16:32		3/18/2015 17:45
ECR-20150318-003	Coosa	1	3/18/2015 15:54		3/18/2015 16:33
ECR-20150317-005	Coosa	0	3/17/2015 16:36		3/17/2015 17:20
ECR-20150316-001	Coosa	1	3/16/2015 12:36		3/16/2015 13:24
ECR-20150307-002	Coosa	1	3/7/2015 14:41		3/7/2015 15:54
ECR-20150215-005	Coosa	15	2/15/2015 19:30		2/15/2015 22:14

ECR-20150212-001	Coosa	2	2/12/2015 13:57		2/12/2015 15:26
ECR-20150207-010	Coosa	5	2/7/2015 16:41		2/7/2015 17:30
ECR-20150207-006	Coosa	1	2/7/2015 13:58		2/7/2015 14:55
ECR-20150207-004	Coosa	3	2/7/2015 12:26		2/7/2015 13:45
ECR-20150207-001	Coosa	30	2/7/2015 12:08		2/7/2015 15:51
ECR-20150131-003	Coosa	5	1/31/2015 15:01		1/31/2015 17:26
ECR-20150121-002	Coosa	1	1/21/2015 12:52		1/21/2015 13:45
ECR-20150120-005	Coosa	1	1/20/2015 15:44		1/20/2015 16:05
ECR-20150119-009	Coosa	2	1/19/2015 14:06		1/19/2015 16:53
ECR-20141129-002	Coosa	1	11/29/2014 16:25		11/29/2014 17:14
ECR-20141128-002	Coosa	1	11/28/2014 12:30		11/28/2014 13:03
ECR-20141122-001	Coosa	2	11/22/2014 12:54		11/22/2014 14:01

ECR-20141113-002	Coosa	8	11/13/2014 23:07		11/14/2014 1:48
ECR-20141104-002	Coosa	1	11/4/2014 14:16		10/28/2014 15:20
ECR-20141031-002	Coosa	1	10/31/2014 16:41		10/31/2014 18:10
ECR-20141021-001	Coosa	0	10/21/2014 9:50		10/21/2014 10:46
ECR-20141006-001	Coosa	0	10/6/2014 11:47		10/6/2014 16:45
ECR-20140924-001	Coosa	12	9/24/2014 19:18		9/24/2014 22:18
ECR-20140902-001	Coosa	9	9/2/2014 8:18		9/2/2014 9:27
ECR-20140302-007	Coosa	30	3/2/2014 14:21		3/2/2014 20:03
ECR-20140302-003	Coosa	40	3/2/2014 13:27		3/2/2014 16:49
ECR-20140224-002	Coosa	30	2/24/2014 13:45		2/24/2014 17:19
ECR-20140125-005	Coosa	1	1/25/2014 12:42		1/25/2014 14:10
ECR-20140121-004	Coosa	30	1/21/2014 17:02		1/21/2014 20:30

ECR-20140121-005	Coosa	10	1/21/2014 17:02		1/21/2014 21:00
ECR-20140120-004	Coosa	8	1/20/2014 14:11		1/20/2014 17:30
ECR-20140119-006	Coosa	0	1/19/2014 16:27		1/19/2014 18:45
ECR-20140119-002	Coosa	6	1/19/2014 12:12		1/19/2014 14:56
ECR-20140109-001	Coosa	0	1/9/2014 11:30		1/9/2014 13:10
ECR-20131014-001	Coosa	0	10/14/2013 13:54		10/14/2013 15:41
ECR-20130423-001	Coosa	3	4/23/2013 12:27		4/23/2013 14:08
ECR-20130413-001	Coosa	4	4/13/2013 13:51		4/13/2013 15:42
ECR-20130409-002	Coosa	8	4/9/2013 15:52		4/9/2013 17:05
ECR-20130329-008	Coosa	3	3/29/2013 15:35		3/29/2013 17:00
ECR-20130328-003	Coosa	2	3/28/2013 14:30		3/28/2013 16:30
ECR-20130320-002	Coosa	2	3/20/2013 15:40		3/20/2013 16:05

ECR-20130318-004	Coosa	0	3/18/2013 15:52		3/18/2013 16:11
ECR-20130316-020	Coosa	4	3/16/2013 19:10		3/16/2013 21:00
ECR-20130316-012	Coosa	5	3/16/2013 16:30		3/16/2013 18:45
ECR-20130316-010	Coosa	24	3/16/2013 16:04		3/16/2013 18:16
ECR-20130315-006	Coosa	0	3/15/2013 17:23		3/15/2013 18:44
ECR-20130314-003	Coosa	40	3/14/2013 21:14		3/15/2013 1:02
ECR-20130309-007	Coosa	0	3/9/2013 12:27		3/9/2013 14:47
ECR-20130309-001	Coosa	2	3/9/2013 11:22		3/9/2013 12:27
ECR-20130307-003	Coosa	1	3/7/2013 16:23		3/7/2013 17:17
ECR-20121210-002	Coosa	30	12/10/2012 6:12		12/10/2012 9:42
ECR-20121207-001	Coosa	80	12/7/2012 8:57		12/7/2012 15:46
ECR-20121206-004	Coosa	2	12/6/2012 18:18		12/6/2012 19:51

ECR-20121124-005	Coosa	60	11/24/2012 14:20		11/24/2012 18:48
ECR-20121124-002	Coosa	40	11/24/2012 11:49		11/24/2012 15:55
ECR-20121121-003	Coosa	0	11/21/2012 14:30		11/21/2012 15:57
ECR-20121117-002	Coosa	3	11/17/2012 12:46		11/17/2012 15:44
ECR-20121103-004	Coosa	6	11/3/2012 17:09		11/3/2012 19:30
ECR-20121029-006	Coosa	4	10/29/2012 19:35		10/29/2012 22:42
ECR-20120915-001	Coosa	6	9/15/2012 12:51		9/15/2012 18:03
ECR-20120907-001	Coosa	0	9/7/2012 17:36		9/7/2012 19:30
ECR-20120907-002	Coosa	0	9/7/2012 17:36		9/7/2012 19:30
ECR-20120617-001	Coosa	10	6/17/2012 17:37		6/17/2012 20:27
ECR-20120413-001	Coosa	37	4/13/2012 14:11		4/13/2012 17:45
ECR-20120321-003	Coosa	0	3/21/2012 12:54		3/21/2012 13:34

ECR-20120320-004	Coosa	2	3/20/2012 13:34		3/20/2012 15:15
ECR-20120306-007	Coosa	1	3/6/2012 17:29		3/6/2012 17:33
ECR-20120306-005	Coosa	3	3/6/2012 15:48		3/6/2012 16:45
ECR-20120305-001	Coosa	0	3/5/2012 11:55		3/5/2012 13:42
ECR-20120223-003	Coosa	0	2/23/2012 16:20		2/23/2012 17:30
ECR-20120106-002	Coosa	2	1/6/2012 14:50		1/6/2012 16:45
ECR-20111120-001	Coosa	75	11/20/2011 19:07		11/21/2011 13:00
ECR-20111108-001	Coosa	6	11/8/2011 12:24		11/8/2011 15:43
ECR-20111026-001	Coosa	2	10/26/2011 16:31		10/26/2011 17:36
ECR-20111018-001	Coosa	1	10/18/2011 15:16		10/18/2011 16:30
ECR-20111017-001	Coosa	0	10/17/2011 14:13		10/17/2011 15:37
ECR-20111005-004	Coosa	1	10/5/2011 17:35		10/5/2011 18:27

ECR-20110930-002	Coosa	0	9/30/2011 14:12		9/30/2011 16:00
ECR-20110929-001	Coosa	0	9/29/2011 16:05		9/29/2011 17:48
ECR-20110919-003	Coosa	1	9/19/2011 13:19		9/19/2011 14:34
ECR-20110829-001	Coosa	2	8/29/2011 14:12		8/29/2011 16:17
ECR-20110803-003	Coosa	120	8/3/2011 17:26		8/3/2011 22:55
ECR-20110705-001	Coosa	10	7/5/2011 17:42		7/5/2011 21:40
ECR-20110610-002	Coosa	2	6/10/2011 19:04		6/10/2011 23:25
ECR-20110608-003	Coosa	2	6/8/2011 17:05		6/8/2011 18:48
ECR-20110608-001	Coosa	1	6/8/2011 11:56		6/8/2011 14:12
ECR-20110606-005	Coosa	1	6/6/2011 17:47		6/6/2011 19:05
ECR-20110602-002	Coosa	0	6/2/2011 15:54		6/2/2011 16:35
ECR-20110525-002	Coosa	3	5/25/2011 8:53		5/25/2011 10:30

ECR-20110523-002	Coosa	1	5/23/2011 13:15		5/23/2011 14:50
ECR-20110404-003	Coosa	23	4/4/2011 16:54		4/4/2011 19:01
ECR-20110323-002	Coosa	4	3/23/2011 13:54		3/23/2011 17:00
ECR-20110321-001	Coosa	25	3/21/2011 14:29		3/21/2011 19:20
ECR-20110320-001	Coosa	8	3/20/2011 12:09		3/20/2011 14:29
ECR-20110319-004	Coosa	3	3/19/2011 14:51		3/19/2011 15:55
ECR-20110312-007	Coosa	10	3/12/2011 16:45		3/12/2011 19:30
ECR-20110312-002	Coosa	13	3/12/2011 13:36		3/12/2011 15:17
ECR-20110303-010	Coosa	10	3/3/2011 14:36		3/3/2011 17:24
ECR-20110224-003	Coosa	40	2/24/2011 9:25		2/24/2011 13:56
ECR-20110223-016	Coosa	15	2/23/2011 18:28		2/23/2011 21:42
ECR-20110222-006	Coosa	1	2/22/2011 14:22		2/22/2011 16:01

ECR-20110222-007	Coosa	8	2/22/2011 13:06		2/22/2011 14:27
ECR-20110221-003	Coosa	1	2/21/2011 14:02		2/21/2011 16:05
ECR-20110220-003	Coosa	4	2/20/2011 15:12		2/20/2011 17:25
ECR-20110217-007	Coosa	0	2/17/2011 13:50		2/17/2011 14:37
ECR-20110216-003	Coosa	0	2/16/2011 12:53		2/16/2011 14:28
ECR-20110215-006	Coosa	2	2/15/2011 14:33		2/15/2011 15:35
ECR-20110215-001	Coosa	20	2/15/2011 10:59		2/15/2011 12:58
ECR-20110124-004	Coosa	0	1/24/2011 13:26		1/24/2011 15:47
ECR-20101230-001	Coosa	3	12/30/2010 11:33		12/30/2010 14:55
ECR-20101224-001	Coosa	2	12/24/2010 13:40		12/24/2010 15:55
ECR-20101206-001	Coosa	0	12/6/2010 7:54		12/6/2010 9:35
ECR-20101022-007	Coosa	0	10/22/2010 18:35		10/22/2010 20:37

ECR-20101022-006	Coosa	1	10/22/2010 16:08		10/22/2010 17:57
ECR-20101001-015	Coosa	4	10/1/2010 21:23		10/1/2010 23:51
ECR-20100925-004	Coosa	8	9/25/2010 15:23		9/25/2010 18:40
ECR-20100923-004	Coosa	48	9/23/2010 14:32		9/23/2010 17:30
ECR-20100923-007	Coosa	40	9/23/2010 14:17		9/23/2010 19:35
ECR-20100922-005	Coosa	1	9/22/2010 18:05		9/22/2010 19:09
ECR-20100919-004	Coosa	2	9/19/2010 16:18		9/19/2010 18:05
ECR-20100917-001	Coosa	30	9/17/2010 17:46		9/17/2010 22:25
ECR-20100911-002	Coosa	13	9/11/2010 8:31		9/11/2010 11:15
ECR-20100906-004	Coosa	0	9/6/2010 16:42		9/6/2010 17:06
ECR-20100905-005	Coosa	5	9/5/2010 15:07		9/5/2010 18:12
ECR-20100902-004	Coosa	0	9/2/2010 13:58		9/2/2010 15:31

ECR-20100814-001	Coosa	6	8/14/2010 15:06		8/14/2010 18:26
ECR-20100813-001	Coosa	64	8/13/2010 12:57		8/13/2010 18:30
ECR-20100809-004	Coosa	3	8/9/2010 16:21		8/9/2010 16:50
ECR-20100809-002	Coosa	1	8/9/2010 12:41		8/9/2010 13:54
ECR-20100728-002	Coosa	1	7/28/2010 15:10		7/28/2010 16:20
ECR-20100725-002	Coosa	0	7/25/2010 16:26		7/25/2010 17:14
ECR-20100725-001	Coosa	2	7/25/2010 14:09		7/18/2010 16:26
ECR-20100724-001	Coosa	1	7/24/2010 16:10		7/24/2010 17:55
ECR-20100723-001	Coosa	4	7/23/2010 14:18		7/23/2010 16:28
ECR-20100722-001	Coosa	1	7/22/2010 15:00		7/22/2010 16:50
ECR-20100719-001	Coosa	0	7/19/2010 17:15		7/19/2010 19:00
ECR-20100714-001	Coosa	1	7/14/2010 12:45		7/14/2010 14:07

ECR-20100419-002	Coosa	7	4/19/2010 7:58		4/19/2010 9:55
ECR-20100411-001	Coosa	6	4/11/2010 13:25		4/11/2010 15:33
ECR-20100406-012	Coosa	5	4/6/2010 19:17		4/6/2010 21:32
ECR-20100401-003	Coosa	20	4/1/2010 14:53		4/1/2010 18:01
ECR-20100331-003	Coosa	10	3/31/2010 13:33		3/31/2010 14:47
ECR-20100328-002	Coosa	2	3/28/2010 18:04		3/28/2010 19:51
ECR-20100324-001	Coosa	2	3/24/2010 13:10		3/24/2010 13:42
ECR-20100307-001	Coosa	9	3/7/2010 10:38		3/7/2010 13:20
ECR-20100304-004	Coosa	2	3/4/2010 15:16		3/4/2010 15:31
ECR-20090705-001	Coosa	5	7/5/2009 14:15		7/5/2009 15:38
ECR-20090705-002	Coosa	8	7/5/2009 14:15		7/5/2009 17:30
ECR-20090623-002	Coosa	5	6/23/2009 13:52		6/23/2009 15:58

ECR-20090422-001	Coosa	1	4/22/2009 15:48		4/22/2009 18:16
ECR-20090409-001	Coosa	10	4/9/2009 12:59		4/9/2009 15:24
ECR-20090404-001	Coosa	8	4/4/2009 14:30		4/4/2009 16:02
ECR-20090323-006	Coosa	0	3/23/2009 16:42		3/23/2009 17:23
ECR-20090321-002	Coosa	2	3/21/2009 15:47		3/21/2009 17:15
ECR-20090310-006	Coosa	80	3/10/2009 17:03		3/10/2009 20:41
ECR-20090310-005	Coosa	15	3/10/2009 15:14		3/10/2009 18:03
ECR-20090305-005	Coosa	3	3/5/2009 16:35		3/5/2009 18:22
ECR-20090217-001	Coosa	218	2/17/2009 8:25		2/17/2009 16:15
ECR-20090210-004	Coosa	1	2/10/2009 17:24		2/10/2009 18:45
ECR-20090210-003	Coosa	8	2/10/2009 17:18		2/10/2009 18:45
ECR-20090209-001	Coosa	1	2/9/2009 11:42		2/9/2009 13:07

ECR-20090203-001	Coosa	3	2/3/2009 16:30		2/3/2009 17:50
ECR-20090101-002	Coosa	2	1/1/2009 13:53		1/1/2009 14:31
DDV-20081123-003	Coosa	1	11/23/2008 12:17		11/23/2008 14:35
DDV-20081015-001	Coosa	5	10/15/2008 14:15		10/15/2008 16:34
DDV-20080810-002	Coosa	0	8/10/2008 12:40		8/10/2008 17:43
DDV-20080807-001	Coosa	0	8/7/2008 13:11		8/7/2008 15:21
DDV-20080806-002	Coosa	0	8/6/2008 17:37		8/6/2008 18:43
DDV-20080804-001	Coosa	0	8/4/2008 13:14		8/4/2008 15:58
DDV-20080709-001	Coosa	40	7/9/2008 10:05		7/9/2008 16:30
DDV-20080626-002	Coosa	60	6/26/2008 0:10		6/26/2008 2:55
DDV-20080623-001	Coosa	0	6/23/2008 10:09		6/23/2008 15:10
DDV-20080520-001	Coosa	0	5/20/2008 23:25		5/20/2008 13:34

DDV-20080501-001	Coosa	0	5/1/2008 17:34		5/1/2008 17:30
DDV-20080415-003	Coosa	3	4/15/2008 17:01		4/14/2008 18:30
DDV-20080329-002	Coosa	10	3/29/2008 12:30		3/29/2008 16:00
DDV-20080329-001	Coosa	0	3/29/2008 12:05		3/29/2008 13:43
DDV-20080326-005	Coosa	2	3/26/2008 15:41		3/26/2008 17:12
DDV-20080324-004	Coosa	3	3/24/2008 18:10		3/24/2008 20:15
DDV-20080324-003	Coosa	0	3/24/2008 15:30		3/24/2008 16:57
DDV-20080322-001	Coosa	10	3/22/2008 13:49		3/22/2008 16:41
DDV-20080318-002	Coosa	1	3/18/2008 15:32		3/18/2008 17:11
DDV-20080303-004	Coosa	2	3/3/2008 13:08		3/3/2008 15:58
DDV-20080219-008	Coosa	25	2/19/2008 15:12		2/19/2008 18:44
DDV-20080218-001	Coosa	2	2/18/2008 16:02		2/18/2008 18:00

DDV-20080129-001	Coosa	0	1/29/2008 23:23		1/29/2008 12:36
DDV-20080129-003	Coosa	15	1/29/2008 13:00		1/29/2008 16:11
DDV-20080129-002	Coosa	2	1/29/2008 12:39		1/29/2008 13:53
DDV-20080104-002	Coosa	1	1/4/2008 20:15		1/4/2008 20:15
DDV-20071114-001	Coosa	5	11/14/2007 14:38		11/14/2007 17:27
DDV-20071026-001	Coosa	1	10/26/2007 19:11		10/26/2007 20:59
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DDV-20070228-004	Coosa	4	2/28/2007 13:16		2/28/2007 14:42
DDV-20070224-013	Coosa	80	2/24/2007 19:30		2/24/2007 23:29
DDV-20070222-002	Coosa	2	2/22/2007 14:51		2/22/2007 15:44
DDV-20070219-004	Coosa	15	2/19/2007 13:46		2/19/2007 14:50
DDV-20070218-001	Coosa	4	2/18/2007 10:50		2/18/2007 12:00
DDV-20070212-003	Coosa	0	2/12/2007 14:17		2/12/2007 15:53

Winter Storms

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	2/12/2010	11:00	CST-6	Winter Weather		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/15/2010	7:00	CST-6	Winter Weather		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	1/28/2014	8:15	CST-6	Winter Storm		0	0	0.00K	0.00K
COOSA (ZONE)	COOSA (ZONE)	AL	12/8/2017	9:00	CST-6	Winter Storm		0	0	0.00K	0.00K
Totals:								0	0	0.00K	0.00K

AEMA Division D Phase IIIc Regional Hazard Mitigation Plan

A Multi-Jurisdictional Plan

2021

JURISDICTIONS:

- **LOWNDES COUNTY**
- TOWN OF BENTON
- TOWN OF FORT DEPOSIT
- TOWN OF GORDONVILLE
- TOWN OF HAYNEVILLE
- TOWN OF LOWNDESBORO
- TOWN OF MOSSES
- TOWN OF WHITE HALL
- LOWNDES COUNTY SCHOOLS

- **MACON COUNTY**
- TOWN OF FRANKLIN
- TOWN OF NOTASULGA
- TOWN OF SHORTER
- CITY OF TUSKEGEE
- MACON COUNTY SCHOOLS
- TUSKEGEE UNIVERSITY

SCADC
SOUTH CENTRAL ALABAMA DEVELOPMENT COMMISSION
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List of Acronyms

ABFE	Advisory Base Flood Elevation
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADR	Alternative Dispute Resolution
AEMA	Alabama Emergency Management Agency
ALDOT	Alabama Department of Transportation
ASCE	American Society of Civil Engineers
BCA	Benefit-Cost Analysis BCR Benefit-Cost Ratio
BFE	Base Flood Elevation
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CBRA	Coastal Barrier Resource Act
CBRS	Coastal Barrier Resource System
CDBG	Community Development Block Grant
CFDA	Catalog of Federal Domestic Assistance
CFR	Code of Federal Regulations
CRS	Community Rating System
DHS	Department of Homeland Security
DMA	Disaster Mitigation Act of 2000
DOB	Duplication of Benefits
DOI	Department of the Interior
DOP	Duplication of Programs
DOT	U.S. Department of Transportation
EHP	Environmental Planning and Historic Preservation
EO	Executive Order
EOC	Emergency Operations Center
EMA	Emergency Management Agency
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIMA	Flood Insurance and Mitigation Administration
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FMA	Flood Mitigation Assistance
FY	Fiscal Year
GAR	Governor's Authorized Representative
GIS	Geographic Information System GSTF Greatest Savings to the Fund
Hazus	Hazards United States
HMA	Hazard Mitigation Assistance
HMGP	Hazard Mitigation Grant Program
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
IBC	International Building Code
ICC	Increased Cost of Compliance
IRS	Internal Revenue Service
ITP	Independent Third Party
LEPC	Local Emergency Planning Committee
NAP	Non-Insured Crop Disaster Assistance Program
NCEI	National Centers for Environmental Information
NEMIS	National Emergency Management Information System
NEPA	National Environmental Policy Act
NFIA	National Flood Insurance Act
NFIF	National Flood Insurance Fund
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	Natural Resources Conservation Service
NWS	National Weather Service
O&M	Operations and Maintenance
OMB	Office of Management and Budget
OPA	Otherwise Protected Area
PARS	Payment and Reporting System
PDM	Pre-Disaster Mitigation
PNP	Private Non-profit
POC	Point of Contact
POP	Period of Performance
SBA	Small Business Administration
SCADC	South Central Alabama Development Commission
SEI	Structural Engineering Institute
SF	Standard Form
SFHA	Special Flood Hazard Area
SFM	Strategic Funds Management
SHMO	State Hazard Mitigation Officer
SOW	Scope of Work
SRIA	Sandy Recovery Improvement Act of 2013 Stafford Act Robert T. Stafford Disaster Relief and Emergency Assistance Act
TB	Technical Bulletin
URA	Uniform Relocation Assistance and Real Property Acquisition Act of 1970
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
USFA	U.S. Fire Administration
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WUI	Wildland-Urban Interface

SECTION 1: INTRODUCTION

Section Contents

1.1 Plan Scope
1.2 Authority
1.3 Funding
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1.5 Multi-Jurisdictional Plan Adoption
1.6 Multi-Jurisdictional Plan Participation
1.7 Hazard Mitigation Planning Process
1.8 Public and Other Stakeholder Involvement
1.9 Integration with Existing Plans

1.1 Plan Scope and Funding

This plan fulfills the requirements set forth by the Disaster Mitigation Act of 2000 (DMA 2000). DMA 2000 requires counties to formulate a hazard mitigation plan to be eligible for mitigation grants made available by the Federal Emergency Management Agency (FEMA).

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan details the multitude of hazards that affect the Alabama Emergency Management Agency (AEMA) Division D area. AEMA Division D region will include the following counties when it is complete: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell and Tallapoosa Counties and the jurisdictions, within these counties. This third and final phase of the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan, will be adopted by the following jurisdictions in Lowndes and Macon Counties:

Lowndes County
Town of Benton
Town of Fort Deposit
Town of Gordonville
Town of Hayneville
Town of Lowndesboro
Town of Mosses
Town of White Hall
Lowndes County Schools

Macon County
Town of Franklin
Town of Notasulga
Town of Shorter
City of Tuskegee
Macon County Schools
Tuskegee University

Each county in AEMA Division D has an existing multi-jurisdictional hazard mitigation plan. This plan will compile information from each of those existing plans and documents the incorporation of hazard mitigation objectives into the region. The AEMA Division D is diverse in terms of development and physical geography, but many of the hazards affecting the region have similar impacts throughout the area. A community must deal with localized threats such as flooding, wildfires, or sinkholes as well as the hazards that do not have geographical limitations like tornadoes, hail, or high winds. Local emergency management agencies in the counties have a responsibility for both urban and rural areas of varying population density. A regional hazard mitigation plan encapsulates these similarities in risk and vulnerability impact and enables regional stakeholders to discuss mitigation techniques for similar impacts.

1.2 Authority

Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (public Law 93-228, as amended), Title 44 Code of Federal Regulations, as amended by Part 201 of the Disaster Mitigation Act of 2000 requires that all state and local governments develop a hazard mitigation plan as a condition of receiving federal disaster assistance. These plans should be approved by FEMA and updated every five years.

1.3 Funding

Funding for the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan was made available through the Hazard Mitigation Grant Program (HMGP), under Disaster Recovery Declaration 1971 (DR-1971). Supplemental funding was supplied the Lee-Russell Council of Governments and the South Central Alabama Development Commission.

1.4 Purpose

The East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan is an effort to evaluate and identify all prioritized hazards which may affect the jurisdictions located with AEMA Division D. The purpose of the plan is to rationalize the process of identifying and implementing appropriate hazard mitigation actions to address the prioritized hazards in each county in AEMA Division D. The document includes a detailed characterization of natural hazards countywide; a risk assessment that describes potential losses to physical assets, people and operations; a set of goals, objectives, strategies and actions that will guide each jurisdiction's mitigation activities, and a detailed plan for implementing and monitoring the required aspects of the plan. This plan is only one of many steps jurisdictions in East Alabama will take to protect the welfare of residents by achieving a safer environment for its residents.

1.5 Multi-Jurisdictional Plan Adoption

The eligible jurisdictions to adopt Phase IIIb of the East Alabama Regional Multi-Jurisdictional Hazard Mitigation Plan when it is deemed "approvable pending adoption" by the FEMA include Lowndes County, the Towns of Benton, Fort Deposit, Gordonville, Hayneville, Lowndesboro, Mosses, and White Hall, and the Lowndes County Board of Education; Macon County, the City of Tuskegee, the Towns of Franklin, Notasulga, and Shorter, the Macon County Board of Education, and Tuskegee University. The hazard mitigation plan can also be adopted by, but not limited to, the following: regional planning councils and local governing bodies, including municipal councils, county commissions, local school districts. The jurisdictions in the remaining AEMA Division D counties are not eligible to adopt Phase III of the AEMA Division D Hazard Mitigation Plan. At the conclusion of the three-phased process, the plan will be compiled to create a regional AEMA Division D Hazard Mitigation Plan with the same deadline and update cycle.

1.6 Multi-Jurisdictional Planning Process

Each eligible local jurisdiction, as previously listed, participated in the development of the hazard mitigation plan. Local jurisdictions within the region participated according to the standards set forth by the Regional Hazard Mitigation Planning Committee and were involved in the updated hazard mitigation planning process. Participants include but are not limited to local government leaders, emergency management agencies, law enforcement, first responders, school boards, and public utilities. The previous hazard mitigation plan and a presentation were distributed to the participant stakeholders along with surveys for feedback identifying hazards, risks, vulnerabilities, and strategies. Each participating jurisdiction was represented by personnel that performed a variety of functions including review of the plan at various stages during its drafting, attending meetings and updates on plan progress and contents, and providing feedback, comments, and consultation during the plan's drafting stages. Refer to Tables 1.2.1 and 1.2.2 for the summary of each jurisdictions' involvement, name the representatives from each jurisdiction involved in the plan, and how involved each jurisdiction was during Phase III. Threats are assessed for each jurisdiction so that hazards affecting one jurisdiction are considered to have an equal impact or potential impact on assets located in those jurisdictions. It is assumed those hazards affecting a specific jurisdiction will have a similar impact on school systems and utilities of the jurisdiction.

1.7 Hazard Mitigation Plan Process

At the beginning of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan a Division D Core Team was developed through interaction between AEMA Division D EMA Directors, the AEMA Division D Coordinator, and the Lee-Russell Council of Governments, as listed in Table

1.1. Members of the AEMA Division D Core Team developed county-level planning subcommittees primarily based on past Hazard Mitigation Plan update participants and the Local Emergency Planning Committees. The teams reviewed previous county-wide local hazard mitigation plans and development of the plan requirements and hazards for Division D Region.

Table 1.1: AEMA Division D Core Team

Organization	Contact
Autauga County EMA	Ernie Baggett
Bullock County EMA	Ray Scott
Chambers County EMA	Jessica Yeagar
Chilton County EMA	Derrick Wright
Coosa County EMA	Terri Q. Hale
Elmore County EMA	Keith Barnett
Lee County EMA	Rita Smith
Lowndes County EMA	David Butts / Rodney Rudolph
Macon County EMA	Frank Lee
Montgomery County EMA	Christina Thornton
Russell County EMA	Robert “Bob” Franklin
Tallapoosa County EMA	Jason Moran
AEMA Division D Coordinator	Monique Smith
Lee-Russell Council of Governments	Lisa Sandt/Tracie Hadaway

Source: Alabama Emergency Management Agency, County EMA Director

The AEMA Division D Core Team developed the phased process of preparing the Regional Hazard Mitigation Plan based upon the staggered deadlines for each jurisdiction. The AEMA Division D Core Team met to compare the identified hazards in each individual jurisdiction plan to reach a consensus of the identified Regional Hazard Profiles. The AEMA Division D Core Team also met to discuss Division D Mitigation goals and strategies based on these items found in each individual jurisdiction plan. The meetings took place on July 29th and September 19th of 2019.

The July 20th, 2019 meeting included discussion of the following:

- Meet with other Division D leaders;
- Introduction to hazard mitigation in the region;
- Establish core planning team responsibilities;
- Identify deadlines;
- Update and outline the evaluation process; and
- Organize the process.

The September 19th, 2019 meeting included discussion of the following:

- Compared goals and hazards in Division D;
- Identified goals for Division D;
- The Lee-Russell Council of Local Governments (LRCOG) oversaw the planning process.

Phase IIIc of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan was developed through the cooperation between Lowndes County EMA, Macon County EMA, the AEMA

Division D Coordinator, the South Central Alabama Development Commission, and the Lee-Russell Council of Governments, as well as stakeholders representing organizations such as county commissions, local governments, local school districts, local utility boards, or law enforcement.

The natural hazards that threaten and impact the jurisdictions in Lowndes and Macon Counties were identified by the Division D Core Team, as well as noted in previous county-level hazard plans. The mitigation actions from the previous county-level hazard plans were identified and presented to the stakeholders, local EMA directors, and participating jurisdictions for reviewed and approved. These hazard and mitigation actions were updated to reflect current information, such as hazard frequency and severity data available on natural hazard events in Lowndes and Macon Counties. Risk analysis was conducted using historical data estimates of magnitude and extent of damage from events. Results were presented to stakeholders and participating jurisdictions in print format, electronically and in hard copy, and were reviewed in a series of local meetings. Stakeholders participated in and helped facilitate the planning process by:

- Attend scheduled meetings, or if unable to attend, send a designee or make themselves available to discuss the agenda through a phone conversation, email, or in-person meeting.
- Represent their jurisdiction's interests, including gathering information and providing feedback, including providing survey comments or marking up information on their existing hazard mitigation plan.
- Collecting and reviewing information on their jurisdiction's conditions and resources
- Facilitating the development of a comprehensive range of mitigation alternatives
- Recommending selected alternatives for action
- Facilitating information exchange among participating jurisdictions, acting as liaisons to eligible entities of each jurisdiction
- Provide an assessment of prioritized projects that have been completed or are ongoing or changes to prioritization.

The discussions with the AEMA Division D Core Team led to county-level meetings with Lowndes and Macon Counties to review the risk, vulnerability, and mitigation components of the Hazard Mitigation Plan. In early 2021, the Hazard Mitigation Plan and the Hazard Mitigation Plan Action Strategies were sent to each participant of the county-level subcommittee prior to the meetings held in 2021. The scope of the meetings was to assess the progress of each jurisdiction's mitigation goals and objectives and to determine recent hazard events and how they affected the jurisdictions. From these meetings, hazard profiles were consolidated, updated for the regional scope of the plan, and risk analysis updates were conducted using historical and local documentation. Plan drafts were distributed to stakeholders and local jurisdictions for review and the plan draft was discussed in the realm of public meetings before submission to AEMA and FEMA.

The joint Lowndes and Macon County meeting on January 27th, 2021 included discussion of the following:

- Divisions in Alabama and Counties in Division D
- Benefits of Mitigation Planning

- Legal Regulations for Local Hazard Mitigation
- Plan Requirements
- Responsibilities, Processes, Timeline
- Demographic Profile
- Vulnerable Population Facilities, Groups and Locations
- Preliminary Hazard Profiles
- Mitigation Goals

The two individual Lowndes and Macon County meetings on February 3rd, 2021 included discussion of the following:

- Divisions in Alabama & Counties in Division D
- Updates to Stakeholders and Technical Advisors
- Plan Requirements, Process, and Timeline
- Role of Stakeholders and Technical Advisors
- Benefits of Mitigation Planning
- Planning and Regulatory Tools
- Preliminary Goals and Action Plan Review
- Finalize Goals
- Update Jurisdiction Mitigation Action Plans

The joint Lowndes and Macon County meeting on February 10th, 2021 included discussion of the following:

- Survey Responses
- Available Tools and Capacity
- Disaster Declarations
- Hazard Summary Review
- Review Risk Assessment
- Review Hazard Priorities
- Review Mitigation Strategies

Table 1.2.1: Lowndes County Hazard Mitigation Plan Subcommittee

Name	Jurisdiction	Title, Organization	Attended Meeting	Opportunity for Written Comments	In-Person Phone Consultation
Jurisdiction Representatives are highlighted in light brown.					
David Butts / Rodney Rudolph	Lowndes County	Lowndes County EMA Director/Engineer	X	X	X
Charlie King	Lowndes County	Chair, Lowndes County Commission		X	X
Jacqueline Thomas	Lowndes County	Administrator, Lowndes County	X	X	X

Santina Rogers	Lowndes County	Director, Lowndes County E911		X	X
Chris West	Lowndes County	Sheriff, Lowndes County		X	X
Donny Cooper	Town of Benton	Mayor, Town of Benton	X	X	X
Edie Hornsby	Town of Benton	Clerk, Town of Benton	X	X	X
Jacqulyn Boone	Town of Fort Deposit	Mayor, Town of Fort Deposit	X	X	X
Cynthia Jones	Town of Fort Deposit	Clerk, Town of Fort Deposit	X	X	X
Bob Hood	Town of Fort Deposit	Chief, Fort Deposit VFD		X	X
Obuty Ozier	Town of Gordonville	Mayor, Town of Gordonville	X	X	X
Katrina Smith	Town of Gordonville	Clerk, Town of Gordonville	X	X	X
Jimmie Davis	Town of Hayneville	Mayor, Town of Hayneville	X	X	X
Susie Smith	Town of Hayneville	Clerk, Town of Hayneville	X	X	X
Jesse McCall	Town of Hayneville	Chief, Hayneville VFD		X	X
Estella Love Rice	Town of Hayneville	Assistant, Hayneville VFD		X	X
Kelvin Mitchell	Town of Hayneville	Chief, Hayneville Police Department		X	X
Anne Spooner	Town of Lowndesboro	Mayor, Town of Lowndesboro	X	X	X
Julia Benton	Town of Lowndesboro	Clerk, Town of Lowndesboro	X	X	X
Brian Hudson	Town of Lowndesboro	Chief, Town of Lowndesboro VFD		X	
Harold Bell	Town of Mosses	Mayor, Town of Mosses	X	X	X
Lucille Smith	Town of Mosses	Clerk, Town of Mosses	X	X	X
Delmartre Bethel	Town of White Hall	Mayor, Town of White Hall	X	X	X
Bertha White	Town of White Hall	Clerk, Town of White Hall	X	X	X
Jason Burroughs	Lowndes County Schools	Superintendent, Lowndes County Schools	X	X	X
Travis Rogers	Lowndes County Schools	President, Lowndes County Board of Education	X	X	X
Kirk Barrett	Community Stakeholder	Chief Operations Officer, Haynes Ambulance		X	X
Jackie Greene	Community Stakeholder	Administrator, Orchard Healthcare	X	X	X
Jennifer Roberts	Community Stakeholder	Public Health Environmentalist, Lowndes County Health Department		X	X
Hubert (Bo) Ansley	Community Stakeholder	Chief, Emergency Management Branch, U.S. Army Corps of Engineers		X	
Paul Stuckey	Community Stakeholder	Work Unit Manager / Forester, Alabama Forestry Commission		X	
Howard S. Powell, III	Community Stakeholder	President, Hayneville Communications		X	X
Andrew Edwards	Community Stakeholder	Reporter, The Lowndes Signal	X	X	X
Brenson Crenshaw	Community Stakeholder	Outside Plant Manager		X	X
Thomas Ellis	Community Stakeholder	Chair, Lowndes County Economic Development Commission	X	X	X
Ben Huguley	Community Stakeholder	Plant Manager, Sejong Alabama LLC	X	X	X
Ben Waits	Community Stakeholder	Sr. Manager - Environment, Health, Safety and Security, SABIC Innovative Plastics	X	X	X
Rodney Hartsfield	Community Stakeholder	SABIC Innovative Plastics		X	X
Herbert Malone	Community Stakeholder	Chairperson, Lowndes County Water Authority	X	X	X
George Sellers	Community Stakeholder	Alabama Power Company	X	X	X
	Community Stakeholder	Pintlala Water & Fire Protection Authority		X	
Felicia Thomas	Community Stakeholder	Director, Lowndes County Department of Human Resources		X	X
Dustin Casey	Community Stakeholder	Chief, Burkeville VFD		X	X
Brent Crenshaw	Community Stakeholder	Chief, Braggs VFD		X	X
Fletcher Hayes	Community Stakeholder	Chief, Calhoun VFD		X	X
Willie Arnold	Community Stakeholder	Chief, Collirene VFD		X	X
Dorothy Maul	Community Stakeholder	Hicks Hill VFD		X	X

Table 1.2.2: Macon County Hazard Mitigation Plan Subcommittee

Name	Jurisdiction	Title, Organization	Attended Meeting	Opportunity for Written Comments	In-Person Phone Consultation
Jurisdiction Representatives are highlighted in light brown.					
Frank H. Lee	Macon County	Director, Macon County EMA/E911	X	X	X
Louis Maxwell	Macon County	Chairman, Macon County Commission		X	X
J.D. Smith	Macon County	County Engineer, Macon County	X	X	X
Brian Ware	Macon County	Compliance Officer, Macon County	X	X	
Andre' Brunson	Macon County	Sheriff, Macon County Sheriff Department	X	X	X
Henry Peavy	Town of Franklin	Mayor, Town of Franklin		X	X
Micha Segrest	Town of Franklin	Town Clerk, Town of Franklin	X	X	X
Tommy Miller	Town of Notasulga	Mayor, Town of Notasulga		X	X
Simona Miller	Town of Notasulga	Asst. Town Clerk, Town of Notasulga	X	X	X
Denise Pilato	Town of Notasulga	Councilmember, Town of Notasulga	X	X	X
George Davis	Town of Shorter	Clerk, Town of Shorter	X	X	X
Sandor Maloy	Town of Shorter	Police Chief, Town of Shorter	X	X	X
Valerie Smith	Town of Shorter	EOC Coordinator, Town of Shorter	X	X	X
Lawrence Haygood	City of Tuskegee	Mayor, City of Tuskegee	X	X	X
Derrick Swanson	City of Tuskegee	Acting City Manager, City of Tuskegee	X	X	
Lloyd Jenkins	City of Tuskegee	Assistant Chief of Police, City of Tuskegee		X	X
Willie Smith	City of Tuskegee	Fire Marshall, City of Tuskegee		X	X
Gerald Long	City of Tuskegee	General Manager, Utilities Board of Tuskegee	X	X	X
Jacqueline Brooks	Macon County Schools	Superintendent, Macon County Schools	X	X	X
AJ Nelson	Macon County Schools	Student Svcs Coord., Macon County Schools	X	X	X
Harold "Kippy" Tate	Tuskegee University			X	
Patrick Mardis	Tuskegee University	Director of Public Safety, Tuskegee University	X	X	X
Larry Foy	Community Stakeholders	Fire Chief, Central Alabama Veterans Health Care System		X	X
Danielle Rice	Community Stakeholders	Emergency Management Coordinator, Central Alabama Veterans Health Care System	X	X	X
Mike Bentley	Community Stakeholders	Pres., Macon County Volunteer Fire Assoc.	X	X	X
Elnora Love	Community Stakeholders	Administrator, Macon County Water Authority	X	X	X
Anita L. Evans	Community Stakeholders	Administrator, Magnolia Haven Health & Rehab Center	X	X	X
Kirk Barrett	Community Stakeholders	Chief Operations Officer, Haynes Ambulance		X	X
Jennifer Smith	Community Stakeholders	Health/Nutrition/Mental Health Coordinator, Tuskegee Macon County Headstart		X	X
Alvin Howard	Community Stakeholders	Representative, Star Mindingall Water Authority		X	X
Joe Turnham	Community Stakeholders	Executive Director, MCEDA	X	X	X
Ron Boyer	Community Stakeholders	Engineer, Hanon Systems Alabama Corp.		X	X
Bernice L. Frazier	Community Stakeholders	President, Southern Christian Leadership Foundation	X	X	X

1.8 Public and Other Stakeholder Involvement

The presence of community engagement is an important element to consider during the planning process because it allows the public and residents to have input in potential projects specifically at the local level. According to the American Planning Association (APA), public engagement is "the key to building an inclusive community," because it gives everyone access to participate in the planning process. Working with the people who live and work in Lowndes and Macon Counties gives the community an active role in planning, thereby creating a partnership between the public and planners.

The opportunity for the public to participate in the hazard mitigation plan was accomplished through multiple strategies. The public was invited to attend and participate in all stakeholder meetings in Lowndes and Macon Counties. Refer to Section 7.2 in the Appendix for the dates and details on meetings. The public was encouraged to voice their opinions and concerns at these meetings regarding how natural hazards impact their local jurisdiction and what potential mitigation actions should be implemented. Due to the public gathering restrictions of COVID-19, meetings were held virtually using Zoom software. Meeting notification was accomplished by placing notices on the county EMA websites and social media, and meeting flyers were posted in multiple locations throughout Lowndes and Macon Counties.

Public outreach was also conducted with online surveys in Lowndes and Macon Counties to obtain helpful information about the residents' knowledge, needs, and concerns regarding natural hazards and their local impact. The survey consisted of multiple choice and short answer questions that focused on understanding the responder's knowledge, needs, and concerns related to hazard events and hazards preparation. The survey was focused on qualitative research rather than quantitative research, which revealed people's feelings and perceptions about natural hazards.

The target population for the hazard mitigation survey was individuals who live or work in Lowndes and Macon Counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys. Two types of surveys were conducted. One was a survey for stakeholders involved in the hazard mitigation planning process. The second survey was a citizen/resident survey distributed through an email broadcast across the counties. In Lowndes County, there were ten responses to the stakeholder survey and 48 responses to the community survey. In Macon County, there were nine responses to the stakeholder survey and 136 responses to the community survey. Results from the stakeholder surveys indicated that tornadoes, high winds, thunderstorms, and lightning were the most probable hazard events to occur in both Lowndes and Macon Counties. Hazard events that stakeholders felt would have the most devastating impact on the counties included tornadoes, high winds, thunderstorms, lightning, extreme temperatures, flooding and drought. Detailed survey results are provided in Appendix 7.2 and a review of the community survey results by county follows.

In Lowndes County, 95.8 percent of the 48 survey responders lived or worked in Lowndes County. Of the total responses, 2.1 percent live in a flood plain area; however, 27.1 percent were not sure if they lived in a flood plain or not. Two responders (4.2 percent) stated that they have national flood insurance, but again, nine responders (18.8 percent) stated that they did not know if they have flood insurance or not. Half of the responders stated that they feel prepared for a natural disaster and another 10.4 percent stated that they feel very prepared. Resources that make survey

responders feel safest are access to safe rooms (60.4 percent), relocation to a safer location 45.7 percent), a readiness kit (45.8 percent), and access to community shelters (41.7 percent). The most effective warning mechanisms, according to the community survey, are cell phone alerts (87.5 percent), outdoor sirens (64.6 percent), weather alert radios (64.6 percent), tv coverage (62.5 percent), and radio (58.3 percent). Natural hazard events that raise the level of concern the most were tornadoes, high winds, and thunderstorms. Hazard events that have had a personal impact on at least half of the responders lives or property include the following: extreme temperatures, flooding and flash flooding, hail, high winds and thunderstorms, lightning, hurricanes, tropical storms and depressions, tornadoes, and winter storms.

In Macon County, 97.8 percent of the 136 survey responders lived or worked in Macon County. Of the total responses, 7.4 percent (10 persons) stated that they live in a flood plain area; however, 44.1 percent, or 60 persons, were unsure if they lived in a flood plain or not. Although 8.1 percdent (11 persons) stated that they have national flood insurance, 22 responders (16.2 percent) stated that they did not know if they have flood insurance or not. Just under half of the responders, at 47.1 percent, stated that they feel prepared or very prepared for a natural disaster. Resources that make survey responders feel safest are a readiness kit (72.8 percent), access to safe rooms (55.9 percent), access to community shelters (46.3 percent), and educational brochures (44.9 percent). The most effective warning mechanisms, according to the community survey, are cell phone alerts (92.7 percent), tv coverage (79.4 percent), weather alert radios (64.7 percent), and outdoor sirens (56.2 percent). Natural hazard events that raise the level of concern the most in Macon County were tornadoes, high winds, thunderstorms, lightning, and hurricanes, tropical storms and depressions. Hazard events that have had a personal impact on at least half of the responders lives or property include the following: extreme temperatures, flooding and flash flooding, hail, high winds and thunderstorms, lightning, hurricanes, tropical storms and depressions, tornadoes, and winter storms.

A copy of the final draft of the plan was emailed to all stakeholders for review, along with a comment form. After the final plan is approved by FEMA, a copy will be placed on the LRCOG and SCADC websites as well as hard copies at the local EMA offices.

1.9 Integration with Existing Plans

Existing state and local plans were reviewed for their applicability to the hazard mitigation plan and to determine additional means of coordinated implementation. The results were utilized as the basis for countywide hazard identification and risk analysis, as well as the development of the mitigation goals, strategy, and actions. This ensured that the county mitigation plans were reflective of additional local plans. A list and explanation of each of the existing plans that were reviewed and incorporated into Phase III of the AEMA Division D Hazard Mitigation Plan follows:

- **Alabama State Hazard Mitigation Plan, July 2018:**
  The State Hazard Mitigation Plan was consulted to assist with consistency of information within the regional plan, including items within the Risk Assessment and local capabilities.

- **Alabama Drought Management Plan (2018 Update)**
  The Alabama Drought Management Plan was studied to provide background information of drought impacts on the planning area.

- **South Central Alabama Comprehensive Economic Development Strategy (CEDS)**
  The SCADC Comprehensive Economic Development Strategy, or CEDS, was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for the economic development district (EDD). Each economic development district develops a new CEDS every five years that provides an overview of the region's economy and to outline a development strategy, as well as associated projects, that will increase the overall economy and quality of life in the region. Each CEDS is then updated annually with an annual report. The other counties included in the South Central Alabama EDD are Butler County, Bullock County, Crenshaw County, Montgomery County, and Pike County.

- **Lowndes County Multi-Jurisdictional Hazard Mitigation Plan of 2015**
  The 2015 hazard mitigation plan was reviewed to determine what issues remain relevant to the current conditions of Lowndes County as well as to identify which mitigation strategies have been implemented and which still need to be addressed.

- **Lowndes County EMA Emergency Operations Plan**
  Lowndes County has an Emergency Operations Plan (EOP) that is utilized in an emergency situation. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. These plans complement the hazard mitigation plan, but do not necessarily cover the same material.

- **Macon County Multi-Jurisdictional Hazard Mitigation Plan of 2015**
  The 2015 hazard mitigation plan was reviewed to determine what issues remain relevant to the current conditions of Macon County as well as to identify which mitigation strategies have been implemented and which still need to be addressed.

- **Macon County EMA Emergency Operations Plan**
  Macon County has an Emergency Operations Plan (EOP) that is utilized in an emergency situation. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. These plans complement the hazard mitigation plan, but do not necessarily cover the same material.

- **Transportation Plans**
  Existing transportation plans are critical in hazard mitigation to determine the best way to mobilize people in an evacuation situation or to mobilize vehicles and/or equipment in other emergencies. Transportation plans that were reviewed included the following:
  - South Central Alabama Rural Transportation Planning Organization Programs and Plans
  - South Central Alabama Human Services Coordinated Transportation Plan
  - Lowndes County Road Maintenance Plans
  - Macon County Road Maintenance Plans

- **Local Growth and Development Plans and Regulations:**
  A review of local long-range growth and development plans, infrastructure plans, economic development plans, and development regulations helped determine growth patterns that will have an impact on hazard mitigation or may be impacted by the potential for natural hazard events.

Lowndes County

- Lowndes County Economic Development Authority Strategic Plan
- Lowndes County Subdivision Regulations
- Fort Deposit Subdivision Regulations
- Fort Deposit Zoning Ordinance
- Hayneville Comprehensive Plan
- Hayneville Subdivision Regulations
- Hayneville Zoning Ordinance
- Lowndesboro Comprehensive Plan
- Lowndesboro Subdivision Regulations
- Lowndesboro Zoning Ordinance
- Mosses Comprehensive Plan
- Mosses Subdivision Regulations
- Mosses Zoning Ordinance

Macon County

- Macon County Development Plan
- Macon County Economic Development Authority Strategic Plan
- Notasulga Land Use Plan
- Notasulga Subdivision Regulations
- Notasulga Zoning Ordinance
- Shorter Development Plan
- Shorter Subdivision Regulations
- Shorter Zoning Ordinance
- Tuskegee Comprehensive Plan
- Tuskegee Subdivision Regulations
- Tuskegee Zoning Ordinance
- Tuskegee University
- Mosses Subdivision Regulations
- Mosses Zoning Ordinance

SECTION 2: PROFILE

Section Contents

2.1 Background
2.2 Demographics
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2.1 Background

The planning area for the Lowndes County and Macon County portion of the AEMA Division D Multi-Jurisdictional Hazard Mitigation Plan includes Lowndes County, with the Town of Benton, the Town of Fort Deposit, the Town of Gordonville, the Town of Hayneville, the Town of Lowndesboro, the Town of Mosses, and Town of White Hall; and Macon County, with the Town of Franklin, the Town of Notasulga, the Town of Shorter, and the City of Tuskegee. Lowndes and Macon Counties are located within the Alabama Emergency Management Agency (AEMA) Division D, which is one of seven emergency management divisions within the state. AEMA Division D is located in eastern Alabama (Figure 2.1) and is comprised of the following twelve counties: Autauga, Bullock, Chambers, Chilton, Coosa, Elmore, Lee, Lowndes, Macon, Montgomery, Russell, Tallapoosa and the jurisdictions in those counties.

Figure 2.1: AEMA Division D



Lowndes County is 725 square miles in size and Macon County is 613 square miles. The two counties are located in three regions of the East Gulf Coastal Plain physiographic region. Though the designation of a plain commonly refers to a flat landscape, much of the East Gulf Coastal Plain consists of a mixture of rounded hills and cuestas (a ridge with steep slopes on one side and gentle slopes on the other), with floodplains along the rivers and streams of the area. The western part of Macon County (along the Tallapoosa River) and the northern part of Lowndes County (along the Alabama River) are in the Alluvial-deltaic Plain; the northern part of Macon County is in the Fall Line Hills District; the southern half of Macon County and the central part of Lowndes County are located in the Black Prairie District; and the southern part of Lowndes County is in the Chunnenuggee Hills District.

The Fall Line Hills are characterized by rounded hills that are cut by valleys with local relief. The region is underlain by sands and gravels, clays, beds of fossil oyster shells, and some sandstone. For most of its southern boundary, the Fall Line Hills region contacts the Black Prairie at elevations that range from 200 to 250 feet above sea level. The Black Prairie District is formed on underlying chalk rocks that are easily dissolved by surface and groundwater. The land overlying the Mooreville Chalk is low and rolling and is characterized by thick black topsoil and vegetation typical of a prairie ecosystem. The land area consists of a network of low hills and irregular ridges

that have narrow, v-shaped valleys. The Chunnennuggee Hills District is formed on sands and sandstones. This portion of the county consists of rolling hills that are dissected by dendritic drainage pattern. These sandy areas are plateaulike upland flats that have steep, short side slopes.

Elevation in Lowndes County ranges from 129 to 584 feet above sea level. The lowest elevations are found in the northern part of the county along the broad, level terraces of the Alabama River which range in elevation from 129 feet above sea level at Benton to 191 feet at Manack. Through the rolling hills of the Black Prairie Hills District in the central part of the county, elevation ranges between 200 and 400 feet above sea level. The highest elevations in Lowndes County are found in the southwest part of the county in the Chunnennuggee Hills District with Barganier Hill at 584 feet above sea level, County Line Hill at 571 feet above sea level, and Gilmer Hills at 548 feet above sea level. The steepest elevation change is at County Line Hill with a rise of 236 feet. Lowndes County drains from the higher elevations in the southern part of the county to the lower elevations of the Alabama River. Major tributaries to the Alabama River include Steep Creek in the northeastern part of the county, Big Swamp Creek and Cherry through the central part, and Old Town Creek and Dry Cedar Creek in the western part of Lowndes County.

The terrain of Macon County is characterized by gently rolling plains through most of the county with elevation ranging from approximately 120 feet above sea level to 410 feet above sea level. The Tuskegee Ridge is found in the south central part of the county with elevations in the neighborhood of 450 feet to 500 feet above sea level. The highest elevations are found in the northeast part of Macon County near Notasulga at 592 feet above sea level. There are four major drainage systems in Macon County, all of which flow northwest to the Tallapoosa River. Uphapee Creek, along with Chewacla Creek, drains the northeast and eastern parts of the county. Calebee Creek drains the central part and Cubahatchee Creek drains the western part of the county. Line Creek, which forms the Macon-Montgomery County Line drains the extreme southwestern part of Macon County.

2.2 Demographics

According to the 2010 decennial census, the total population of Lowndes County was 11,299 persons, which was a 16.1 percent decrease from the 2000 population of 13,473 persons. Census Population Estimates for 2019 indicate that the Lowndes County population has decreased another 10.8 percent to 10,079 persons. The 2010 population of Macon County was 21,452 persons, which was a 11.0 percent decrease from the 2000 population of 24,105 persons. According to Census Population Estimates for 2019, the Macon County population has decreased another 12.8 percent to 18,708 persons. Therefore, in just under 20 years, from 2000 to 2019, while the nation's population has increased by 15.4 percent and state's population has increased 9.7 percent, the Lowndes County population has decreased 25.2 percent and the Macon County population has decreased 22.4 percent.

Population decline has occurred throughout both counties, with only Fort Deposit in Lowndes County and Franklin and Notasulga in Macon County having any population growth in the nine years from 2010 to 2019. Fort Deposit grew by 491 people, or 36.5 percent and the Notasulga population increased by 46 people, or 4.8 percent. Franklin had a tremendous population increase of 481 persons, or 322.8 percent; however, much of Franklin population growth was due to an annexation that increased the Town's corporate limits from 4.48 square miles to 14.98 square

miles. The remaining municipalities and the unincorporated areas in both counties suffered population decreases ranging from a 17.1 percent to 44.2 percent decrease in Lowndes County and a 14.0 percent to 24.9 percent decrease in Macon County. Municipalities that experienced the most population loss were Gordonville in Lowndes County, with a 44.2 percent loss, and Shorter in Macon County, with a 24.9 percent loss. The unincorporated portions of the counties experienced similar population losses, with a 17.1 percent decrease in unincorporated Lowndes County and a 17.7 percent decrease in unincorporated Macon County. The recent population history for each jurisdiction in Lowndes and Macon Counties is shown in Table 2.1.

Table 2.1: Population Change from 2010 to 2019

Location	2010 Population	2019 Population Estimate	# Change 2010 to 2019	% Change 2010 to 2019
Alabama	4,779,736	4,876,250	96,514	2.0%
Lowndes County	**11,299**	**10,079**	**-1,220**	**-10.8%**
Benton	49	29	-20	-40.8%
Fort Deposit	1,344	1,835	491	36.5%
Gordonville	326	182	-144	-44.2%
Hayneville	932	872	-60	-6.4%
Lowndesboro	115	92	-23	-20.0%
Mosses	1,029	846	-183	-17.8%
White Hall	858	711	-147	-17.1%
Unincorporated Lowndes County	6,646	5,512	-1,134	-17.1%
Macon County	**21,452**	**18,708**	**-2,744**	**-12.8%**
Franklin	149	630	481	322.8%
Notasulga	965	1,011	46	4.8%
Shorter	474	356	-118	-24.9%
Tuskegee	9,865	8,486	-1,379	-14.0%
Unincorporated Macon County	9,999	8,225	-1,774	-17.7%
Source: U.S. Census Bureau, 2010 Census and 2015-2019 American Community Survey 5-Year Estimates				

Only a small portion of the total area of Lowndes and Macon Counties is located within an incorporated municipality. In Lowndes County, the largest municipality by land area is White Hall, at 15.54 square miles and the largest municipality by population size is Fort Deposit, at 1,835 persons. The total incorporated area of Lowndes County is 34.58 square miles, which is only 4.8 percent of the total county land area. The combined municipal population in Lowndes County is 4,567 persons, which is 45.3 percent of the total county population. In Macon County, the largest municipality by both land area and population size is Tuskegee, at 16.38 square miles and 8,486 persons. The total incorporated area of Macon County is 49.88 square miles, which is 8.1 percent of the total Macon County land area. As stands to reason, the population density in the municipalities is much higher than that of the unincorporated parts of the counties. Although it is not the largest municipality by either land area or population, Hayneville is the most densely populated town in Lowndes County, at 464.5 persons per square mile. The least densely populated municipality in Lowndes County is Gordonville, at 32.5 persons per square mile. The unincorporated part of Lowndes County is even less densely populated, at 8.0 persons per square mile. In Macon County, Tuskegee is the most densely populated municipality, at 518.2 persons

per square mile and the least densely populated municipality is Franklin, at 42.1 persons per square mile. Population density in the unincorporated part of Macon County is 14.6 persons per square mile. The total area and population density for 2010 and 2019 for Lowndes and Macon Counties, the municipalities, and the unincorporated portion of the counties is provided are Table 2.2.

Table 2.2: Population Density, 2010 and 2019

Location	Land Area (sq mi)	2010 Population	2010 Density (persons per square mile)	2019 Population	2019 Density (persons per square mile)
Alabama	52,420.00	4,779,736	91.2	4,876,250	93.0
Lowndes County	**725.07**	**11,299**	**15.6**	**10,079**	**13.9**
Benton	0.34	49	145.6	29	86.2
Fort Deposit	5.66	1,344	237.4	1,835	324.1
Gordonville	5.60	326	58.2	182	32.5
Hayneville	1.88	932	496.4	872	464.5
Lowndesboro	0.79	115	145.2	92	116.2
Mosses town	4.78	1,029	215.4	846	177.1
White Hall	15.54	858	55.2	711	45.8
Unincorp. Lowndes County	690.49	6,646.00	9.6	5,512.00	8.0
Macon County	**613.21**	**21,452**	**35.0**	**18,708**	**30.5**
Franklin (2010)	4.48	149	33.3	--	--
Franklin (2019)	14.98	--	--	630	42.1
Notasulga	13.95	965	69.2	1,011	72.4
Shorter	4.57	474	103.8	356	78.0
Tuskegee	16.38	9,865	602.4	8,486	518.2
Unincorp. Macon County	573.83	9,999.00	17.4	--	--
Unincorp. Macon County	563.33	--	--	8,225.00	14.6

Source: U.S. Census Bureau, 2010 Census and 2015-2019 American Community Survey 5-Year Estimates

The population of Lowndes County is 47.8 percent male and 52.2 percent female, and in Macon County, the ratio is 45.9 percent male and 54.1 percent female. The male ratio is slightly lower than that of the nation, where 49.2 percent of the population is male and 50.8 percent of the population is female; and of the state, where 48.4 percent of the population is male, and 51.6 percent of the population is female. Municipalities that have a higher percentage of male population than female are Benton, at 55.2 percent male, Gordonville, at 56.0 percent male, Hayneville, at 53.1 percent male, and White Hall, at 52.6 percent male, all of which are in Lowndes County. Lowndesboro, in Lowndes County, and Notasulga, in Macon County, each have an equal ratio of 50.0 percent male and 50.0 percent female.

The median age of the Lowndes County population, at 42.0 years old, is higher than the median age of the nation, at 38.1, and the state, at 39.0, while the median age of Macon County, at 38.6 is lower than that of the state. One influencing factor on the median age in Macon County is the presence of students attending Tuskegee University. In Lowndes County, the municipality with the oldest population is Lowndesboro, with a median age of 62.5, while the youngest population

is found in Fort Deposit, with a median age of 31.9. In Macon County, the median age is highest in Shorter, at 56.7, and lowest in Tuskegee, at 26.4.

The majority of the Lowndes County population is African American, at 74.6 percent. In Macon County, African Americans are also the largest racial group, at 83.2 percent of the total population. Persons of Hispanic or Latino origin make up 0.5 percent of the population in Lowndes County and 0.8 percent of the population in Macon County. The racial demographics of Lowndes and Macon Counties, as well as the municipalities is provided in Table 2.3 below.

Table 2.3: Racial Composition, 2019

Location	Total Population	White	Black or African American	American Indian and Alaska Native	Asian	Native Hawaiian and Other Pacific Islander	Some other race	Two or more races	Hispanic or Latino	Not Hispanic or Latino
United States	324,697,795	72.5%	12.7%	0.8%	5.5%	0.2%	4.9%	3.3%	18.0%	82.0%
Alabama	4,876,250	68.1%	26.6%	0.5%	1.4%	0.0%	1.4%	1.9%	4.3%	95.7%
Lowndes County	10,079	24.8%	74.6%	0.1%	0.0%	0.0%	0.0%	0.5%	0.5%	99.5%
Benton	29	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Fort Deposit	1,835	15.4%	84.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Gordonville	182	1.1%	90.7%	0.0%	0.0%	0.0%	0.0%	8.2%	0.0%	100.0%
Hayneville	872	8.8%	91.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Lowndesboro	92	88.0%	12.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Mosses	846	0.0%	99.8%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	100.0%
White Hall	711	1.8%	96.8%	0.0%	0.0%	0.0%	0.0%	1.4%	1.7%	98.3%
Macon County	18,708	16.0%	83.2%	0.1%	0.2%	0.0%	0.1%	0.5%	0.8%	99.2%
Franklin	630	10.2%	88.6%	1.3%	0.0%	0.0%	0.0%	0.0%	0.8%	99.2%
Notasulga	1,011	42.2%	57.4%	0.0%	0.0%	0.0%	0.0%	0.4%	0.6%	99.4%
Shorter	356	28.1%	68.8%	0.0%	2.5%	0.0%	0.0%	0.6%	0.0%	100.0%
Tuskegee	8,486	1.9%	97.4%	0.1%	0.3%	0.0%	0.0%	0.4%	1.5%	98.5%

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates

According to the 2015-2019 American Community Survey 5-Year Population Estimates, there are 15,520 total housing units in Lowndes and Macon Counties. Of the total housing units in Lowndes County, 4,251 units, or 81.4 percent, are occupied. In Macon County, 7,474 units, or 72.6 percent, are occupied. Housing information, including data on vulnerable housing, such as mobile homes, multi-unit structures, and aging housing are provided in Tables 2.4 and 2.5. Persons living in manufactured homes, as well as older housing, are generally more vulnerable to natural disasters because the building materials and construction standards are often inferior to newer site-built homes. Older housing units are more likely to be in deteriorated or dilapidated condition and can have issues with providing safe shelter in the event of a natural disaster. Multi-unit structures can be an issue in a natural disaster because of the concentration of people who might be injured.

Table 2.4: Housing Occupancy and Type, 2019

Location	Total housing units	Occupied housing units	Vacant housing units	Single Unit Structures	Multi-Unit Structures	Mobile Home, Boat, Van, RV
United States	137,428,986	120,756,048	16,672,938	92,693,327	36,114,707	8,620,952
Percent	137,428,986	87.9%	12.1%	67.4%	26.3%	6.3%
Alabama	2,255,026	1,867,893	387,133	1,581,912	371,544	301,570
Percent	100.0%	82.8%	17.2%	70.2%	16.5%	13.4%
Lowndes County	5,224	4,251	973	2,916	364	1,944
Percent	100.0%	81.4%	18.6%	55.8%	7.0%	37.2%
Benton	13	13	0	13	0	0
Percent	100.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Fort Deposit	837	725	112	372	197	268
Percent	100.0%	86.6%	13.4%	44.4%	23.5%	32.0%
Gordonville	102	81	21	46	2	54
Percent	100.0%	79.4%	20.6%	45.1%	2.0%	52.9%
Hayneville	440	358	82	254	92	94
Percent	100.0%	81.4%	18.6%	57.7%	20.9%	21.4%
Lowndesboro	79	53	26	79	0	0
Percent	100.0%	67.1%	32.9%	100.0%	0.0%	0.0%
Mosses	413	367	46	220	58	135
Percent	100.0%	88.9%	11.1%	53.3%	14.0%	32.7%
White Hall	417	351	66	262	15	140
Percent	100.0%	84.2%	15.8%	62.8%	3.6%	33.6%
Unincorp Area	2,923	2,303	620	1,670	0	1,253
Percent	100.0%	78.8%	21.2%	57.1%	0.0%	42.9%
Macon County	10,296	7,474	2,822	6,682	1,536	2,078
Percent	100.0%	72.6%	27.4%	64.9%	14.9%	20.2%
Franklin	376	279	97	290	11	75
Percent	100.0%	74.2%	25.8%	77.1%	2.9%	19.9%
Notasulga	538	456	82	353	23	162
Percent	100.0%	84.8%	15.2%	65.6%	4.3%	30.1%
Shorter	215	168	47	186	0	29
Percent	100.0%	78.1%	21.9%	86.5%	0.0%	13.5%
Tuskegee	4,475	2,936	1,539	2,923	1,447	105
Percent	100.0%	65.6%	34.4%	65.3%	32.3%	2.3%
Unincorp Area	4,692	3,635	1,057	2,930	55	1,707
Percent	100.0%	77.5%	22.5%	62.4%	1.2%	36.4%

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table DP04: Selected Housing Characteristics

There are 1,944 mobile homes and 364 multi-unit structures in Lowndes County, making up 44.2 percent of the county's total housing stock. The highest number and percentage of mobile homes is found in the unincorporated area, at 42.9 percent of the total housing. Fort Deposit has the most multi-unit structures, at 197 units, or 23.5 percent, of the total housing units. In Macon County, there are 2,078 mobile homes and 1,536 multi-unit structures, comprising 35.1 percent of the county's total housing stock. The unincorporated part of Macon County has the most mobile

homes with 1,707 units, or 36.4 percent of the total housing. The highest number of multi-unit structures is found in Tuskegee with 1,447 units or 32.3 percent of the city's total housing stock. Housing that is 20 years old or older comprises more than 80.0 percent of the total housing stock in both Lowndes County, at 81.7 percent, and Macon County, at 88.9 percent. The percentage of housing more than 40 years old in Lowndes County, at 33.7 percent, is considerably lower than that of the nation, at 53.6 percent, and the state, at 45.2 percent. In Macon County, the percentage of housing more than 40 years old, at 56.6 percent, is more in line with that of the state and nation.

Table 2.5: Housing Age, 2019

Location	Total housing units	Units Built After 2000 (<20 years old)	Units Built Before 2000 (20+ years old)	Units Built Before 1980 (40+ years old)
United States	137,428,986	26,276,812	111,152,174	73,624,260
Percent	100.0%	19.1%	80.9%	53.6%
Alabama	2,255,026	497,017	1,758,009	1,020,051
Percent	100.0%	22.0%	78.0%	45.2%
Lowndes County	5,224	954	4,270	1,758
Percent	100.0%	18.3%	81.7%	33.7%
Benton	13	2	11	11
Percent	100.0%	15.4%	84.6%	84.6%
Fort Deposit	837	142	695	317
Percent	100.0%	17.0%	83.0%	37.9%
Gordonville	102	18	84	46
Percent	100.0%	17.6%	82.4%	45.1%
Hayneville	440	119	321	173
Percent	100.0%	27.0%	73.0%	39.3%
Lowndesboro	79	10	69	57
Percent	100.0%	12.7%	87.3%	72.2%
Mosses	413	130	283	143
Percent	100.0%	31.5%	68.5%	34.6%
White Hall	417	79	338	138
Percent	100.0%	18.9%	81.1%	33.1%
Unincorporated Area	2,923	454	2,469	873
Percent	100.0%	15.5%	84.5%	35.4%
Macon County	10,296	1,140	9,156	5,827
Percent	100.0%	11.1%	88.9%	56.6%
Franklin	376	70	306	168
Percent	100.0%	18.6%	81.4%	44.7%
Notasulga	538	92	446	297
Percent	100.0%	17.1%	82.9%	55.2%
Shorter	215	40	175	123
Percent	100.0%	18.6%	81.4%	57.2%
Tuskegee	4,475	198	4,277	3,188
Percent	100.0%	4.4%	95.6%	71.2%
Unincorporated Area	4,692	740	3,952	2,051
Percent	100.0%	15.8%	84.2%	51.9%

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table DP04: Selected Housing Characteristics

The U.S. Census Bureau defines a "household" to include all persons who occupy one unit of a residence, such as an apartment, single room, mobile home, or a house. And, the Census Bureau determines poverty based on the poverty threshold. If the total income is greater than the poverty threshold, then the family or person is not considered to be below the poverty line. The U.S. Census Bureau uses the following two equations to determine poverty status: *Income / Threshold = X or Income – Threshold = X*. According to 2015-2019 ACS 5-Year Estimates, Lowndes County has a total of 4,251 households with an average household size of 2.35 persons and Macon County has 7,474 households with an average household size of 2.20 persons. The average household size in both counties is smaller than that of the nation, at 2.62 persons, and the state, at 2.55 persons. Income levels in Lowndes and Macon Counties are generally lower than those of the state and nation, as shown in Table 2.6. In Lowndes County, the median household income, at $30,036, is 47.8 percent of the nation's, and 59.43 percent of that of the state's. Two municipalities, however, have a median household income that is higher than that of the state: Benton, at $101,458, and Lowndesboro, at $57,679. Per capita income in Lowndes County, at $20,209, is 59.3 percent of the nation's and 72.4 percent of the state's. Again, the per capita income of Benton and Lowndesboro is higher than that of the state. As expected with the low income rates, poverty levels in Lowndes are considerably higher than that of the state and nation, with 22.4 percent of Lowndes County families living in poverty and 26.8 percent of all residents living in poverty. Althouogh income levels in Macon County are slightly higher than Lowndes County, they are still much lower than the nation and state. The Macon County median household income, at $33,370, is 53.1 percent of the nation's and 66.0 percent of the state's. The Macon County per capita income, at $20,625, is 54.9 percent of the nation's and 75.5 percent of the state's. Only Franklin has a median household income and a per capita income higher than the state's. Poverty levels in Macon County are higher than the state and nation, at 18.1 percent of all families and 24.4 percent of all residents living in poverty.

Table 2.6: Households, Income and Poverty

	Total Households	Median Household Income	Median Family Income	Per Capita Income	Median Nonfamily Income	Living in Poverty	
						All Families	All People
United States	120,756,048	$62,843	$77,263	$34,103	$37,561	9.5%	13.4%
Alabama	1,867,893	$50,536	$64,430	$27,928	$27,335	12.3%	16.7%
Lowndes County	4,251	$30,036	$41,444	$20,209	$15,190	22.4%	26.8%
Benton	13	$101,458	$101,458	$39,390	-	0.0%	0.0%
Fort Deposit	725	$34,107	$50,045	$19,124	$15,000	20.9%	29.4%
Gordonville	81	$25,179	$46,875	$24,402	$16,364	15.4%	18.7%
Hayneville	358	$23,036	$35,882	$15,254	$12,500	29.7%	37.0%
Lowndesboro	53	$57,679	-	$42,207	-	0.0%	8.7%
Mosses	367	$24,410	$25,441	$14,281	-	36.0%	44.1%
White Hall	351	$23,482	$33,667	$15,560	$18,264	36.0%	38.4%
Macon County	7,474	$33,370	$48,723	$20,419	$20,625	18.1%	24.4%
Franklin	279	$75,139	$91,625	$34,084	$32,500	4.3%	6.1%
Notasulga	456	$36,970	$56,563	$23,434	$22,446	6.4%	9.2%
Shorter	168	$30,000	$41,827	$21,928	$16,875	8.4%	12.5%
Tuskegee	2,936	$28,016	$49,500	$17,178	$16,982	20.7%	27.9%

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table DP02: Selected Social Characteristics and Table DP03: Selected Economic Characteristics

According to the 2015-2019 ACS 5-Year Estimates, there are 7,062 persons in Lowndes County and 12,033 persons in Macon County that are 25 years or older. Table 2.7 shows the total number and educational attainment for persons that are age 25 and older for each jurisdiction in the two counties. Lowndes and Macon Counties do not fare well in comparison with the State of Alabama and the national educational levels. In Lowndes County, 21.7 percent of the population age 25 and older have less than a high school diploma, and in Macon County, the percentage is 81.8 percent, as compared to the state, at 13.8 percent and the nation, at 12.0 percent. Both counties have a lower percentage of high school graduates as well as a lower percentage of persons with a Bachelor's Degree or higher than the state or the nation. The same is true in almost all municipalities. In Benton and Lowndesboro in Lowndes County and Notasulga in Macon County, the percentage of persons with less than a high school degree is lower than that of the state and nation.

Table 2.7: Educational Attainment

Location	Population 25 Years and Over	Less than High School Diploma	High School Graduate or Higher	Bachelor's Degree or Higher
United States	220,622,076	12.0%	88.0%	32.1%
Alabama	3,320,877	13.8%	86.2%	25.5%
Lowndes County	**7,062**	**21.7%**	**78.3%**	**14.7%**
Benton	23	0.0%	100.0%	56.5%
Fort Deposit	1,106	18.3%	81.7%	14.9%
Gordonville	142	18.3%	81.7%	11.3%
Hayneville	609	29.1%	70.9%	12.3%
Lowndesboro	82	0.0%	100.0%	23.2%
Mosses	591	18.3%	81.7%	7.3%
White Hall	525	35.4%	64.6%	8.8%
Macon County	**12,033**	**18.2%**	**81.8%**	**20.4%**
Franklin	500	18.4%	81.6%	30.4%
Notasulga	788	10.7%	89.3%	12.8%
Shorter	284	25.4%	74.6%	10.6%
Tuskegee	4,465	19.0%	81.0%	26.5%

Source: U.S. Census Bureau, 2015-2019 American Community Survey 5-Year Estimates, Table DP02: Selected Social Characteristics

In the event of a natural disaster, the most vulnerable population groups are those that are dependent upon someone else to be safe. In terms of age demographics, the most vulnerable population groups include those persons that are under the age of 18 and those persons that are age 65 and older because of the higher potential for reliance on another person. According to the 2015-2019 ACS 5-Year Estimates, 40.9 percent of the Lowndes County population and 36.7 percent of the Macon County population would be considered vulnerable based solely on age. Between 2010 and 2019, the vulnerable population increased by 1.6 percent in Lowndes County and 1.2 percent in Macon County, as compared to a similar increase of 1.2 percent in the nation and 1.5 percent in the State of Alabama. The percentage of the population that is under age 18 decreased between 2010 and 2019 by 24.1 percent in Lowndes County and by 30.8 percent in Macon County, while the population that is age 65 and older increased by 14.1 percent in Lowndes County and by 20.3 percent in Macon County. The state and the nation both saw similar increases in the elderly

population, however the decrease in the population under age 18 was much, much smaller. Details of vulnerable population groups of the counties and the municipalities is provided in Table 2.8.

Table 2.8: Vulnerable Population Groups by Age, 2010 and 2019

Location	2010			2019			% Change 2010 to 2019	
	Total Population	Under 18	65 Years and Over	Total Population	Under 18	65 Years and Over	Under Age 18	65 Years+
United States	303,965,272	74,033,117	38,749,413	324,697,795	73,429,392	50,783,796	-0.8%	31.1%
Percent	100.0%	24.4%	12.70%	100.0%	22.6%	15.60%		
Alabama	4,712,651	1,132,303	635,217	4,876,250	1,096,376	804,881	-3.2%	26.7%
Percent	100.0%	24.0%	13.50%	100.0%	22.5%	16.50%		
Lowndes Co.	11,731	2,993	1,627	10,079	2,271	1,856	-24.1%	14.1%
Percent	100.0%	25.5%	13.90%	100.0%	22.5%	18.40%		
Benton	40	13	3	29	6	3	-53.8%	0.0%
Percent	100.0%	32.5%	7.50%	100.0%	20.7%	10.30%		
Fort Deposit	1,115	273	126	1,835	510	126	86.8%	0.0%
Percent	100.0%	24.5%	11.30%	100.0%	27.8%	6.90%		
Gordonville	310	83	68	182	15	40	-81.9%	-41.2%
Percent	100.0%	26.8%	21.90%	100.0%	8.2%	22.00%		
Hayneville	1,424	403	153	872	194	116	-51.9%	-24.2%
Percent	100.0%	28.3%	10.70%	100.0%	22.2%	13.30%		
Lowndesboro	156	25	53	92	2	40	-92.0%	-24.5%
Percent	100.0%	16.0%	34.00%	100.0%	2.2%	43.50%		
Mosses	1,158	378	88	846	207	92	-45.2%	4.5%
Percent	100.0%	32.6%	7.60%	100.0%	24.5%	10.90%		
White Hall	823	216	75	711	152	192	-29.6%	156.0%
Percent	100.0%	26.2%	9.10%	100.0%	21.4%	27.00%		
Unincorp Area	6,705	1,602	1,061	5,512	1,185	1,247	-26.0%	17.5%
Percent	100.0%	23.9%	15.8%	100.0%	21.5%	22.6%		
Macon Co.	21,699	4,691	3,004	18,708	3,248	3,614	-30.8%	20.3%
Percent	100.0%	21.6%	13.80%	100.0%	17.4%	19.30%		
Franklin	329	105	24	630	66	164	-37.1%	583.3%
Percent	100.0%	31.9%	7.30%	100.0%	10.5%	26.00%		
Notasulga	985	200	127	1,011	116	140	-42.0%	10.2%
Percent	100.0%	20.3%	12.90%	100.0%	11.5%	13.80%		
Shorter	452	86	42	356	61	111	-29.1%	164.3%
Percent	100.0%	19.0%	9.30%	100.0%	17.1%	31.20%		
Tuskegee	10,189	1,803	1,155	8,486	1,406	1,301	-22.0%	12.6%
Percent	100.0%	17.7%	11.30%	100.0%	16.6%	15.30%		
Unincorp Area	9,744	2,497	1,656	8,225	1,599	1,898	-36.0%	14.6%
Percent	100.0%	25.6%	17.0%	100.0%	19.4%	23.1%		

Source: U.S. Census Bureau, 2006-2010 American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates; and 2015-2019 American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates

2.3 Business and Industry

Lowndes and Macon Counties support a limited, but varied, contingency of industrial and commercial establishments. The 2019 American Community Survey data reports that Lowndes County has a civilian labor force of 3,807 persons, of which 4.7 percent are unemployed. Of the 3,430 employed workers, 22.6 percent, are employed in manufacturing, and 18.7 percent are employed in education, health care and social services. The occupations with the largest percentage of workers are production, transportation and material moving, at 29.2 percent, and management, business, science, and arts, at 25.1 percent. The great majority of the labor force, at 81.9 percent, are private wage and salary workers. It is estimated that 56.5 percent of the households in Lowndes County have earnings and the mean earnings is $57,643, as of 2019. Macon County has a civilian labor force of 7,967 persons, of which 11.3 percent are unemployed. Of the 7,064 employed workers, 33.2 percent are employed in education, health care and social services and 14.3 percent are employed in manufacturing. The occupations with the largest percentage of workers are management, business, science, and arts, at 31.3 percent, and sales and office occupations, at 21.4 percent. Again, the majority of the employed labor force, at 76.0 percent, are private wage and salary workers. It is estimated that 62.9 percent of the households in Macon County have earnings and the mean earnings is $50,175, as of 2019. Unemployment data from the Alabama Department of Labor shows that the average unemployment rate for 2020 in Lowndes County was 13.7 percent and in Macon County, it was 9.7 percent. During the height of COVID-19 shutdowns and unemployment in April 2020, the Lowndes County unemployment rate was 26.0 percent, and the Macon County unemployment rate was 18.7 percent.

Major employers in Lowndes County employ between 1,650 and 2,175 persons and the major employers in Macon County employ between 3,805 and 4,090 persons. The largest employers in Lowndes and Macon Counties are listed in Table 2.9 below. These industries are susceptible to the same natural hazards as the remainder of the county, e.g. high wind events and potential flooding; however, they also bring the added risk of large concentrations of persons at any given time as well as the economic impact of industry loss or shut-down. Losing any industry is directly related to the size/type of business and the duration/severity of the loss.

Table 2.9: Largest Employers

Lowndes County			Macon County		
American Colloid Co.	Bentonite Clay	20-50	Beck's Turf	Sod Production	40-45
Bates Turkey Farm	Processing	30-35	CAVHCS	Healthcare	800-850
Daehan Solutions	Insulation Components	300-350	Hanon Systems Corp	Auto Parts Mftg	500-550
Flying J Travel Center	Fuel, Retail	70-100	Logisall	Freight Mgr	25
Koch Foods	Feed Mill	20-50	Love's Travel Center	Fuel, Retail	75-100
Love's Travel Center	Fuel, Retail	70-100	Macon County Jail	Prison	150-175
Lowndes County Jail	Prison	125-150	Macon County Schools	Education	400-450
Lowndes Co. Schools	Education	350-400	Magnolia Haven	Healthcare	110
Orchard Nursing Home	Healthcare	85-90	Martin Marietta	Mining	50
Priester Pecan	Pecans, Candies	50-60	Moore & Davis Nursery	Nursery	15-20
SABIC	Eng. Plastics	600	Reed Ambulatory Care	Healthcare	100-110
Sejong Alabama LLC	Exhaust Mftg	170	Tuskegee University	Education	800-850
			VictoryLand	Entertainment	750-750

2.4 Infrastructure

Transportation:
Located in south central Alabama, Lowndes County is accessed by Interstate 65 as it crosses the eastern part of the county in a northeast to southwest direction. U.S. Highways 31 and 80 also run through the county, along with four state highways. U.S. Highway 80 runs east-west through the northern part of the county and U.S. Highway 31 parallels Interstate 65 in the southeast corner. Alabama Highway 21 crosses the central part of the county from U.S. Highway 80 in the northeast corner to enter Wilcox County to the southwest. Alabama Highway 97 connects U.S. Highways 80 and 31 in the east central part of the county. Alabama Highways 185 and 263 are found in the southern part of the county. There is a rail line in the northern part of the county, however, there is no commercial airport in the county.

Macon County is accessed by Interstate 85 as it crosses the northern part of the county in a southwest to northeast direction. U.S. Highway 29 enters the county from Lee County in the northeast, merges with U.S. Highway 80 and then runs south into Bullock County. U.S. Highway 80 crosses the north central part of the county in an east-west direction. There are seven state highways, all of which are located in the northern part of the county. Alabama Highway 14 runs east-west across the northern tip of the county. Alabama Highways 81 and 199 run north-south connecting Highway 14 with U.S. Highway 29 in Tuskegee. There are only small segments of the remaining four state highways, all of which run primarily north-south to provide connections with Interstate 85. There is a rail line in the northern part of the county, however, there is no commercial airport in the county.

Utilities:
Lowndes County is served by six public water systems. Five of these systems, Fort Deposit, Hayneville, Lowndesboro, Mosses and White Hall are municipally owned and operated. In 2007, the Lowndes County Water Authority (LCWA) absorbed the Black Belt Authority and serves primarily rural residents in the Braggs, Calhoun, Collirene, Farmersville, Hicks Hill, and Mt. Willing communities. It is estimated that the six systems combined serve approximately 4,370 customers. Those households without public water are dependent on private wells, hauling water from neighboring properties, or some other means. It is estimated that there are close to 700 domestic wells in use in Lowndes County.

Macon County is served by five public water systems. Three of these systems, Franklin, Notasulga, and the Utilities Board of Tuskegee are municipal systems. The other two systems, Macon County Water Authority (MCWA) and Star Mindingall Water Authority (SMWA), are both nonprofit water authorities governed by three-member boards. The three municipal systems serve approximately 5,500 households. The Utilities Board of Tuskegee is the largest of the municipal systems, serving 4,400 customers. Together, these five systems provide water to virtually all occupied households, businesses and industries in Macon County. Still, it is estimated that there are approximately 200 domestic wells in use to provide water to those residents who are not served by a public water system.

Neither Lowndes County nor Macon County have a countywide public sewer system. In Lowndes County, there are three municipal systems in Fort Deposit, Hayneville and Mosses. The Town of

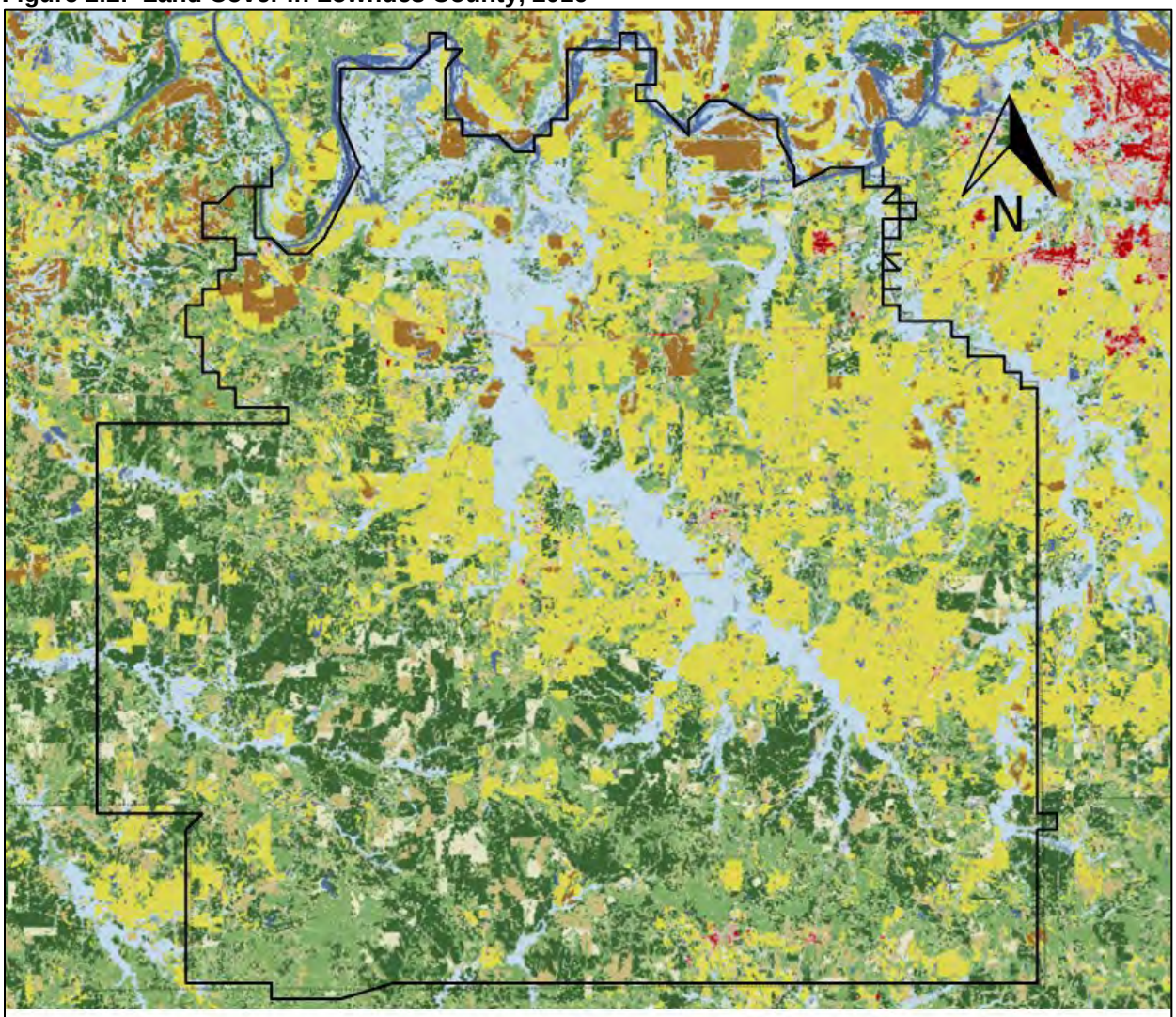
White Hall has a new sewer system under construction. None of the municipal systems currently provide sewage disposal to the commercial entities located along Interstate 65 in the eastern part of the county. In Macon County, the only public sewer systems in the county are the municipally-owned and operated systems in Notasulga, Shorter and Tuskegee. In both counties, those households without sewer most often utilize some form of onsite sanitary disposal system, such as septic tanks.

Electrical service is provided in Lowndes County by Alabama Power Company, Pioneer Electric Cooperative, Inc., Dixie Electric Cooperative, and Central Alabama Electric Cooperative. In Macon County, electrical services are provided by Alabama Power Company and the Utilities Board of Tuskegee. Power service is considered to be in good condition and fully meets the needs of all residents. Natural gas is supplied to Lowndes County by Southeast Alabama Gas District and by Spire, Inc. In Macon County, natural gas is supplied by Southeast Alabama Gas District, Southern Natural Gas, and Spire, Inc.

2.5 Land Use and Development Trends

Lowndes County and Macon County are rural counties where the predominant land uses are deciduous and evergreen forest, crop production, and pasture. Commercial-type development is primarily limited to the Town of Hayneville and the City of Fort Deposit in Lowndes County, and the Town of Notasulga, the Town of Shorter, and City of Tuskegee in Macon County, as shown in Figure 2.2 and Figure 2.3. Further, because of the continued population decline in both counties over the last 20 years, there has been no incentive for any large scale private development in recent years, as seen in Figure 2.4 and Figure 2.5. What changes in land use that have occurred have been agricultural in nature or timber-related. Since the population losses in both Lowndes County and Macon County have not had an impact on current land uses and development trends, both have generally remained static due to the rural environment and agricultural land uses. Therefore, the counties and municipalities therein are no more vulnerable to hazardous conditions than they have been in the past. On the other hand, because the poor economic conditions in both counties have not improved and resources are scarce for infrastructural and system improvements, both Lowndes County and Macon County remain highly vulnerable to the impact of any hazard event that may strike simply due to the lack of financial resources necessary for hazard prevention and mitigation and, ultimately, for recovery.

Figure 2.2: Land Cover in Lowndes County, 2016

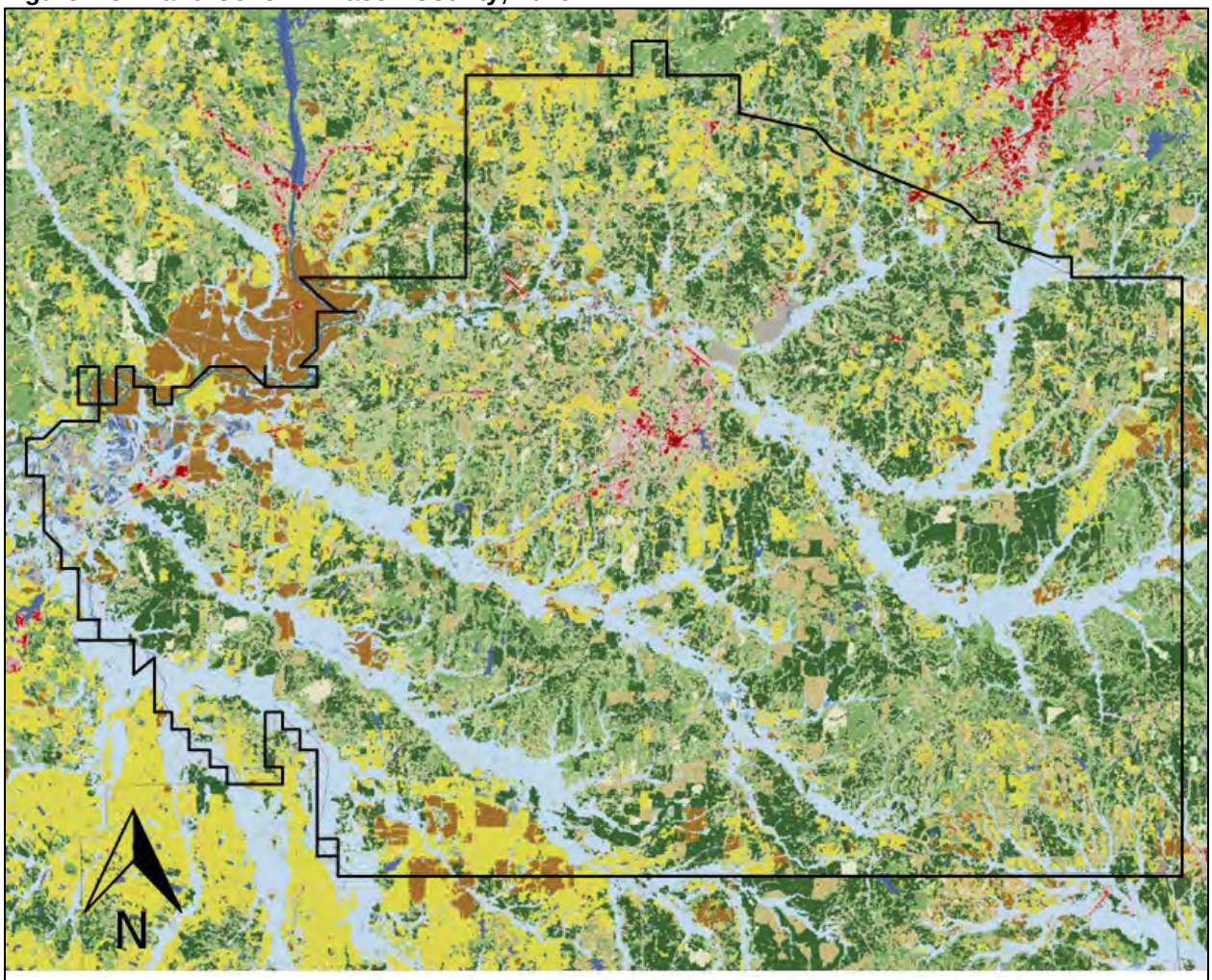


LOWNDES COUNTY LAND COVER 2016

- Open Water (11)
- Perennial Ice/Snow/ (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
- Barren Land (Rock/Sand/Clay) (31)
- Unconsolidated Shore (32)
- Deciduous Forest (41)
- Evergreen Forest (42)
- Mixed Forest (43)
- Dwarf Scrub(AK only) (51)
- Shrub/Scrub (52)
- Grasslands/Herbaceous (71)
- Sedge/Herbaceous(AK only) (72)
- Lichens (Ak only) (73)
- Moss (AK only) (74)
- Pasture/Hay (81)
- Cultivated Crops (82)
- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (95)

Source: National Land Cover Database, Multi-Resolution Land Characteristics Consortium, https://www.mrlc.gov/viewer

Figure 2.3: Land Cover in Macon County, 2016

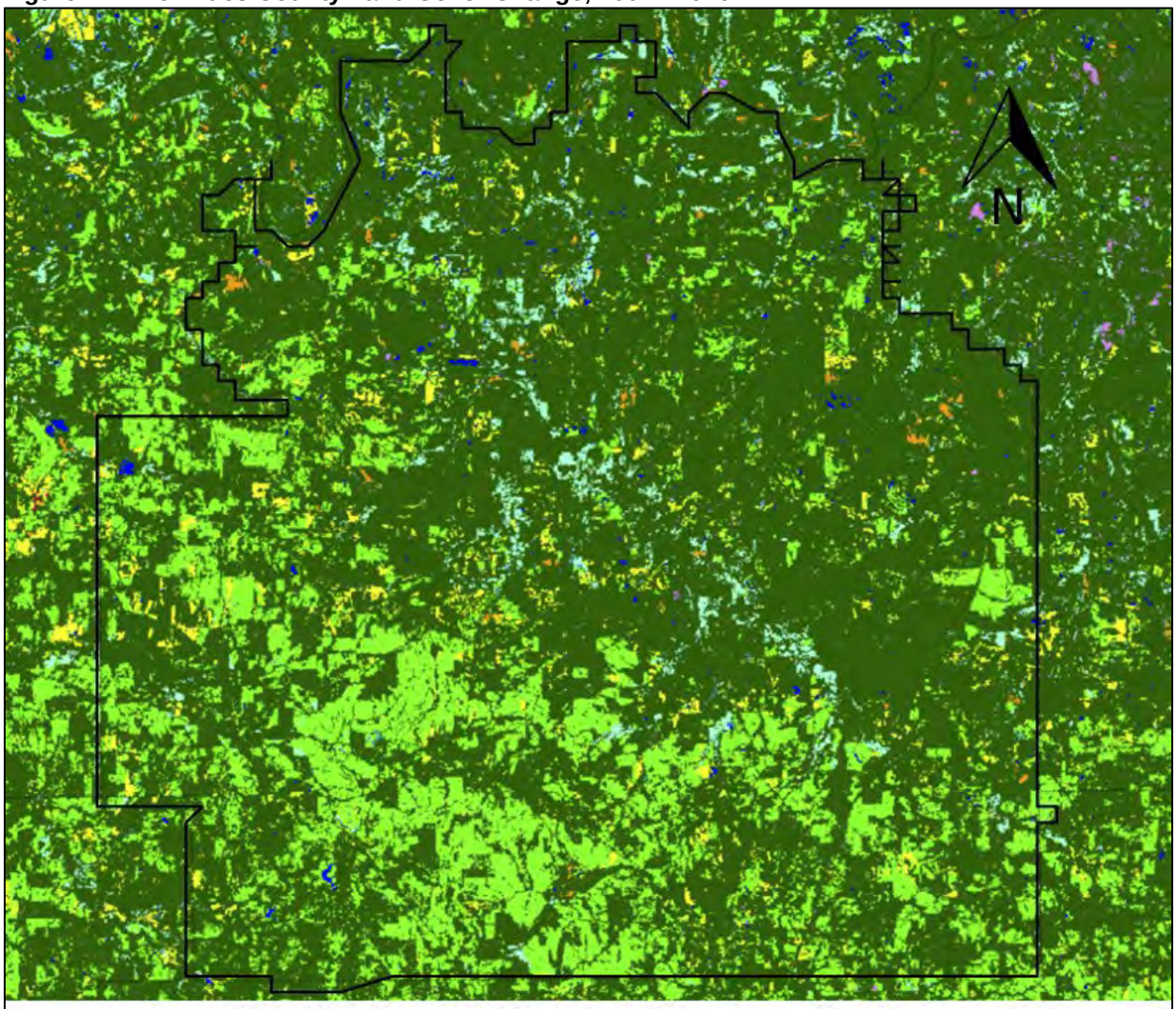


MACON COUNTY LAND COVER 2016

- Open Water (11)
- Perennial Ice/Snow/ (12)
- Developed, Open Space (21)
- Developed, Low Intensity (22)
- Developed, Medium Intensity (23)
- Developed, High Intensity (24)
- Barren Land (Rock/Sand/Clay) (31)
- Unconsolidated Shore (32)
- Deciduous Forest (41)
- Evergreen Forest (42)
- Mixed Forest (43)
- Dwarf Scrub(AK only) (51)
- Shrub/Scrub (52)
- Grasslands/Herbaceous (71)
- Sedge/Herbaceous(AK only) (72)
- Lichens (Ak only) (73)
- Moss (AK only) (74)
- Pasture/Hay (81)
- Cultivated Crops (82)
- Woody Wetlands (90)
- Emergent Herbaceous Wetlands (95)

Source: National Land Cover Database, Multi-Resolution Land Characteristics Consortium, https://www.mrlc.gov/viewer

Figure 2.4: Lowndes County Land Cover Change, 2001 - 2016

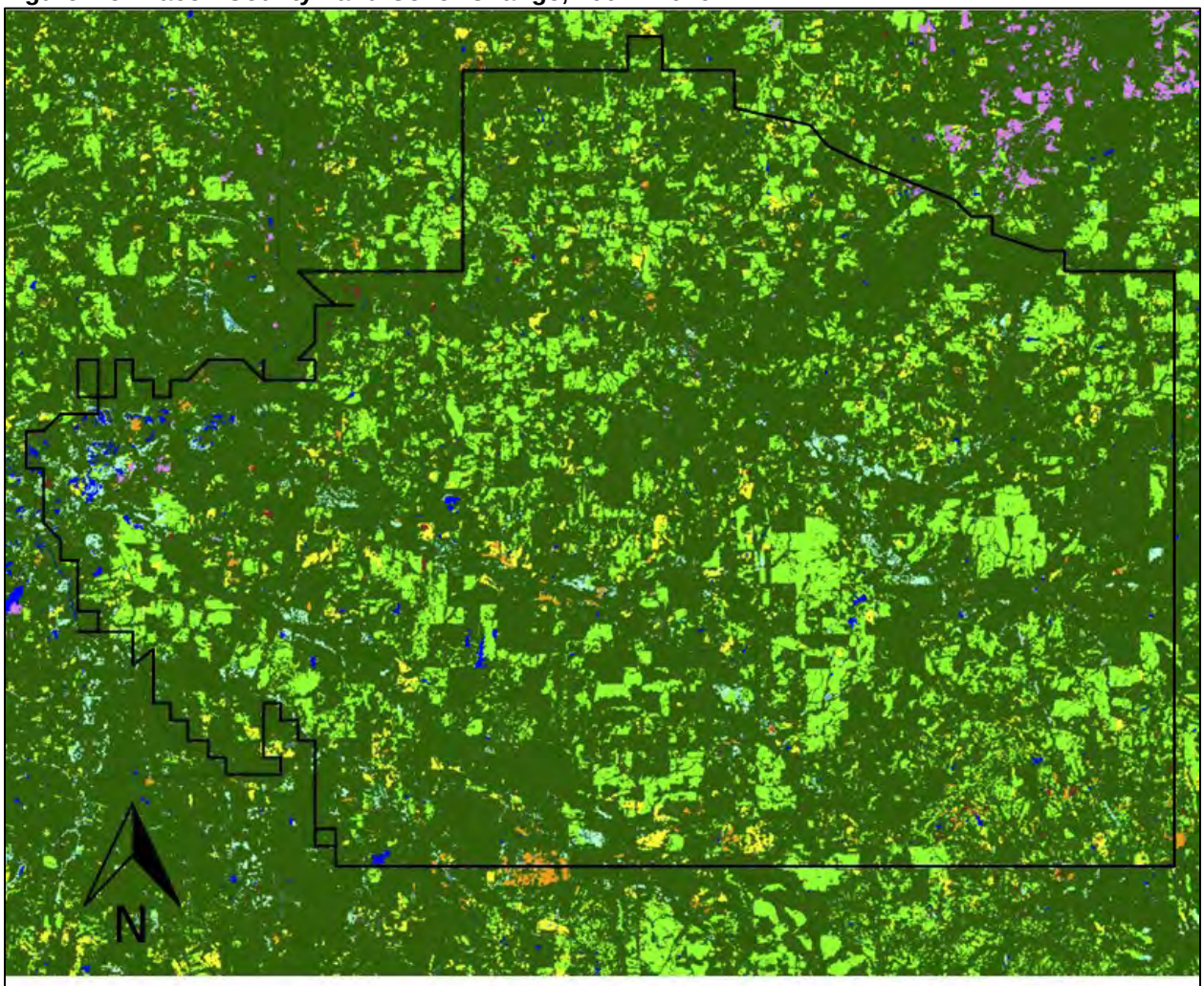


NLCD Land Cover Change Index
Lowndes County, 2001 to 2016

- No change (1)
- water change (2)
- urban change (3)
- wetland within class change (4)
- herbacous wetland change (5)
- ag hay/pasture change (6)
- cultivated crop change (7)
- hay/pasture change (8)
- persistent grass and shrub change (9)
- barren change (10)
- forest-theme change (11)
- woody wetland change (12)

Source: National Land Cover Database, Multi-Resolution Land Characteristics Consortium, https://www.mrlc.gov/viewer

Figure 2.5: Macon County Land Cover Change, 2001 - 2016



NLCD Land Cover Change Index
Macon County, 2001 to 2016

- No change (1)
- water change (2)
- urban change (3)
- wetland within class change (4)
- herbacous wetland change (5)
- ag hay/pasture change (6)
- cultivated crop change (7)
- hay/pasture change (8)
- persistent grass and shrub change (9)
- barren change (10)
- forest-theme change (11)
- woody wetland change (12)

Source: National Land Cover Database, Multi-Resolution Land Characteristics Consortium, https://www.mrlc.gov/viewer

2.6 NFIP Compliance

It is estimated that there are 83 NFIP policies in effect in Lowndes County and 30 NFIP policies in Macon Counties. Currently, the flood maps are being updated in Macon County to obtain better flood information in industrial areas. Table 2.9 below summarizes NFIP participation and policy statistics for each jurisdiction in the Lowndes County and Macon County as of February 2, 2021. More site-specific information is provided in the Risk Assessment section.

All jurisdictions except Gordonville and Lowndesboro in Lowndes County and Franklin in Macon County participate in the National Flood Insurance Program. Jurisdictions that are non-participating in the NFIP Program have participated in the hazard mitigation planning process. All three non-participating municipalities have a population of less than 700 persons with minimal non-residential development to generate the necessary revenue to support local administrative staff and additional programs. Further, the Town of Lowndesboro has no floodplain within the corporate limits and the Town of Franklin has minimal floodplain area within the corporate limits, as discussed in Section 3.7. The Town of Gordonville does have floodplain areas. During the hazard mitigation planning process, however, the Town of Gordonville recognized the need to participate in the NFIP and was referred to the Office of Water Resources Division of the Alabama Department of Economic and Community Affairs for additional information.

Table 2.9: Macon County Land Cover Change, 2001 - 2016

CID	Name	County	Participation Status	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date
010272#	Lowndes County	Lowndes	Yes	11/29/1974	8/15/1984	9/3/2014
015002#	Benton	Lowndes	Yes	4/6/1973	7/1/1974	9/3/2014
010384#	Fort Deposit	Lowndes	Yes	9/29/1978	11/4/2009	11/04/2009(M)
010506#	Gordonville -no	Lowndes	No		11/4/2009	11/4/2009
010341#	Hayneville	Lowndes	Yes		11/4/2009	11/04/2009(M)
--	Lowndesboro	Lowndes	No	Not Listed in NFIP Community Status Book		
010509#	Mosses	Lowndes	Yes		11/4/2009	11/04/2009(M)
010507#	White Hall	Lowndes	Yes		11/4/2009	9/3/2014
010148#	Macon County	Macon	Yes	1/6/1978	4/1/1982	11/18/2009
010385#	Franklin	Macon	No	11/18/2009	11/18/2009	010385#
010149#	Notasulga	Macon	Yes	10/25/1974	11/24/1978	11/18/09(M)
010512#	Shorter	Macon	Yes		11/18/2009	11/18/09 (M)
010150#	Tuskegee	Macon	Yes	8/16/1974	1/6/1982	1/18/2009

Source: FEMA, the National Flood Insurance Program Community Status Book, 2021

SECTION 3: HAZARD RISK ASSESSMENT

Section Contents

3.1 Risk Assessment
3.2 Natural Hazards Identification
3.3 Dam Failure
3.4 Drought
3.5 Earthquake
3.6 Extreme Heat
3.7 Flooding
3.8 Hail
3.9 High Winds, Thunderstorms, Severe Storms
3.10 Landslides
3.11 Lightning
3.12 Sinkholes
3.13 Tropical Depression, Tropical Storm, Hurricanes
3.14 Tornadoes
3.15 Wildfire
3.16 Winter/Ice Storms, Extreme Cold

3.1 Risk Assessment

Lowndes and Macon Counties are affected by a wide range of natural and human-caused hazards that negatively impact life and property. Current FEMA regulations are under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human-caused hazards (i.e., technological hazards, terrorism, etc.) is allowed, but not required for plan approval. The AEMA Division D Regional Hazard Mitigation Plan concentrates on natural hazards but does include a summarized assessment of potential human-caused hazards.

A profile and risk assessment for each natural hazard that might present a risk to Lowndes and Macon Counties is provided in this section. Lowndes and Macon County EMA, local governments, and other stakeholders identified the natural hazards and developed a risk assessment for each county based on the potential impact of each hazard. The following components are included for each hazard profile:

- Hazard Description
- Location
- Hazard Extent
- Previous Occurrences
- Probability of Future Occurrence by Jurisdiction
- Overall Risk Analysis

3.2 Natural Hazard Identification

In the initial phase of the planning process, the HMPC (Hazard Mitigation Planning Committee) considered 19 natural hazards and the risks they create for the citizens of Lowndes and Macon Counties. Some hazards were eliminated due to a lack of applicability in Lowndes and Macon Counties. Eliminated hazards included avalanche, coastal erosion, tsunami, and volcano. The remaining hazards were dam failure, drought, earthquakes, extreme heat, flood, hail, high winds and thunderstorms, hurricanes and tropical storms, land subsidence/sinkholes, landslides, lightning, tornadoes, wildfire, and winter storms. Below is a table that displays each natural hazard, whether the hazard is a risk to Lowndes County and Macon County, the source of risk information, and how the hazard correlates with Lowndes and Macon Counties and the AEMA Division D Region. The hazard identification shown in Table 3.1 outlines the 15 hazards that will be addressed in AEMA Division D Phase III Hazard Mitigation Plan that includes Lowndes County, Macon County, and the jurisdictions in both counties. Many hazards are multi-faceted and interrelated; therefore, some, such as high winds and thunderstorms, are grouped together due to their impacts and mitigation strategies being similar.

Table 3.1: Potential Hazards and Data Sources Per Hazard

Natural Hazard	Risk	Source	Correlation with Lowndes County and Macon County
Avalanche	No	• US Forest Service National Avalanche Center *http://www.fsavalanche.org/*	No risk of avalanche events in Alabama

Coastal Erosion	No	• FEMA for Flood Risk Analysis and Mapping: Coastal Erosion, February 2018 *fema.gov*	Lowndes and Macon Counties are inland areas
Dam Failure	Yes	• USACE National Inventory of Dams, Interactive Map and Charts *nid.sec.usace.army.mil*	Flooding concerns downstream from dams
Drought and Extreme Heat	Yes	• United States Drought Monitor *droughtmonitor.unl.edu* • NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents* • National Weather Service, Heat Index *w2.weather.gov/safety/heat* • NOAA National Centers for Environmental Information, Climate at a Glance *ncdc.noaa.gov/cag*	Historic incidents with damage
Earthquake	Yes	• Geological Survey of Alabama, Geologic Investigations Program, Geological Hazards *gsa.state.al.us/gsa/geologic/hazards/earthquakes* • USGS Earthquake Hazards Program *earthquake.usgs.gov/earthquakes/* • FEMA Earthquake Hazard Maps *fema.gov/emergency-managers/risk-management/earthquake/hazard-maps*	Proximity to Southeast US seismic zones
Flooding	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents* • ADECA Office of Water Resources, Alabama Flood Risk Information System *alabamaflood.com*	Historic events with damage; Identified flood hazard areas
Hail	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents*	Historic events
High Winds, Thunderstorms, Severe Storms	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents*	Historic events with damage
Hurricanes, Tropical Storms, Tropical Depressions	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents* • NOAA National Ocean Service *oceanservice.noaa.gov/hazards/hurricanes* • NOAA National Hurricane Center, National Hurricane Center Data Archive *http://www.nhc.noaa.gov/data/#tcr*	Historic events with damage
Landslides	Yes	• USGS Landslides Hazards Program *usgs.gov/natural-hazards/landslide-hazards* • Geological Survey of Alabama, Geologic Hazards, Landslides *gsa.state.al.us/gsa/geologichazards*	Areas susceptible to landslides

Land Subsidence/ Sinkholes	Yes	• Geological Survey of Alabama, Geologic Hazards, Sinkholes *gsa.state.al.us/gsa/geologichazards*	Areas susceptible to land subsidence / sinkholes
Lightning	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents*	Previous events in the counties
Tornadoes	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents*	Historic events with damage
Tsunami	No	• USGS Pacific Coastal and Marine Science Center *usgs.gov/centers/pcmsc/science/hazards*	Lowndes and Macon Counties are inland areas in southeastern US
Volcano	No	• USGS Science Explorer, Natural Hazards, Volcanoes *usgs.gov/science/science-explorer,Natural+Hazards*	No active volcano sites near Lowndes and Macon Counties
Wildfire	Yes	• Alabama Forestry Commission *Forestry.alabama.gov/Pages/Fire/Totals.aspx*	Historic incidents with damage, Susceptible areas
Winter / Ice Storms	Yes	• NOAA National Centers for Environmental Information, Storm Events Database *ncdc.noaa.gov/stormevents*	Historic events with damage

A review of FEMA's historical disaster declarations in Alabama indicates that Lowndes County has been included in 20 disaster declarations and Macon County has been included in 25 disaster declarations since 1953, as compared to a total of 96 total declarations in the State of Alabama. Federal declarations that included Lowndes County and/or Macon County are listed in Table 3.2. Of the total federal declarations in Lowndes County, ten declarations were for hurricane events, four were severe storm events that included tornadoes, straight-line winds, and flooding; two were for flooding, two were biological related to the COVID-19 pandemic, and one each was for drought and snow/winter storm. In Macon County, nine declarations were for hurricane events, nine were severe storm events that included tornadoes, straight-line winds, and flooding; two were for flooding, two were biological related to the COVID-19 pandemic, and one each was for drought, snow/winter storm, and a tornado.

Table 3.2: Summary of Lowndes County and Macon County Disaster Declarations, 1953 to 2020

Declaration Number	Date	Incident Type	Declaration Title	LOWNDES COUNTY		MACON COUNTY	
				Individual Assistance	Public Assistance	Individual Assistance	Public Assistance
DR-109-AL	2/27/1961	Floods	STATEWIDE FLOODS	Y	Y	Y	Y
EM-3007-AL	1/18/1975	Tornado	TORNADOES	--	--	Y	Y
DR-458-AL	3/14/1975	Flood	SEVERE STORMS & FLOODING	Y	Y	Y	Y

DR-488-AL	10/2/1975	Severe Storm(s)	SEVERE STORMS, TORNADOES & FLOODING	--	--	Y	Y
EM-3045-AL	7/20/1977	Drought	DROUGHT	N	Y	N	Y
DR-861-AL	3/21/1990	Severe Storm(s)	SEVERE STORMS, TORNADOES & FLOODING	Y	Y	Y	Y
EM-3096-AL	3/15/1993	Snow	SEVERE SNOWFALL, WINTER STORM	N	Y	N	Y
DR-1070-AL	10/4/1995	Hurricane	HURRICANE OPAL	Y	Y	Y	Y
DR-1108-AL	3/20/1996	Severe Storm(s)	SEVERE STORMS, FLOODING AND TORNADOES	--	--	Y	N
DR-1250-AL	9/30/1998	Hurricane	HURRICANE GEORGES - 18 SEP 98	Y	Y	--	--
DR-1352-AL	12/18/2000	Severe Storm(s)	SEVERE STORMS AND TORNADOES	--	--	Y	Y
DR-1466-AL	5/12/2003		SEVERE STORMS, TORNADOES, AND FLOODING	--	--	Y	N
DR-1549-AL	9/15/2004	Hurricane	HURRICANE IVAN	Y	Y	Y	N
DR-1593-AL	7/10/2005	Hurricane	HURRICANE DENNIS	N	Y	N	Y
EM-3237-AL	9/10/2005	Hurricane	HURRICANE KATRINA EVACUATION	N	Y	N	Y
EM-3292-AL	8/30/2008	Hurricane	HURRICANE GUSTAV	N	Y	N	Y
EM-3319-AL	4/27/2011	Severe Storm(s)	SEVERE STORMS, TORNADOES, AND STRAIGHT-LINE WINDS	N	Y	N	Y
DR-1971-AL	4/28/2011	Severe Storm(s)	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	N	Y	N	Y
DR-4251-AL	1/21/2016	Severe Storm(s)	SEVERE STORMS, TORNADOES, STRAIGHT-LINE WINDS, AND FLOODING	N	Y	N	Y
EM-3389-AL	9/11/2017	Hurricane	HURRICANE IRMA	N	Y	N	Y
EM-3394-AL	10/8/2017	Hurricane	HURRICANE NATE	N	Y	N	Y
DR-4349-AL	11/16/2017	Hurricane	HURRICANE NATE	--	--	N	Y
EM-3472-AL	3/13/2020	Biological	COVID-19	N	Y	N	Y
DR-4503-AL	3/29/2020	Biological	COVID-19 PANDEMIC	N	Y	N	Y
DR-4546-AL	5/21/2020	Severe Storm(s)	SEVERE STORMS AND FLOODING	--	--	N	Y
EM-3545-AL	9/14/2020	Hurricane	HURRICANE SALLY	N	Y	N	Y
DR-4573-AL	12/10/2020	Hurricane	HURRICANE ZETA	N	Y	--	--

Source: FEMA, Reports and Data, OpenFEMA Dataset: Disaster Declarations Summaries - v2 | FEMA.gov

When a federally declared disaster occurs, the State of Alabama and affected local jurisdictions are eligible to apply for federal reimbursement for debris removal, emergency services, and critical facility repair/replacement. Funding is also made available for hazard mitigation grants that allow for the implementation of mitigation projects that are listed in this plan. Public assistance was provided in all declarations in Lowndes County and all but three declarations in Macon Counties; individual assistance was provided in six declarations in Lowndes County; and individual assistance was provided in ten declaration events in Macon County.

NOAA's National Centers for Environmental Information (NCEI) provides historic storm event data from January 1, 1950 to present day. This database was a primary source for storm event data for the hazard profiles and risk analysis. The database includes data on drought, excessive heat, flooding, high wind events, wildfires, and winter/ice storm events. It does not provide data for dam

failures, earthquakes, landslides, or land subsidence/sinkholes. Table 3.3 provides a summary of storm events as identified through NCEI over the last 70 years in Lowndes County and Macon County. Although damages are not available for every hazard event, the summary data does indicate that natural hazards events in Lowndes and Macon Counties have caused one death and 56 injuries, and resulted in more than $9.3 million in property damages and more than $2.4 million in crop damages. Past storm events are investigated more thoroughly for each hazard in the following hazard profile sections.

Table 3.3: Summary of Storm Events by Jurisdiction, 1950 to 2020

Location	Number of Events	Deaths	Injuries	Property Damage	Crop Damage
Lowndes Countywide	131	1	22	$5,102,000	$1,235,000
Fort Deposit	17	0	0	$46,500	$0
Gordonville	2	0	2	$102,000	$25,000
Hayneville	31	0	4	$203,500	$0
Lowndesboro	17	0	0	$155,000	$0
White Hall	13	0	1	$159,000	$0
Unincorporated	41	0	14	$476,000	$4,000
Total Lowndes County	**252**	**1**	**43**	**$6,244,000**	**$1,264,000**
Macon Countywide	142	0	10	$1,425,500	$1,110,000
Franklin	4	0	0	$32,000	$0
Notasulga	21	0	0	$828,000	$0
Shorter	20	0	1	$282,000	$0
Tuskegee	28	0	1	$384,000	$30,000
Unincorporated	37	0	1	$131,500	$0
Total Macon County	**252**	**0**	**13**	**$3,083,000**	**$1,140,000**

National Centers for Environmental Information, Storm Events Database
https://www.ncdc.noaa.gov/stormevents

The following sections provide a profile of each of the hazards that have been identified as having had or have the potential to impact Lowndes County, Macon County and the jurisdictions located therein. Each hazard profile includes the following:

Description — Includes general definitions and descriptions of the hazard, it characteristics and potential effects.

Location — Provides information on the geographic area, or areas, within Lowndes County or Macon County that may be susceptible to hazard occurrences. Locations affected are described regionally unless a specific jurisdiction has different risks, which is further explained.

Extent — Provides information on the potential strength or magnitude of the hazard.

Previous Occurrences Provides information on the history of previous hazard events in the planning area, including their impacts.

Probability of Future Events Describes the likelihood of future hazard events in Lowndes County or Macon County based on the information provided including previous occurrences and other risk factors. Many hazards may affect the county, while other hazards are more localized due to specific factors. Probability is described as a percentage of risk that the event will occur in the future. The probability (%) that an identified hazard will occur on an annual basis was determined using the following formula:

$$\frac{\textit{Number of historical events}}{\textit{by the number of years in reporting period}} = \textit{Probability of Future Annual Event Occurrences}$$

Because of the lack of comprehensive quantitative data on many of the hazards, the impact of, or susceptibility to, future damage will be noted by categories of High, Medium, Low or Very Low as described below:

High:	Probable major damage in a 1-10 Year Period
Medium:	Probable major damage in a 10-50 Year Period
Low:	Probable major damage in a 100 Year Period
Very Low:	No probable major damage in a 100 Year Period

3.3 Dam Failure

Description.
A dam is a "barrier across flowing water that obstructs, directs or slows down the flow, often creating a reservoir, lake or impoundments". Most dams have a section that is called a spillway or a weir that water may flow through or over either intermittently or continuously. Dam failure occurs when the structural dam no longer creates a sound barrier to the flowing water. Dam failure can occur with little to no warning. Further, dam failure does not always occur during a storm event. Dam failure can result in flash flooding or severe inundation depending on the severity of the dam failure. Breaching can occur very quickly after the beginning of a storm event or can occur over an extended period of time up to a couple of weeks after a storm event from increased water pressure on the dam structure. Flooding can also occur from if a dam operator releases excess water downstream to relieve the water pressure on a dam.

Dam safety is a hazard that the State of Alabama has worked on continuously for the last two decades as the infrastructure ages, especially small privately-owned dams and/or those that are poorly maintained. Alabama currently does not have a state law to regulate existing private dams or new construction of private dams that do not require federal licenses or inspections. There are approximately 1,700 privately owned dams in Alabama that are on bodies of water over 50 acre-feet or dams higher than 25 feet. Efforts to pass legislation regarding the regulation of these 1,700 dams have not been successful to date.

Location.
There are 34 dams in Lowndes County and 26 dams in Macon County according to the U.S. Army Corps of Engineers (USACE) National Dam Inventory (NID). All dams are privately owned except for one federal dam in Lowndes County that is owned by the US Army Corp of Engineers South Atlantic Division Mobile District, and two dams in Macon County, one of which is owned by the City of Tuskegee and one is owned by the Town of Notasulga. The location of the dams, as available through the USACE National Dam Inventory website, are shown in Figure 3.1 and Figure 3.2. Localized studies of the NID data conducted by the Alabama Office of Water Resources (OWR) have shown that many NID points are not spatially accurate and do not represent the potential hazards with the particular dams. There are also private dams in many areas that are not necessarily known by local authorities.

Most of the dams are located in the unincorporated area of the counties and used for agricultural purposes. These dams do not present an extreme danger to surrounding properties or persons. The locally owned dams, however, are located within more densely populated municipal boundaries and have a larger storage capacity than most of the agricultural dams. The largest dam in the planning area is the Robert F. Henry Lock and Dam, located on the Alabama River which forms the northern boundary of Lowndes County. Construction of the Robert F. Henry Lock and Dam by the US Army Corps of Engineers created a12,510 acre reservoir that provides navigation, hydroelectric power generation, and recreation. Built in 1974, the Robert F. Henry Lock and Dam is 110 feet high, 1,150 feet long and has a storage capacity of 234,200 acre-feet.

Figure 3.1: Lowndes County Dam Inventory Map

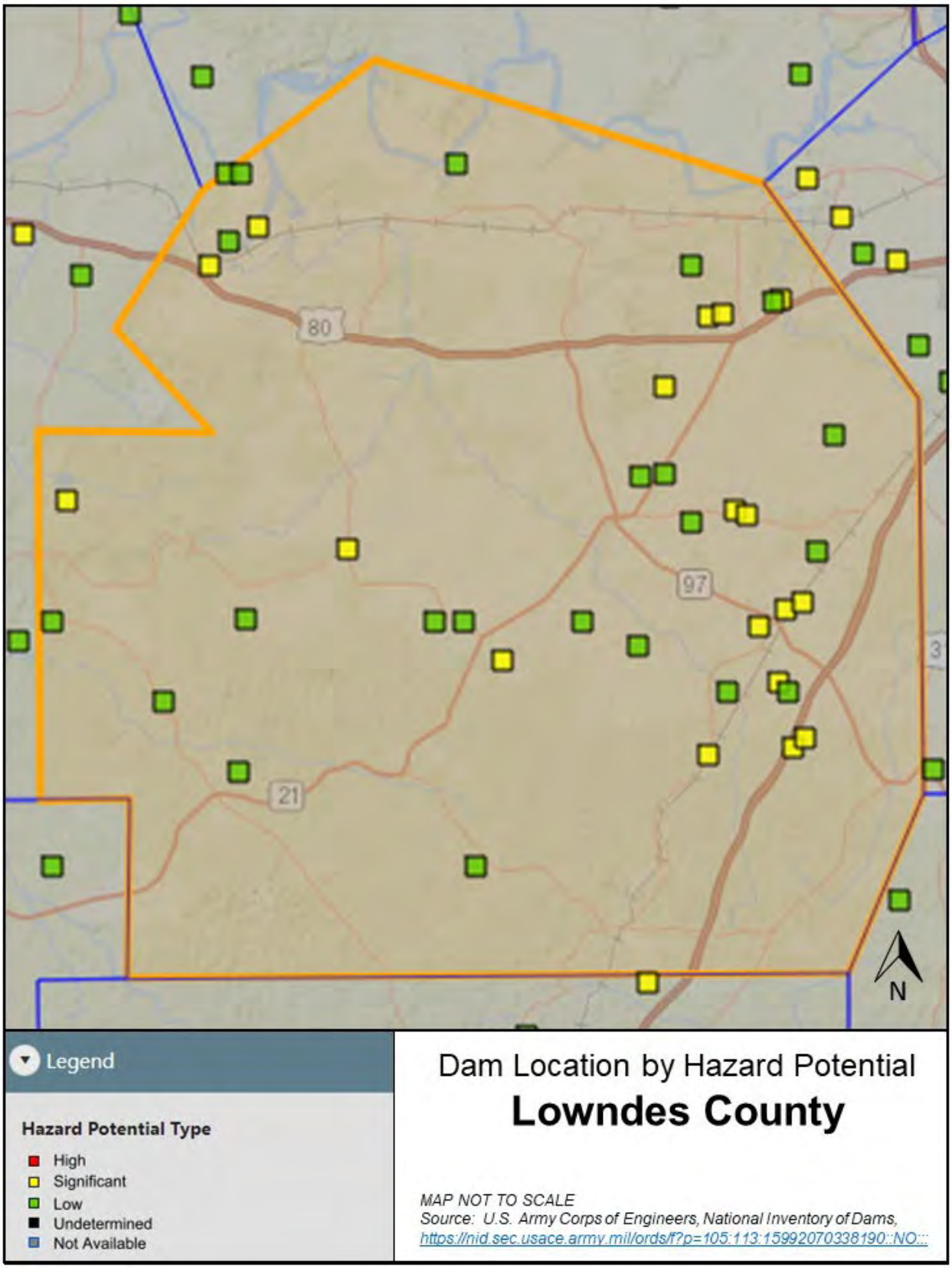
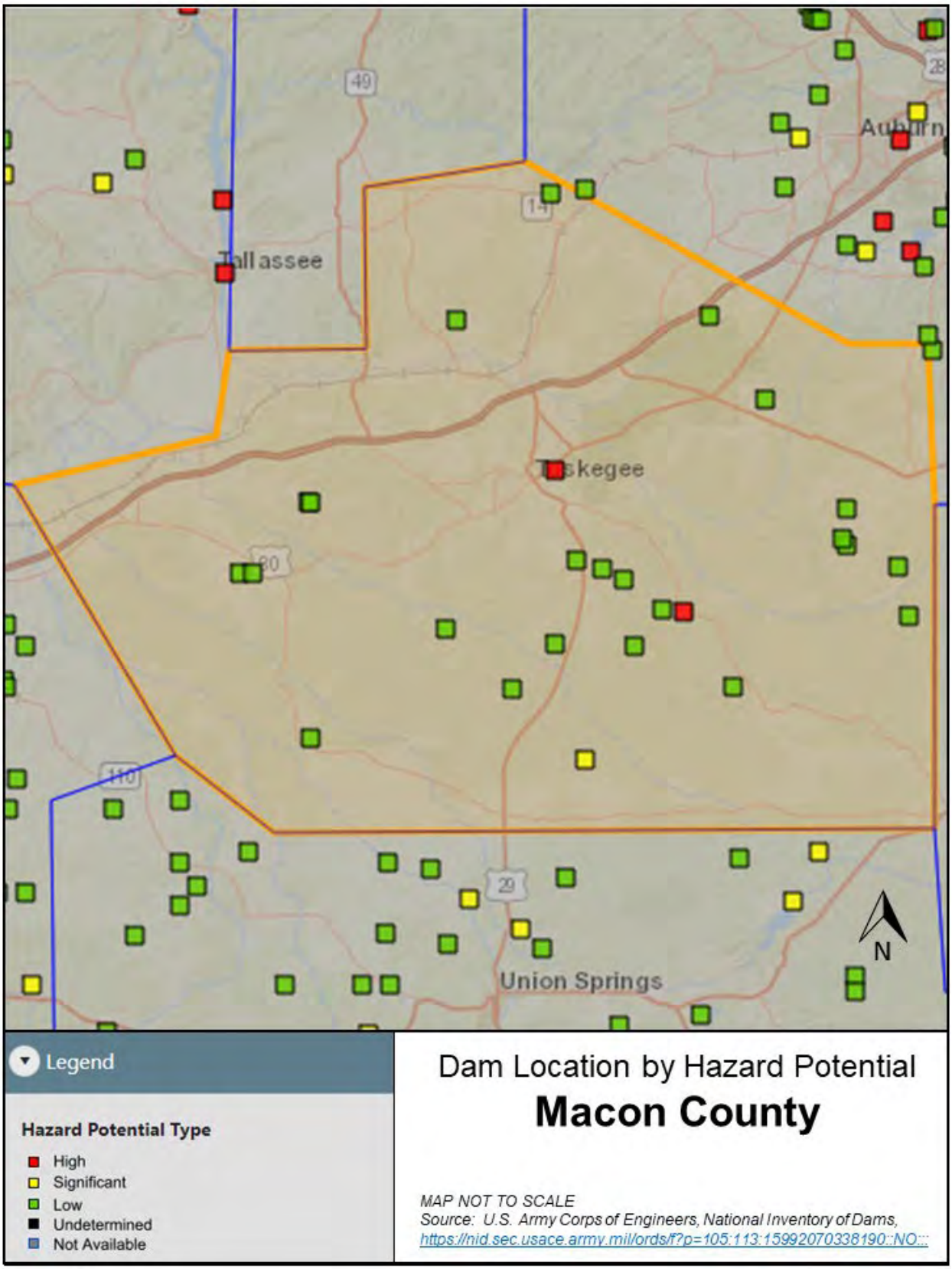


Figure 3.2: Macon County Dam Inventory Map



Extent.
Dams located in the planning area are valuable assets for the communities and residents because these dams provide communities with many benefits including water for drinking and agricultural purposes, recreation, flood control, and power generation. Despite the importance of the dams, if a dam failure were to occur considerable problems can arise downstream. The water that is stored behind the dam's wall has a large amount of energy stored, which can cause casualties and property damage should a dam fail and release its capacity uncontrolled. The potential extent of dam failure may be classified by their "hazard potential". The "hazard potential" for dams indicates the probable damage that would occur if the dam failed, in regard to human life and property damage. The Federal Guidelines for Dam Safety presents three classifications for Dam Hazard Potential:

High:	Loss of human life is likely if the dam fails
Significant:	No probable loss of human life but can cause economic loss, environmental damage, disruption of essential services/utilities, or impact other concerns
Low:	Failure or mis-operation will result in no probable loss of human life and low economic and/or environmental loss.

Table 3.4 provides an inventory of the dams in Lowndes and Macon Counties, as well as the NID hazard rating for each. Of the 34 dams in Lowndes County, half have a significant hazard rating. Only two of the dams with a significant hazard rating are located in or near a municipality – Benton and White Hall. The remainder are in the unincorporated area of Lowndes County. Of the 17 dams with the significant hazard rating, three are of particular significance because of their size. The JL Crenshaw No. 1 Dam is located on Jack Creek in eastern Lowndes County and is 35 feet high with a storage capacity of 128 acre-feet. The Mush Creek Watershed Dam Site 5 is 45 feet tall and has a storage capacity of 7,650 acre-feet located in extreme western Lowndes County. And, the Robert F. Henry Lock and Dam, which is located on the Alabama River in northwestern Lowndes County, is 110 feet high and has a storage capacity of 234,200 feet. The Robert F. Henry Lock and Dam is federally-maintained and does have an Emergency Action Plan. In FEMA's *Upper Alabama Watershed Flood Risk Report* (2013), 16 dams were identified as being areas of mitigation interest. These dams were rated as having both low and significant hazard potential. None of the dams identified in the report have an Emergency Action Plan. The 16 dams identified in the report are italicized in the Dam Inventory and Hazard Rating (Table 3.4). The *Upper Alabama Watershed Flood Risk Report*, however, does not provide details on why these particular dams were identified as areas of mitigation interest.

Of the 20 dams in Macon County, one has a significant hazard rating and two have a high hazard rating. The Ostette Dam on Prairie Creek is located in an unincorporated area in southern Macon County. It is 350 feet long, 13 feet high and has a storage capacity of 50 acre-feet. The Herring Lake #1 Dam is located in an unincorporated area near Big Swamp Creek in south central Macon County. It is 1,120 feet long, 25 feet high, with a 528 acre-feet storage capacity. The Tuskegee City Lake Dam is located near Big Swamp Creek in the City of Tuskegee and surrounded by residential structures. The Tuskegee City Lake Dam is 1,000 feet long and 33 feet high, with a storage capacity of 1,322 acre-feet.

Table 3.4: Dam Inventory and Hazard Rating

NID ID	DAM NAME	OWNERSHIP	YEAR COMPLETED	DAM LENGTH (feet)	NID DAM HEIGHT (feet)	NID STORAGE (acre feet)	NID HAZARD RATING
LOWNDES COUNTY							
NOTE: Dams identified as being areas of mitigation interest in the Upper Alabama Watershed Flood Risk Report are shown in bold italics.							
AL00780	*FLOWERS*	*PRIVATE*	*1955*	*575*	*29*	*108*	*L*
AL00782	BROWNS DAM	PRIVATE	1965	943	24	390	L
AL00785	*REESE DAM*	*PRIVATE*	*1948*	*590*	*21*	*198*	*L*
AL00786	*WYNN AND HARRELL NO 1 DAM*	*PRIVATE*			*0*	*0*	*S*
AL00787	*WYNN AND HARRELL NO 2 DAM*	*PRIVATE*			*0*	*0*	*S*
AL00788	*HAMMOND NUMBER ONE DAM*	*PRIVATE*	*1955*	*560*	*20*	*336*	*L*
AL00789	HAMMOND NUMBER TWO DAM	PRIVATE	1955	500	23	118	S
AL00790	JOHNSTONS LAKE DAM	PRIVATE			0	0	S
AL00791	PAYNES DAM	PRIVATE	1978	1100	21	329	L
AL00792	*GRANT DAM*	*PRIVATE*	*1948*	*500*	*18*	*64*	*L*
AL00794	*J L CRENSHAW NO 2 DAM*	*PRIVATE*	*1950*	*490*	*24*	*86*	*L*
AL00795	*NEIL ROBINSON DAM*	*PRIVATE*	*1955*	*760*	*16*	*78*	*S*
AL00797	*J L CRENSHAW NO 1 DAM*	*PRIVATE*	*1960*	*575*	*35*	*128*	*S*
AL00798	BEN SPEAR DAM	PRIVATE	1952	475	25	101	L
AL00799	*GUS GASTON DAM ONE*	*PRIVATE*	*1952*	*490*	*20*	*109*	*S*
AL00800	*MCQUEENS DAM*	*PRIVATE*			*0*	*0*	*S*
AL00801	*YORK NO 2 DAM*	*PRIVATE*			*0*	*0*	*S*
AL00803	*C P CRENSHAW DAM*	*PRIVATE*	*1925*	*450*	*19*	*61*	*S*
AL01434	ROBERT F. HENRY LOCK AND DAM	USACE	1974	1,150	110	234,200	S
AL01725	FLORENCE CABINISS LAKE DAM	PRIVATE	1965	300	20	50	L
AL01726	CONTAINER CORP LAKE DAM	PRIVATE	1970	310	32	99	L
AL01727	J R PAUL LAKE DAM	PRIVATE	1973	500	23	84	L
AL01728	BESSIE BECK LAKE DAM	PRIVATE	1970	445	16	50	S
AL01730	H W MOORE LAKE DAM	PRIVATE	1976	490	19	96	L
AL01731	DAN S HAGOOD LAKE DAM	PRIVATE	1972	360	22	56	S
AL01732	W B WOODALL LAKE DAM	PRIVATE	1973	545	32	141	L
AL01733	*GUS GASTON DAM TWO*	*PRIVATE*	*1955*	*336*	*23*	*64*	*S*
AL01735	C D LONG LAKE DAM	PRIVATE	1950	390	21	67	S
AL01738	*LILA REBECCA WEBSTER LAKE DAM*	*PRIVATE*	*1970*	*280*	*20*	*72*	*L*
AL01740	*E B AND S L PAYNE LAKE DAM*	*PRIVATE*			*0*	*0*	*S*
AL02212	MUSH CREEK W/S DAM SITE 5	PRIVATE	1984	4,500	45	7,650	S
AL02213	PAUL & WHEELER	PRIVATE	1976	900	18	93	L
AL02214	PAUL & WHEELER	PRIVATE	1978	500	17	83	L
AL02454	HIGH RIDGE LAKE	PRIVATE	1993	763	25	331	L
MACON COUNTY							
AL00422	TUSKEGEE CITY LAKE	TUSKEGEE	1947	1,000	33	1,322	H
AL00423	NOTASULGA CITY LAKE	NOTASULGA	1954	125	35	236	L
AL00424	HA VAUGHN JR NO 1	PRIVATE	1951	700	10	50	L
AL00425	BRIDGES	PRIVATE	1958	700	22	240	L
AL00426	JOHN FRANK MOORER	PRIVATE	1950	600	14	163	L
AL00427	CARRONA NO 1	PRIVATE	1945	480	18	157	L
AL00428	VAUGHANS MILL POND	PRIVATE	1940	125	16	90	L
AL00429	HUSKEYS	PRIVATE	1968	345	23	118	L
AL00431	W T WADSWORTH	PRIVATE	1966	600	18	118	L

AL00432	SANFORD JOHNSON	PRIVATE	1965	300	30	60	L
AL00433	W M RUSSELL JR	PRIVATE	1965	350	14	57	L
AL00434	J T CONNER	PRIVATE	1954	700	20	300	L
AL00435	T U KELLY NO 1	PRIVATE	1946	300	30	80	L
AL00436	HOWARD LAMAR	PRIVATE	1968	700	8	50	L
AL00437	JACK LACEY NO 1	PRIVATE	1956	350	14	96	L
AL00438	H A VAUGHAN JR	PRIVATE	1968	360	16	50	L
AL00439	LAKE CARRONA NO 2	PRIVATE	1945	450	20	130	L
AL00440	T U KELLY NO 2	PRIVATE	1946	450	12	50	L
AL00441	J P GROCE	PRIVATE	1948	420	15	86	L
AL00442	JACK LACEY NO 2	PRIVATE	1968	450	18	94	L
AL01703	WILLIAMS	PRIVATE	1950	350	23	100	L
AL01704	HOWARD	PRIVATE	1950	400	13	50	L
AL01705	OSTETTE	PRIVATE	1948	350	13	50	S
AL02215	HUSKEY DAM	PRIVATE	1969	600	21	105	L
AL02371	TROY BEATTY DAM	PRIVATE	1986	925	21	284	L
AL83486	HERRING LAKE #1	PRIVATE		1,120	25	528	H

Source: US Army Corps of Engineers, National Inventory of Dams, Downloads (Public)

Historical Occurrences.

There is no record of dam failure in Lowndes County, nor do any of the historical flooding event reports available through NOAA's National Centers for Environmental Information Storm Event Database cite dam failure as a contributing factor. Further, these is no local knowledge or hearsay regarding past dam failures. In Macon County, the Town of Notasulga stated that on December 31, 2015, previous heavy rains and flash flooding caused the Notasulga City Lake Dam (AL00423) to fail and caused boulders and small rocks to wash into the lake and wash the spillway away. The Town of Notasulga did meet with FEMA and made repairs to the dam. There are no other historical flooding reports and no local hearsay regarding damages from dam failure in Macon County. It is likely that the lack of reporting requirements may impact the number of known local dam failures if they were not of major significance.

Probability of Future Events.

Because of dated and incomplete information pertaining to dam classification in Alabama, it is difficult to ascertain which dams are more susceptible to failure than others. Lowndes County has experienced no reported dam failures in the last 21 years and hazard mitigation planning participants and local officials feel that dam failure is an unlikely occurrence. Macon County has experienced one reported dam failure in the last 21 years due to extreme flooding conditions; hazard mitigation planning participants and local officials still feel that dam failure is an unlikely occurrence. Therefore, the probability of future events is **0.0 percent in Lowndes County and 4.8 percent in Macon County**. As shown in Table 3.5, the impact of a future dam failure for all jurisdictions in Lowndes and Macon Counties is considered to be **Very Low** since flooding as a result of dam failure would most likely be localized in an undeveloped area.

Table 3.5: Dam Failure Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**0 Events**	**0**	**0%**	**$0**	**Very Low**
Unincorp. Lowndes County	0 Events	0	0%	$0	Very Low
Town of Benton	0 Events	0	0%	$0	Very Low
Town of Fort Deposit	0 Events	0	0%	$0	Very Low

Town of Gordonville	0 Events	0	0%	$0	Very Low
Town of Hayneville	0 Events	0	0%	$0	Very Low
Town of Lowndesboro	0 Events	0	0%	$0	Very Low
Town of Mosses	0 Events	0	0%	$0	Very Low
Town of White Hall	0 Events	0	0%	$0	Very Low
Macon County	**1 Events**	**Low**	**4.8%**	**Unknown**	**Very Low**
Unincorp. Macon County	0 Events	0	0%	$0	Very Low
Town of Franklin	0 Events	0	0%	$0	Very Low
Town of Notasulga	1 Event	Low	4.8%	Unknown	Very Low
Town of Shorter	0 Events	0	0%	$0	Very Low
City of Tuskegee	0 Events	0	0%	$0	Very Low

3.4 Drought

Description.
Drought is a complex natural hazard and is a normal part of virtually every climate on the planet, including areas of both high and low normal rainfalls. Drought is the result of a natural decline in the expected precipitation over an extended period of time, typically one or more seasons in length. The severity of drought can be aggravated by other climatic factors, such as prolonged high winds and low relative humidity. The Alabama State Hazard Mitigation Plan (published July 18, 2018) states, "Although there is no single, concise definition of a drought, droughts can be grouped into four general types." The four types of drought are shown in Table 3.6.

Table 3.6: Types of Drought

Drought Type	Description/Definition
Meteorological	Defined solely on the degree of dryness, expressed as a departure of actual precipitation from an expected average or normal amount basedon monthly, seasonal, or annual time scales.
Hydrological	Related to the effects of precipitation shortfalls on stream flows andreservoir, lake, and groundwater levels.
Agricultural	Defined principally in terms of soil moisture deficiencies relative to water demands of plant life, usually crops.
Socioeconomic	Associates the supply and demand of economic goods or services withelements of meteorological, hydrologic, and agricultural drought. Socioeconomic drought occurs when the demand for water exceeds the supply as a result of a weather-related supply shortfall. This type ofdrought may also be called a water management drought.

Source: State Hazard Mitigation Plan, State of Alabama; July 18, 2018. https://alabamaema.files.wordpress.com/2018/11/state-of-alabama_state-hazard-mitigation-plan-2018-update_final_07182018.pdf

There may also be an event called a water management drought. A drought's severity depends on numerous factors, including duration, intensity, and geographic extent as well as regional water supply demands by humans and vegetation. Due to its multidimensional nature, drought is difficult to define in exact terms and also poses difficulties in terms of comprehensive risk assessments.

Drought differs from other natural hazards in three ways. First, the onset and end of a drought are difficult to determine due to the slow accumulation and lingering of effects of an event after its apparent end. Second, the lack of an exact and universally accepted definition adds to the confusion of its existence and severity. Third, in contrast with other natural hazards, the impact of drought is less obvious and may be spread over a larger geographic area. These characteristics have hindered the preparation of drought contingency or mitigation plans by many governments.

Droughts may cause a shortage of water for human and industrial consumption, hydroelectric power, recreation, and navigation. Water quality may also decline, and the number and severity of wildfires may increase. Severe droughts may result in the loss of agricultural crops and forest products, undernourished wildlife and livestock, lower land values, and higher unemployment.

Location.
All of Lowndes County and Macon County are susceptible to drought due to its location in the southeastern United States, which is prone to unpredictable precipitation patterns including

extended periods of below-average rainfall. As a result, all of the planning area has suffered extreme drought with regularity. Throughout the planning area, drought tends to occur in conjunction with extreme heat conditions.

Extent.

According to the U.S. Drought Monitor, located at the National Drought Mitigation Center at the University of Nebraska-Lincoln, no two states experience the same set of impacts during a drought. Therefore, tables were developed with drought impacts that have been reported in each state, for each U.S. Drought Monitor (USDM) category, during the onset of a major drought. For extent of drought, the U.S. Drought Monitor classifies drought in five levels of severity, based on multiple indicators including soil moisture, streamflow levels, precipitation levels, and local observations. These classifications for Alabama, ranging from D0 to D4, are listed in Table 3.7.

Table 3.7: Drought Monitor Classification Scheme for Alabama

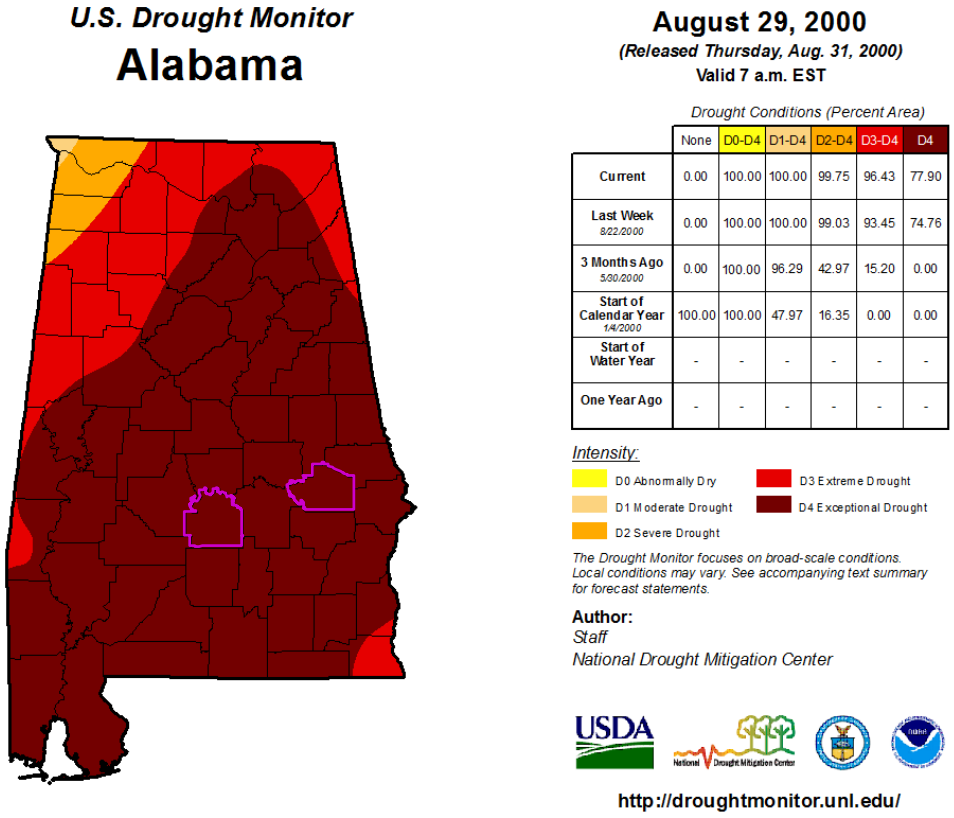
Category	Impact
D0 Abnormally Dry	• Forage crops and pasture are stressed; producers feed livestock early • Ground is hard • Agriculture ponds and creeks begin to decline
D1 Moderate Drought	• Cash crop growth and yield are low • National forests implement campfire and firework bans • Streams and ponds are low • Fire activity increases
D2 Severe Drought	• Crops are damaged, especially dryland corn • Burn bans begin • Large cracks appear in foundations of homes • Large surface water levels drop; agricultural ponds, streams have dried up • Saltwater intrusion occurs in rivers and bays; saltwater wildlife migrates upstream • Hydroelectric power decreases; navigation is limited
D3 Extreme Drought	• Soybean pods shatter • Large-scale hay shortages occur; producers sell livestock • Wildfire count and fire danger continue to increase • Landscape growth is stunted, needs irrigation; Christmas tree growth is stunted • Ground has noticeable cracks; road damage has occurred • Low flow in rivers and lakes affects recreation • Water mains break daily in large municipalities; water conservation is implemented • Air quality is poor
D4 Exceptional Drought	• Trees and shrubs are defoliated; grass is brown; landscaping projects are delayed • Wildfire count is very high • Lakes are extremely low; large municipalities implement water restrictions; water prices increase

According to the U.S. Drought Monitor, Lowndes and Macon Counties have experienced abnormally dry to moderate and severe drought conditions with regularity over the last 20 years. A series of maps in Figure 3.3 shows the most severe drought conditions in Lowndes and Macon Counties between 2000 and 2020. Figure 3.4 provides a timeline of the extent and severity of drought conditions in Lowndes County and in Macon County in the same time frame.

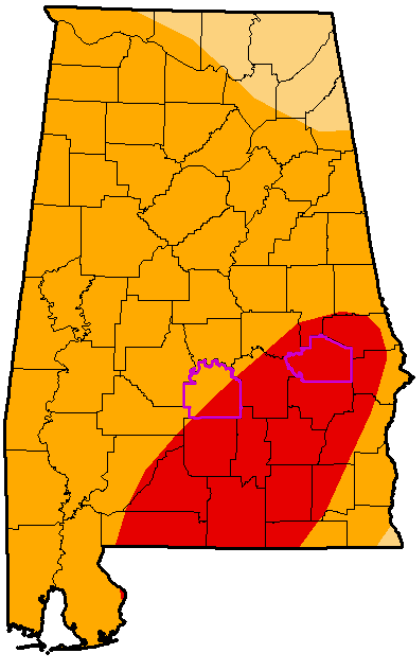
Lowndes County has suffered D4 Exceptional Drought conditions on two occasions from July through September 2000 and from August through December 2007. Likewise, Macon County also suffered D4 drought conditions from July through early October 2000 and from August 2007 through January 2008. Additionally, both Lowndes County and Macon County have experienced D3 Extreme Drought conditions over at least half of the county 2000, 2006, 2007, 2008, 2011,

2012, 2013, and 2016. Since Lowndes and Macon Counties have significant agricultural land uses that are adversely affected by drought conditions, drought can pose potentially serious economic threats to the counties. Drought can also be a contributing factor to wildfires in the counties' forested areas.

Figure 3.3: U.S. Drought Monitor Conditions 2000, 2006, 2007, 2010, 2011, 2013, 2016, 2018, 2019



U.S. Drought Monitor
Alabama



August 22, 2006
(Released Thursday, Aug. 24, 2006)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	92.85	19.70	0.00
Last Week 8/15/2006	0.00	100.00	100.00	92.30	19.70	0.00
3 Months Ago 5/23/2006	94.80	5.20	0.27	0.00	0.00	0.00
Start of Calendar Year 1/3/2006	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year 9/27/2005	100.00	0.00	0.00	0.00	0.00	0.00
One Year Ago 8/23/2005	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

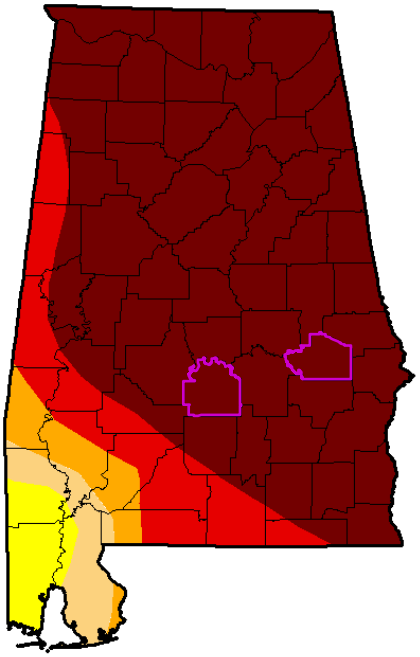
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author:
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http://droughtmonitor.unl.edu/

U.S. Drought Monitor
Alabama



August 21, 2007
(Released Thursday, Aug. 23, 2007)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	95.95	91.73	87.45	74.37
Last Week 8/14/2007	0.00	100.00	96.04	91.73	85.47	73.12
3 Months Ago 5/22/2007	0.00	100.00	100.00	69.13	58.74	0.00
Start of Calendar Year 1/2/2007	51.87	48.13	0.00	0.00	0.00	0.00
Start of Water Year 9/26/2006	0.00	100.00	74.15	0.00	0.00	0.00
One Year Ago 8/22/2006	0.00	100.00	100.00	92.85	19.70	0.00

Intensity:

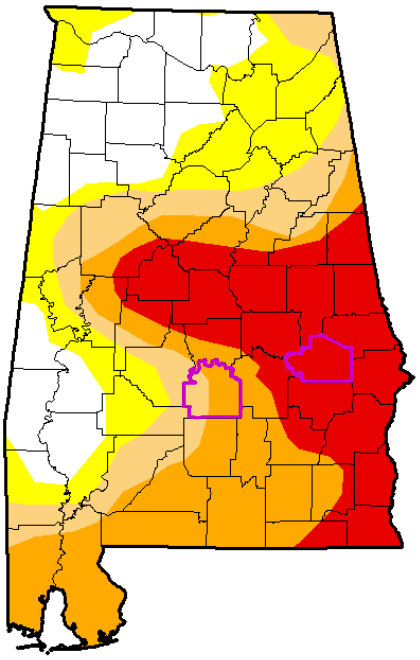
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author:
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U.S. Drought Monitor
Alabama



August 30, 2011
(Released Thursday, Sep. 1, 2011)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	20.03	79.97	61.33	46.73	23.29	0.00
Last Week *8/23/2011*	30.55	69.45	55.97	36.52	4.50	0.00
3 Months Ago *5/31/2011*	33.25	66.75	43.51	34.26	13.15	0.00
Start of Calendar Year *1/4/2011*	27.87	72.13	53.79	28.76	1.82	0.00
Start of Water Year *9/28/2010*	3.64	96.36	66.34	25.17	4.40	0.00
One Year Ago *8/31/2010*	47.65	52.35	17.59	0.00	0.00	0.00

Intensity:

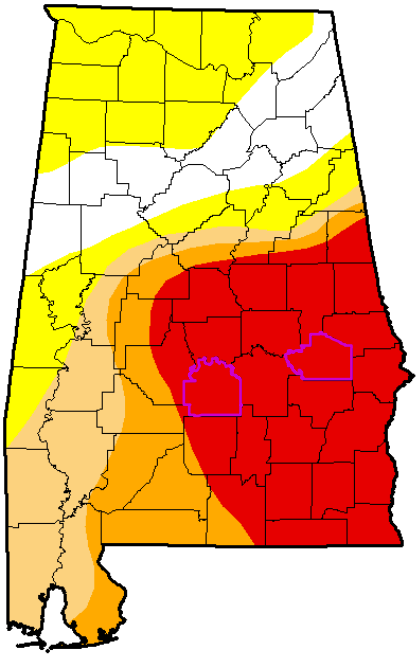
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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U.S. Drought Monitor
Alabama



November 22, 2011
(Released Thursday, Nov. 24, 2011)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.93	85.07	59.72	45.20	31.45	0.00
Last Week *11/15/2011*	14.93	85.07	59.72	45.20	31.45	0.00
3 Months Ago *8/23/2011*	30.55	69.45	55.97	36.52	4.50	0.00
Start of Calendar Year *1/4/2011*	27.87	72.13	53.79	28.76	1.82	0.00
Start of Water Year *9/27/2011*	52.55	47.45	39.68	29.11	14.38	0.00
One Year Ago *11/23/2010*	0.00	100.00	64.17	36.26	6.26	0.00

Intensity:

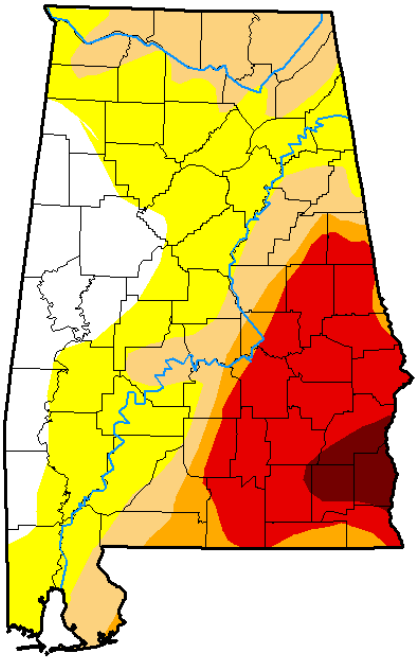
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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U.S. Drought Monitor
Alabama



May 15, 2012
(Released Thursday, May. 17, 2012)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	15.49	84.51	48.25	27.66	21.89	2.85
Last Week *05-08-2012*	9.38	90.62	50.03	27.70	22.69	2.99
3 Months Ago *02-14-2012*	50.07	49.93	41.14	30.94	19.46	5.74
Start of Calendar Year *01-03-2012*	39.32	60.68	49.64	27.97	14.47	0.00
Start of Water Year *09-27-2011*	52.55	47.45	39.68	29.11	14.38	0.00
One Year Ago *05-17-2011*	51.77	48.23	38.35	29.46	6.30	0.00

Intensity:

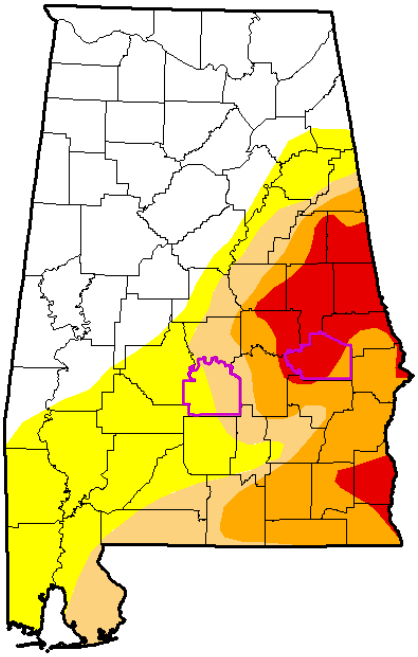
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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U.S. Drought Monitor
Alabama



January 29, 2013
(Released Thursday, Jan. 31, 2013)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.32	56.68	33.35	21.94	8.03	0.00
Last Week *1/22/2013*	43.32	56.68	30.61	16.92	6.99	0.00
3 Months Ago *10/30/2012*	66.90	33.10	20.73	11.92	6.82	0.00
Start of Calendar Year *1/1/2013*	40.07	59.93	33.67	19.47	9.81	0.00
Start of Water Year *9/25/2012*	71.58	28.42	19.42	15.36	8.69	0.00
One Year Ago *1/31/2012*	55.62	44.38	34.99	21.79	7.97	1.83

Intensity:

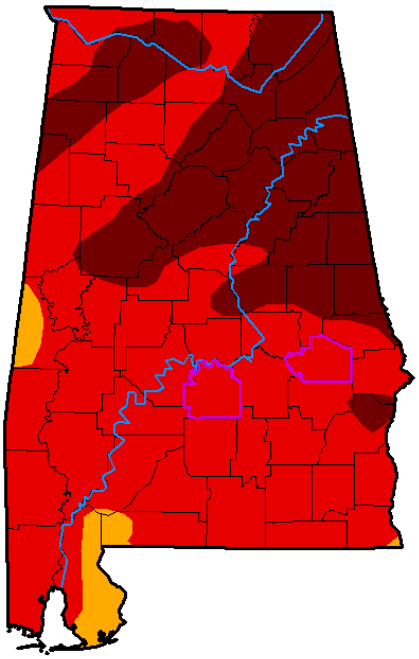
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

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U.S. Drought Monitor
Alabama



November 29, 2016
(Released Thursday, Dec. 1, 2016)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	100.00	96.51	32.75
Last Week *11-22-2016*	0.00	100.00	100.00	97.87	82.08	35.38
3 Months Ago *08-30-2016*	50.76	49.24	27.23	9.52	1.51	0.00
Start of Calendar Year *12-29-2015*	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year *09-27-2016*	17.15	82.85	47.12	17.94	6.36	0.00
One Year Ago *12-01-2015*	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:

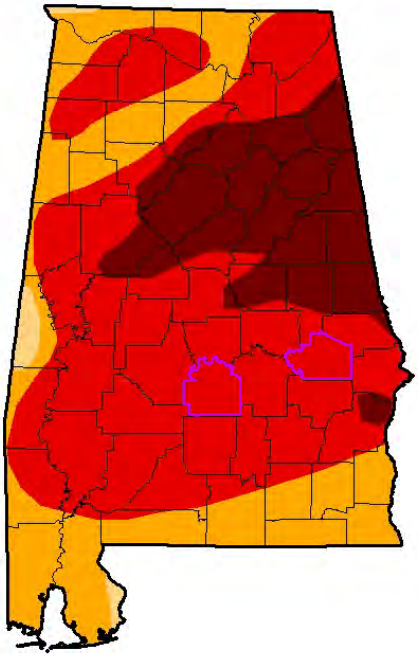
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author:
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U.S. Drought Monitor
Alabama



December 6, 2016
(Released Thursday, Dec. 8, 2016)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	0.00	100.00	100.00	98.64	73.26	20.57
Last Week *11/29/2016*	0.00	100.00	100.00	100.00	96.51	32.75
3 Months Ago *9/6/2016*	46.43	53.57	27.29	9.12	1.51	0.00
Start of Calendar Year *12/29/2015*	100.00	0.00	0.00	0.00	0.00	0.00
Start of Water Year *9/27/2016*	17.15	82.85	47.12	17.94	6.36	0.00
One Year Ago *12/6/2015*	100.00	0.00	0.00	0.00	0.00	0.00

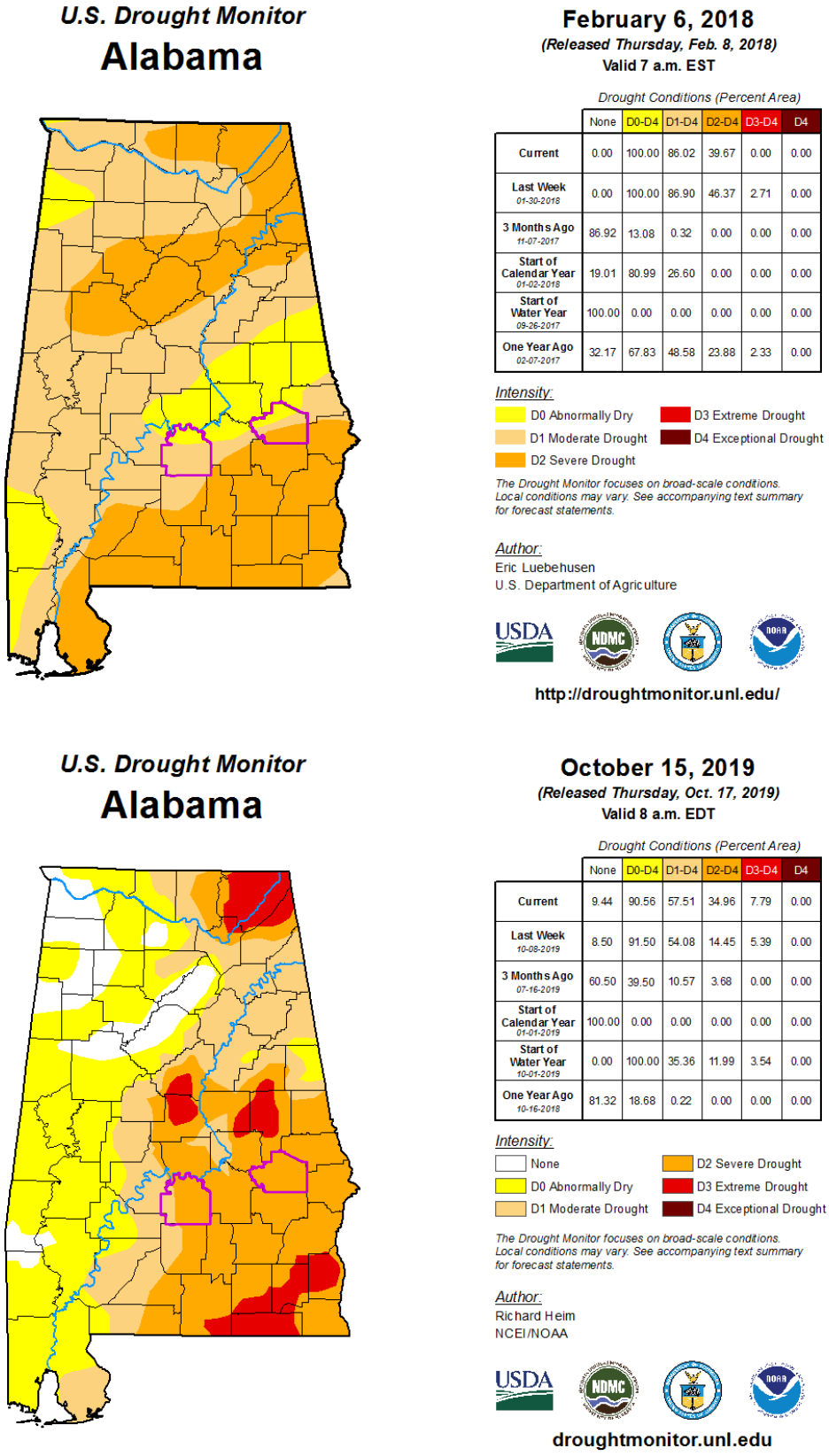
Intensity:

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

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

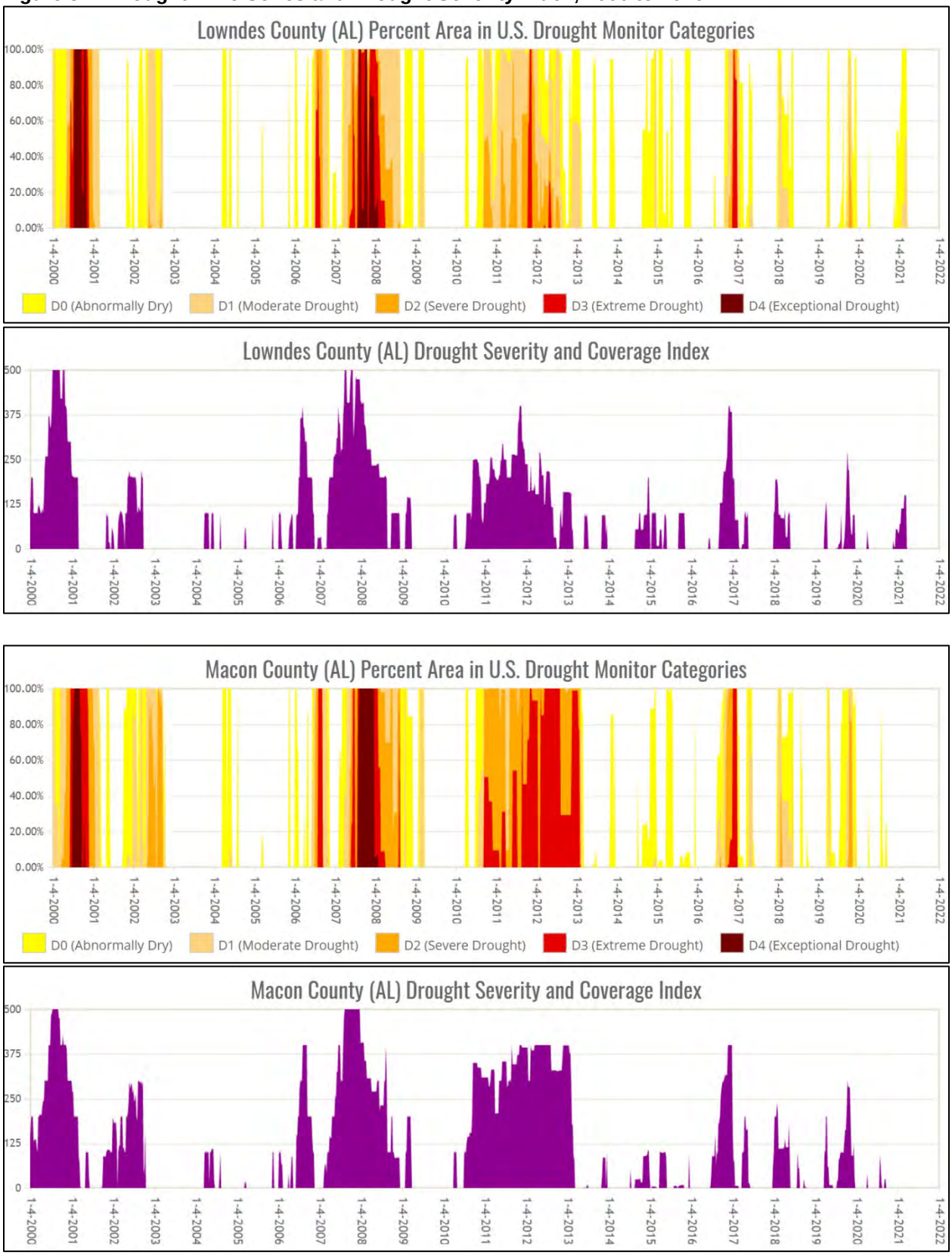
Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC

http://droughtmonitor.unl.edu/



Source: U.S. Drought Monitor, https://droughtmonitor.unl.edu/Maps/MapArchive.aspx

Figure 3.4: Drought Time Series and Drought Severity Index, 2000 to 2020



Source: U.S. Drought Monitor, https://droughtmonitor.unl.edu/Data/Timeseries.aspx

Historical Occurrences.

On July 20, 1977, FEMA announced an emergency declaration for drought covering the State of Alabama (EM-3045-AL), including Lowndes and Macon Counties. Public assistance was provided to local governments; however, the declaration was not eligible for individual assistance. Quantification of drought occurrences are not easily classified, due to those conditions providing differing effects based on reliance on agricultural, hydrological, or socioeconomic concerns. Therefore, the NOAA National Centers for Environmental Information (NCEI) and the U.S. Drought Monitor were utilized to obtain data for drought events from January 1, 2000 through December 31, 2020. NCEI data indicates that there were a total of 41 drought events affecting Lowndes County and 65 drought events affecting Macon County in the 21-year time period, all of which were countywide events. None of the events, however, resulted in death, injury, property damage or crop damage, as shown in Tables 3.8.1 and 3.8.2.

Table 3.8.1: Lowndes County Drought Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	7/11/2006	Drought		0	0	$0	$0
Countywide	8/1/2006	Drought		0	0	$0	$0
Countywide	9/1/2006	Drought		0	0	$0	$0
Countywide	5/22/2007	Drought		0	0	$0	$0
Countywide	6/1/2007	Drought		0	0	$0	$0
Countywide	7/1/2007	Drought		0	0	$0	$0
Countywide	8/1/2007	Drought		0	0	$0	$0
Countywide	9/1/2007	Drought		0	0	$0	$0
Countywide	10/1/2007	Drought		0	0	$0	$0
Countywide	11/1/2007	Drought		0	0	$0	$0
Countywide	12/1/2007	Drought		0	0	$0	$0
Countywide	1/1/2008	Drought		0	0	$0	$0
Countywide	2/1/2008	Drought		0	0	$0	$0
Countywide	3/1/2008	Drought		0	0	$0	$0
Countywide	4/1/2008	Drought		0	0	$0	$0
Countywide	5/1/2008	Drought		0	0	$0	$0
Countywide	6/1/2008	Drought		0	0	$0	$0
Countywide	9/21/2010	Drought		0	0	$0	$0
Countywide	10/1/2010	Drought		0	0	$0	$0
Countywide	12/1/2010	Drought		0	0	$0	$0
Countywide	2/22/2011	Drought		0	0	$0	$0
Countywide	3/1/2011	Drought		0	0	$0	$0
Countywide	4/5/2011	Drought		0	0	$0	$0
Countywide	5/10/2011	Drought		0	0	$0	$0
Countywide	6/1/2011	Drought		0	0	$0	$0
Countywide	7/1/2011	Drought		0	0	$0	$0
Countywide	8/23/2011	Drought		0	0	$0	$0
Countywide	9/1/2011	Drought		0	0	$0	$0
Countywide	10/1/2011	Drought		0	0	$0	$0
Countywide	11/1/2011	Drought		0	0	$0	$0
Countywide	12/1/2011	Drought		0	0	$0	$0
Countywide	1/1/2012	Drought		0	0	$0	$0
Countywide	2/1/2012	Drought		0	0	$0	$0
Countywide	3/1/2012	Drought		0	0	$0	$0
Countywide	4/1/2012	Drought		0	0	$0	$0

Countywide	5/1/2012	Drought		0	0	$0	$0
Countywide	7/3/2012	Drought		0	0	$0	$0
Countywide	8/1/2012	Drought		0	0	$0	$0
Countywide	11/15/2016	Drought		0	0	$0	$0
Countywide	12/1/2016	Drought		0	0	$0	$0
Countywide	1/1/2017	Drought		0	0	$0	$0
Jurisdictional Summary: Lowndes County Drought							
Countywide		41 Events		0	0	$0	$0
Benton		41 Events		0	0	$0	$0
Fort Deposit		41 Events		0	0	$0	$0
Gordonville		41 Events		0	0	$0	$0
Hayneville		41 Events		0	0	$0	$0
Lowndesboro		41 Events		0	0	$0	$0
Mosses		41 Events		0	0	$0	$0
White Hall		41 Events		0	0	$0	$0
Unincorporated Lowndes County		41 Events		0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.8.2: Macon County Drought Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	7/11/2006	Drought		0	0	$0	$0
Countywide	8/1/2006	Drought		0	0	$0	$0
Countywide	9/1/2006	Drought		0	0	$0	$0
Countywide	5/22/2007	Drought		0	0	$0	$0
Countywide	6/1/2007	Drought		0	0	$0	$0
Countywide	7/1/2007	Drought		0	0	$0	$0
Countywide	8/1/2007	Drought		0	0	$0	$0
Countywide	9/1/2007	Drought		0	0	$0	$0
Countywide	10/1/2007	Drought		0	0	$0	$0
Countywide	11/1/2007	Drought		0	0	$0	$0
Countywide	12/1/2007	Drought		0	0	$0	$0
Countywide	1/1/2008	Drought		0	0	$0	$0
Countywide	2/1/2008	Drought		0	0	$0	$0
Countywide	3/1/2008	Drought		0	0	$0	$0
Countywide	4/1/2008	Drought		0	0	$0	$0
Countywide	5/1/2008	Drought		0	0	$0	$0
Countywide	6/1/2008	Drought		0	0	$0	$0
Countywide	7/1/2008	Drought		0	0	$0	$0
Countywide	8/1/2008	Drought		0	0	$0	$0
Countywide	9/14/2010	Drought		0	0	$0	$0
Countywide	9/21/2010	Drought		0	0	$0	$0
Countywide	10/1/2010	Drought		0	0	$0	$0
Countywide	11/1/2010	Drought		0	0	$0	$0
Countywide	11/23/2010	Drought		0	0	$0	$0
Countywide	12/1/2010	Drought		0	0	$0	$0
Countywide	12/1/2010	Drought		0	0	$0	$0
Countywide	1/1/2011	Drought		0	0	$0	$0
Countywide	1/1/2011	Drought		0	0	$0	$0
Countywide	2/1/2011	Drought		0	0	$0	$0
Countywide	2/4/2011	Drought		0	0	$0	$0
Countywide	3/1/2011	Drought		0	0	$0	$0

Countywide	3/1/2011	Drought		0	0	$0	$0
Countywide	4/1/2011	Drought		0	0	$0	$0
Countywide	4/5/2011	Drought		0	0	$0	$0
Countywide	5/1/2011	Drought		0	0	$0	$0
Countywide	6/1/2011	Drought		0	0	$0	$0
Countywide	7/1/2011	Drought		0	0	$0	$0
Countywide	8/1/2011	Drought		0	0	$0	$0
Countywide	9/1/2011	Drought		0	0	$0	$0
Countywide	10/1/2011	Drought		0	0	$0	$0
Countywide	11/1/2011	Drought		0	0	$0	$0
Countywide	12/1/2011	Drought		0	0	$0	$0
Countywide	1/1/2012	Drought		0	0	$0	$0
Countywide	2/1/2012	Drought		0	0	$0	$0
Countywide	3/1/2012	Drought		0	0	$0	$0
Countywide	4/1/2012	Drought		0	0	$0	$0
Countywide	5/1/2012	Drought		0	0	$0	$0
Countywide	6/1/2012	Drought		0	0	$0	$0
Countywide	7/1/2012	Drought		0	0	$0	$0
Countywide	8/1/2012	Drought		0	0	$0	$0
Countywide	9/1/2012	Drought		0	0	$0	$0
Countywide	10/1/2012	Drought		0	0	$0	$0
Countywide	11/1/2012	Drought		0	0	$0	$0
Countywide	12/1/2012	Drought		0	0	$0	$0
Countywide	1/1/2013	Drought		0	0	$0	$0
Countywide	2/1/2013	Drought		0	0	$0	$0
Countywide	9/1/2016	Drought		0	0	$0	$0
Countywide	10/1/2016	Drought		0	0	$0	$0
Countywide	11/1/2016	Drought		0	0	$0	$0
Countywide	12/1/2016	Drought		0	0	$0	$0
Countywide	1/1/2017	Drought		0	0	$0	$0
Countywide	1/23/2018	Drought		0	0	$0	$0
Countywide	2/1/2018	Drought		0	0	$0	$0
Countywide	10/8/2019	Drought		0	0	$0	$0
Countywide	11/1/2019	Drought		0	0	$0	$0
Jurisdictional Summary: Macon County Drought							
Countywide		65 Events		0	0	$0	$0
Franklin		65 Events		0	0	$0	$0
Notasulga		65 Events		0	0	$0	$0
Shorter		65 Events		0	0	$0	$0
Tuskegee		65 Events		0	0	$0	$0
Unincorporated Macon County		65 Events		0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.

Normally in south central Alabama, rainfall occurs consistently throughout the year, but there are occasions that drought conditions will occur. This type of hazard can affect agricultural uses and contribute to wildfire incidents. Drought conditions can potentially affect the entire county by stressing citizens and the municipal and agricultural water supply. Lowndes County experienced 41 drought events in a 21-year period resulting in a greater than 100% (1.95) probability that a drought event will occur on an annual basis. Macon County experienced 65 drought events in a

21-year period resulting in a greater than 100% (3.1) probability that a drought event will occur on an annual basis. The total amount of damages for all drought events was $0 with no drought events causing damage resulting in an estimated $0 of expected annual damages from future events. Although the probability of future events of drought in Lowndes County and Macon County is relatively high, most jurisdictions can manage mild cases of drought and heat waves, rendering minor impacts most of the time. Therefore, the likelihood of probability for impactful drought events for the counties and all jurisdictions is **Medium**, with probable major damage in a 10 to 50-year period.

Table 3.9: Drought Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**41 Events**	**D4**	**100%**	**$0**	**Medium**
Unincorp. Lowndes County	41 Events	D4	100%	$0	Medium
Town of Benton	41 Events	D4	100%	$0	Medium
Town of Fort Deposit	41 Events	D4	100%	$0	Medium
Town of Gordonville	41 Events	D4	100%	$0	Medium
Town of Hayneville	41 Events	D4	100%	$0	Medium
Town of Lowndesboro	41 Events	D4	100%	$0	Medium
Town of Mosses	41 Events	D4	100%	$0	Medium
Town of White Hall	41 Events	D4	100%	$0	Medium
Macon County	**65 Events**	**D4**	**100%**	**$0**	**Medium**
Unincorp. Macon County	65 Events	D4	100%	$0	Medium
Town of Franklin	65 Events	D4	100%	$0	Medium
Town of Notasulga	65 Events	D4	100%	$0	Medium
Town of Shorter	65 Events	D4	100%	$0	Medium
City of Tuskegee	65 Events	D4	100%	$0	Medium

3.5 Earthquake

Description.
An earthquake is ground shaking caused by a sudden movement of rock in the earth's crust. Such movements occur along faults, which are thin zones of crushed rock separating blocks of crust. When one block suddenly slips and moves relative to another along a fault, the energy released creates vibrations called seismic waves that radiate up through the crust to the earth's surface, causing the ground to shake. Earthquakes may last only a few seconds or may continue for up to several minutes. They can occur at any time of the day or night and at any time of the year. They are caused by stress that builds up over time as blocks of crust attempt to move but are held in place by friction along a fault. (The earth's crust is divided into large plates that continually move over, under, alongside or apart from one another atop the partly molten outer layer of the earth's core.) When the pressure to move becomes stronger than the friction holding them together, adjoining blocks of crust can suddenly slip, rupturing the fault and creating an earthquake. Earthquakes have little to no warning, and they can cause property damage on the surface and subsurface by destroying buildings, utility lines, communications, and infrastructure. Secondary hazards include surface faulting, sinkholes, and landslides. While most earthquakes occur near the edges of the tectonic plates, earthquakes may also occur at the interior of plates.

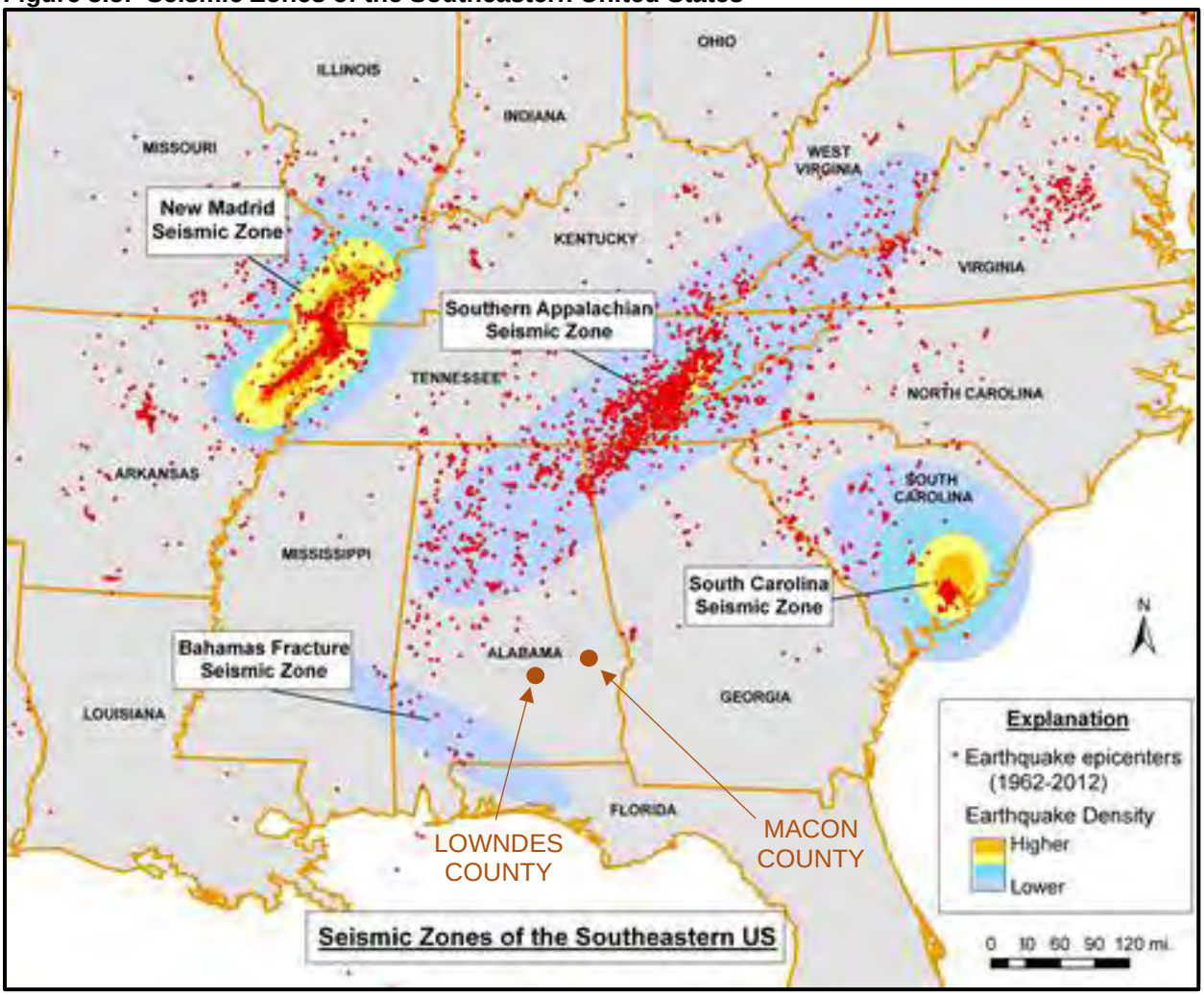
The vibration or shaking of the ground during an earthquake is described by ground motion. The severity of ground motion generally increases with the amount of energy released and decreases with distance from the fault or epicenter of the earthquake. Ground motion causes waves in the earth's interior, also known as seismic waves, and along the earth's surface, known as surface waves. The following are the two kinds of seismic waves:

- P (primary) waves are longitudinal or compression waves similar in character to sound waves that cause back-and-forth oscillation along the direction of travel (vertical motion), with particle motion in the same direction as wave travel. They move through the earth at approximately 15,000 miles per hour.
- S (secondary) waves, also known as shear waves, are slower than P waves and cause structures to vibrate from side-to-side (horizontal motion) due to particle motion at right angles to the direction of wave travel. Unreinforced buildings are more easily damaged by S waves. There are also two kinds of surface waves, Raleigh waves and Love waves. These waves travel more slowly and typically are significantly less damaging than seismic waves.

Location.
Although earthquakes are common in the eastern United States and even in Alabama, there has been no report of earthquake activity in Lowndes or Macon County. Two sources were consulted regarding the location of earthquake hazards in the planning area: the Geological Survey of Alabama (GSA) and the US Geological Survey (USGS). According to the GSA, the four zones of frequent earthquake activity affecting Alabama, as shown in Figure 3.5, are the New Madrid Seismic Zone, the Southern Appalachian Seismic Zone, the South Carolina Seismic Zone, and the Bahamas Fracture Seismic Zone. GSA further states that most of the earthquakes experienced in Alabama are associated with the Southern Appalachian Seismic that runs along the Appalachian Mountains from the northeastern corner into the central part of the state and the Bahamas Fracture Seismic Zone in southern Alabama. The Seismic Zones of the Southeastern United States Map

indicates that Lowndes County and Macon County are located in an area outside of any of the four seismic zones.

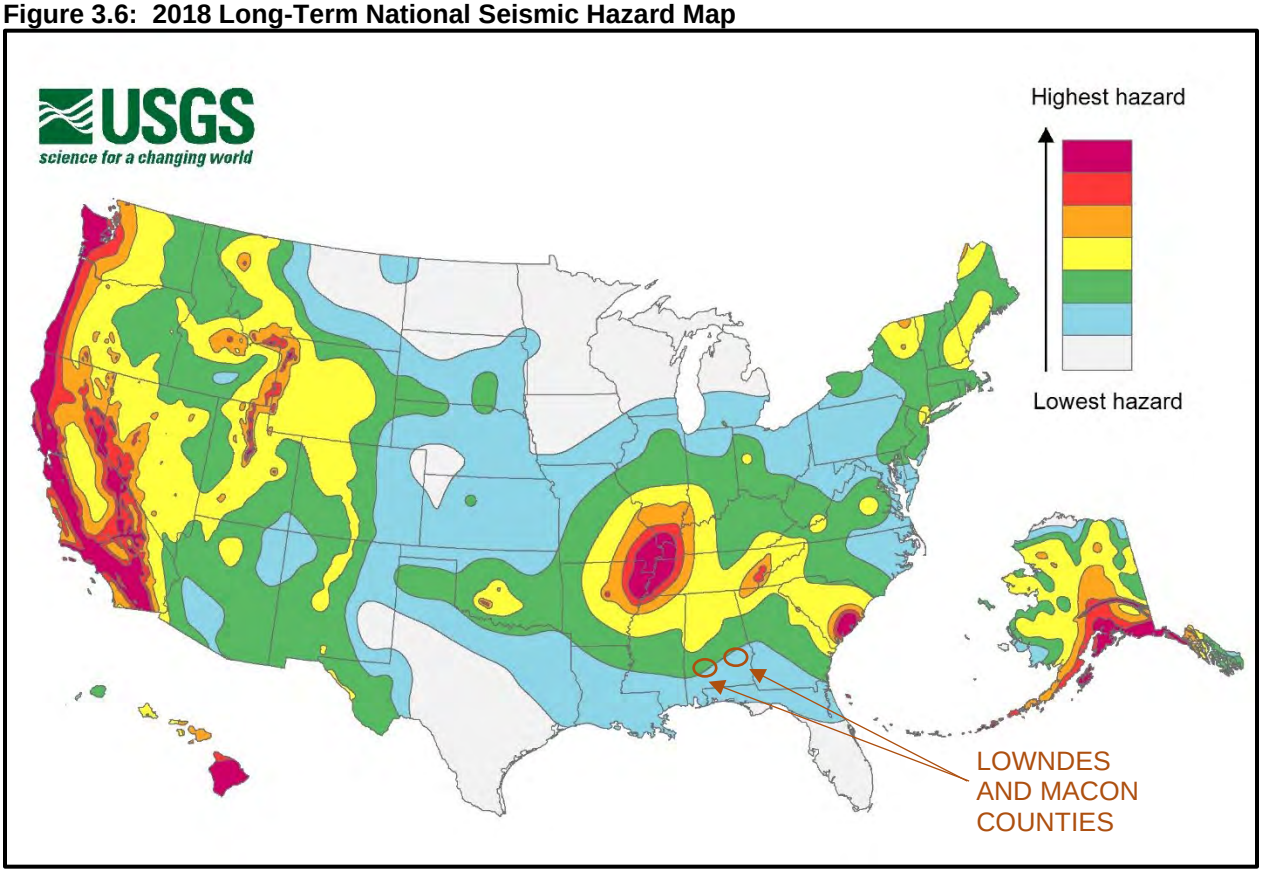
Figure 3.5: Seismic Zones of the Southeastern United States



Source: Geological Survey of Alabama, Geological Hazards.
https://gsa.state.al.us/gsa/geologic/hazards/earthquakes/alquakes

The 2018 Long-Term National Seismic Hazard Map (Figure 3.6), available through USGS, shows peak ground accelerations have a 2 percent probability of being exceeded in 50 years, for a firm rock site. USGS states, "The map is based on the most recent USGS models for the conterminous U.S. (2018), Hawaii (1998), and Alaska (2007). The models are based on seismicity and fault-slip rates and take into account the frequency of earthquakes of various magnitudes." USGS further states that locally, the hazard may be greater than shown in the long-term seismic hazard map, because site geology may amplify ground motions. Given the location of Lowndes and Macon Counties in relation to seismic zones and probable seismic hazard areas shown in the two aforementioned maps, it becomes apparent that Lowndes County and Macon County are not at risk from an earthquake event; however, there remains the potential of minor effects from seismic activity in other Alabama locations.

Figure 3.6: 2018 Long-Term National Seismic Hazard Map



Source: US Geological Survey (USGS), Earthquake Hazards Program.
https://www.usgs.gov/media/images/2018-long-term-national-seismic-hazard-map

Extent.

A major earthquake in Lowndes or Macon County could result in great loss of life and property damage in the billions of dollars. Adding to the danger is the fact that structures in the area were not built to withstand earthquake shaking. Construction of many buildings on steep slopes susceptible to landslides and in karst terrains susceptible to sinkholes will be a major contributing factor to damage from future earthquakes in the county.

According to the USGS Earthquake Hazard Program, earthquakes are measured using two types of measurements: magnitude and intensity. The magnitude is a number that characterizes the relative size of an earthquake. Magnitude is based on measurement of the maximum motion recorded by a seismograph. Several scales have been defined, but the most commonly used are (1) local magnitude (ML), commonly referred to as "Richter magnitude", (2) surface-wave magnitude (Ms), (3) body-wave magnitude (Mb), and (4) moment magnitude (Mw). The most accurate of the four scales is the moment magnitude (Mw) scale, which is based on the concept of seismic moment and is uniformly applicable to all sizes of earthquakes. Magnitude is the most common measure for an earthquake's size and is the same number no matter where it is located and regardless of what the earthquake's shaking feels like at any given location.

Intensity is a measure of the shaking and damage caused by the earthquake. The intensity value changes from one location to another, based on the proximity of the earthquake. Earthquake

intensity is a Roman numeral describing the severity of an earthquake in terms of its effects on the earth's surface and on humans and their structures. One of the most commonly used scales to measure intensity in the United States, and the one that will be used in this plan, is the Modified Mercalli scale, which is shown and explained in Figure 3.7. The Modified Mercalli Intensity Scale has measurements from I to XII, with it being hardly felt, if at all, and XII being total destruction of the surface. Using an abbreviated version of the Modified Mercalli scale, FEMA provides seismic design category map for low rise structures on sites with average soil conditions. The Seismic Design Categories Map for the Eastern United States, shown in Figure 3.8 with category definitions provided in Table 3.10, indicates that Lowndes County and Macon County are in Category A, which has a very small probability of experiencing damaging earthquake effects.

Figure 3.7: Modified Mercalli Intensity Scale

Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest,especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: USGS, Natural Hazards Program, Earthquake Hazards. The Modified Mercalli Intensity Scale (usgs.gov)

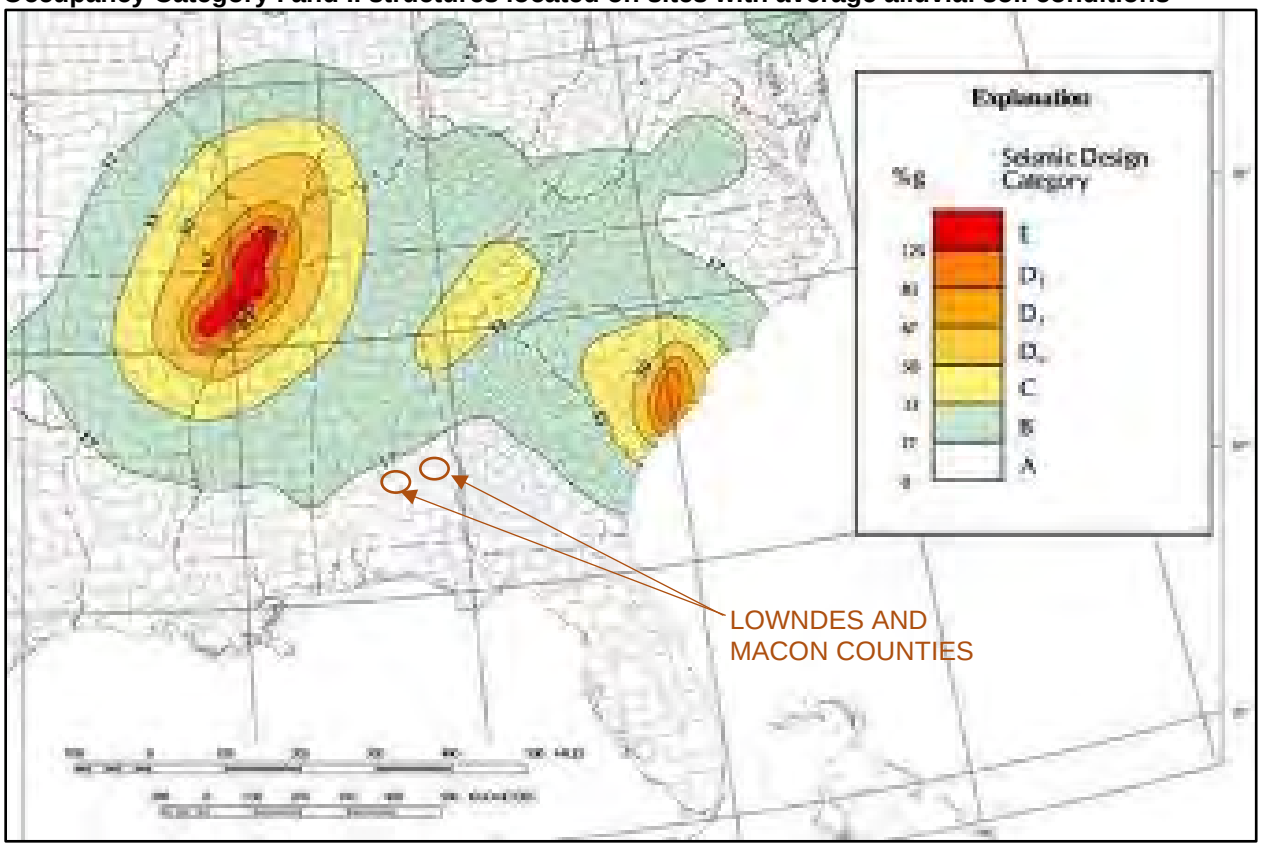
Table 3.10: Seismic Design Categories (SDC) Map Definitions

SDC	Map Color	Earthquake Hazard	Potential Effects of Shaking*
A	White	Very small probability of experiencing damaging earthquake effects.	
B	Gray	Could experience shaking of moderate intensity.	Moderate shaking—Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
C	Yellow	Could experience strong shaking.	Strong shaking—Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built structures.
D0	Light Brown	Could experience very strong shaking (the darker the color, the stronger the shaking).	Very strong shaking—Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with
D1	Darker Brown		
D2	Darkest Brown		

			partial collapse. Damage great in poorly built structures.
E	Red	Near major active faults capable of producing the most intense shaking.	Strongest shaking—Damage considerable in specially designed structures; frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations. Shaking intense enough to completely destroy buildings.
* Abbreviated descriptions from The Modified Mercalli Intensity Scale.			

Source: FEMA, Earthquake Hazard Maps. https://www.fema.gov/earthquake-hazard-maps

Figure 3.8: Seismic Design Categories (SDC) Map of the Eastern United States for low-rise Occupancy Category I and II structures located on sites with average alluvial soil conditions

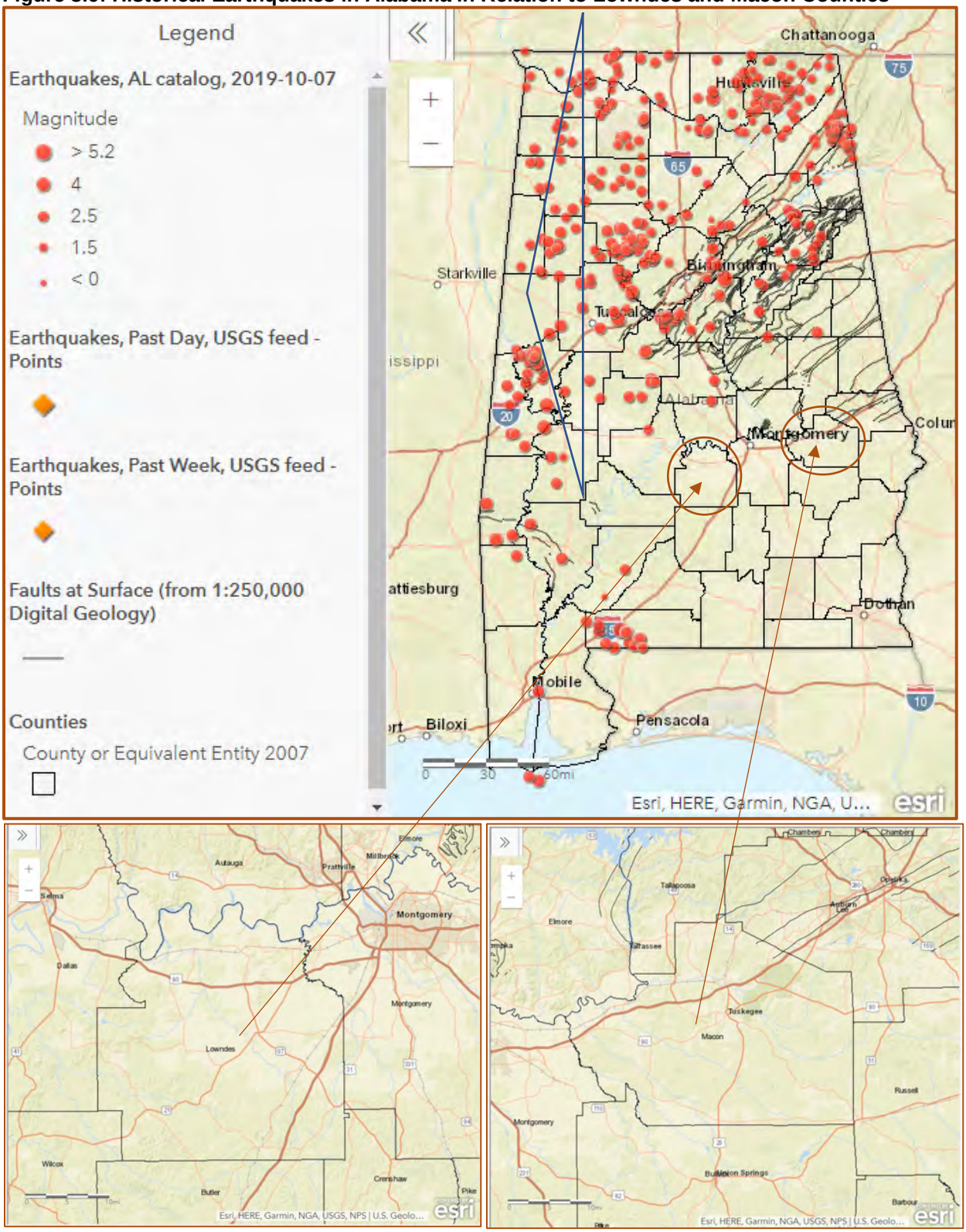


Source: FEMA, Earthquake Hazard Maps. https://www.fema.gov/earthquake-hazard-maps

Historical Occurrences.

It is locally assumed that there has been no recent or past earthquake activity in the area of Lowndes County or Macon County. Both the US Geological Survey and the Geological Survey of Alabama maintain catalogs of earthquake events affecting Alabama that date back to 1886. FEMA also provides a map by state of all earthquake events from 1900 to present, which is shown in Figure 3.9. A review of both past event catalogs, along with the map of past earthquakes in relation to Lowndes County and Macon County, confirms that there are no historical occurrences of earthquakes in the county.

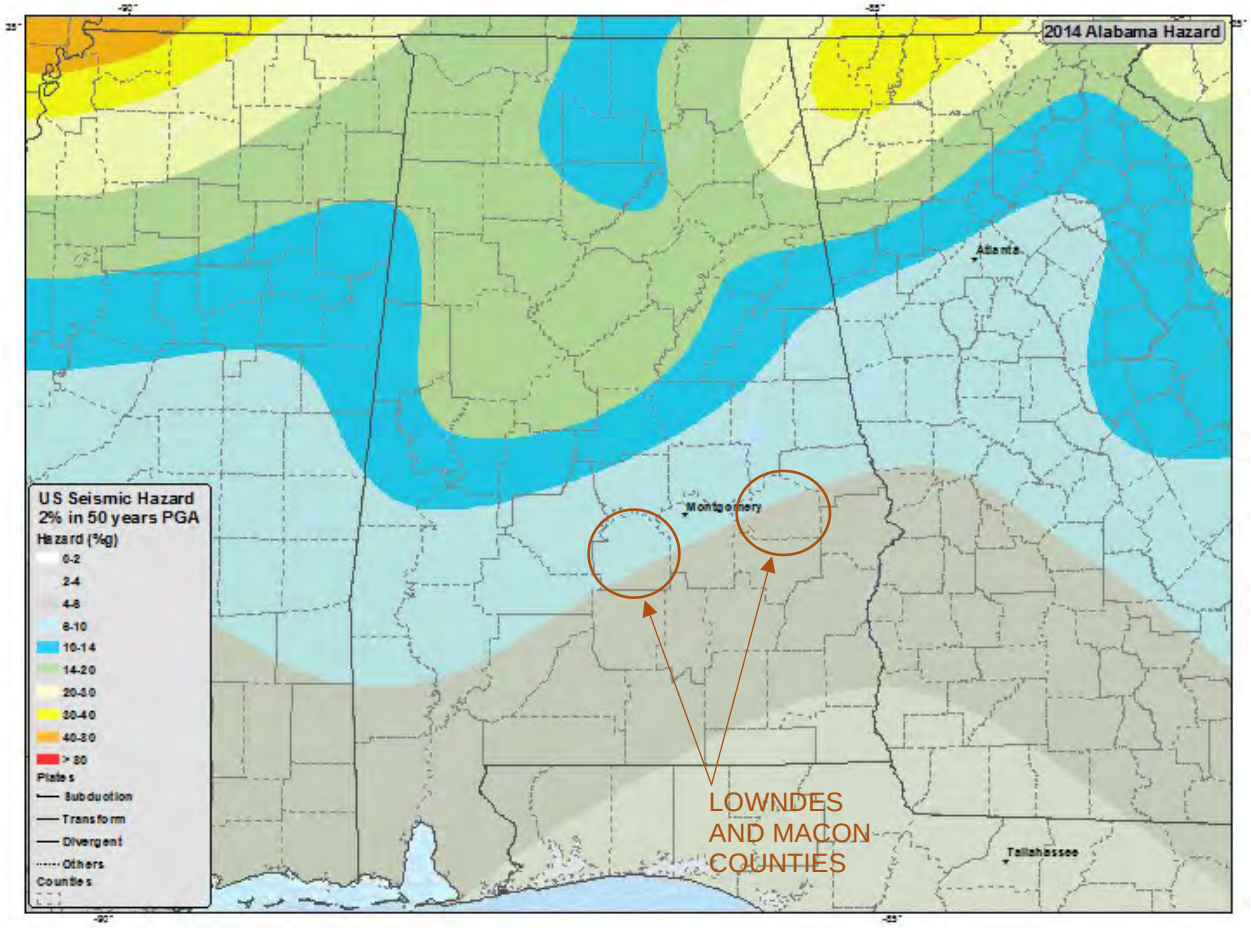
Figure 3.9: Historical Earthquakes in Alabama in Relation to Lowndes and Macon Counties



Source: Geological Survey of Alabama, Geological Hazards.
https://gsa.state.al.us/gsa/geologic/hazards/earthquakes/alquakes

Probability of Future Events.
Given Lowndes County's and Macon County's location outside of seismic zone activity and history of no past earthquakes, the probability of future earthquake events in each county is **0.0 percent**. Figure 3.10 provides a seismic hazard map available from USGS. These maps display earthquake ground motions for various probability levels across the United States and are applied in seismic provisions of building codes, insurance rate structures, risk assessments, and other public policy. For Lowndes County and Macon County and their jurisdictions, the earthquake peak ground acceleration (PGA) that has a 2 percent chance of being exceeded in 50 years has a value between **4 and 8%g**, and is considered **Very Low**.

Figure 3.10: Seismic Hazard Map of Alabama



Source: US Geological Survey (USGS), Earthquake Hazards Program.
https://www.usgs.gov/media/images/2014-seismic-hazard-map-alabama

Table 3.11: Earthquake Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**0 Events**	**None**	**4-8%g%**	**N/A**	**Very Low**
Unincorp. Lowndes County	0 Events	None	4-8%g%	N/A	Very Low
Town of Benton	0 Events	None	4-8%g%	N/A	Very Low
Town of Fort Deposit	0 Events	None	4-8%g%	N/A	Very Low
Town of Gordonville	0 Events	None	4-8%g%	N/A	Very Low
Town of Hayneville	0 Events	None	4-8%g%	N/A	Very Low
Town of Lowndesboro	0 Events	None	4-8%g%	N/A	Very Low
Town of Mosses	0 Events	None	4-8%g%	N/A	Very Low
Town of White Hall	0 Events	None	4-8%g%	N/A	Very Low
Macon County	**0 Events**	**None**	**4-8%g%**	**N/A**	**Very Low**
Unincorp. Macon County	0 Events	None	4-8%g%	N/A	Very Low
Town of Franklin	0 Events	None	4-8%g%	N/A	Very Low
Town of Notasulga	0 Events	None	4-8%g%	N/A	Very Low
Town of Shorter	0 Events	None	4-8%g%	N/A	Very Low
City of Tuskegee	0 Events	None	4-8%g%	N/A	Very Low

3.6 Extreme Heat

Description.
Extreme heat is defined as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. A heat wave is an extended period of extreme heat and is often accompanied by high humidity. Heat stress can be indexed by combining the effects of temperature and humidity. The index estimates the relationship between dry bulb temperatures (at different humidity) and the skin's resistance to heat and moisture transfer. The higher the temperature or humidity, the higher the apparent temperature. These abnormally high temperatures can disproportionately affect the elderly, very young, and those with health concerns if exposed to the conditions, especially those without effective climate control systems. In addition to affecting people, severe heat places significant stress on plants and animals. The effects of severe heat on agricultural products, such as cotton, may include reduced yields and even loss of crops. Similarly, cows may become overheated, leading to reduced milk production and other problems.

Location.
All of Lowndes County and Macon County are susceptible to extreme heat due to their location in the southeastern United States, which is prone to unpredictable precipitation patterns including extended periods of below-average rainfall. Temperatures of 90 degrees or more are regularly observed in the summer months, with 100-degree temperatures being possible. These conditions can be dangerous and even life-threatening for humans who do not take the proper precautions. Throughout the planning area, extreme heat tends to occur in conjunction with drought conditions.

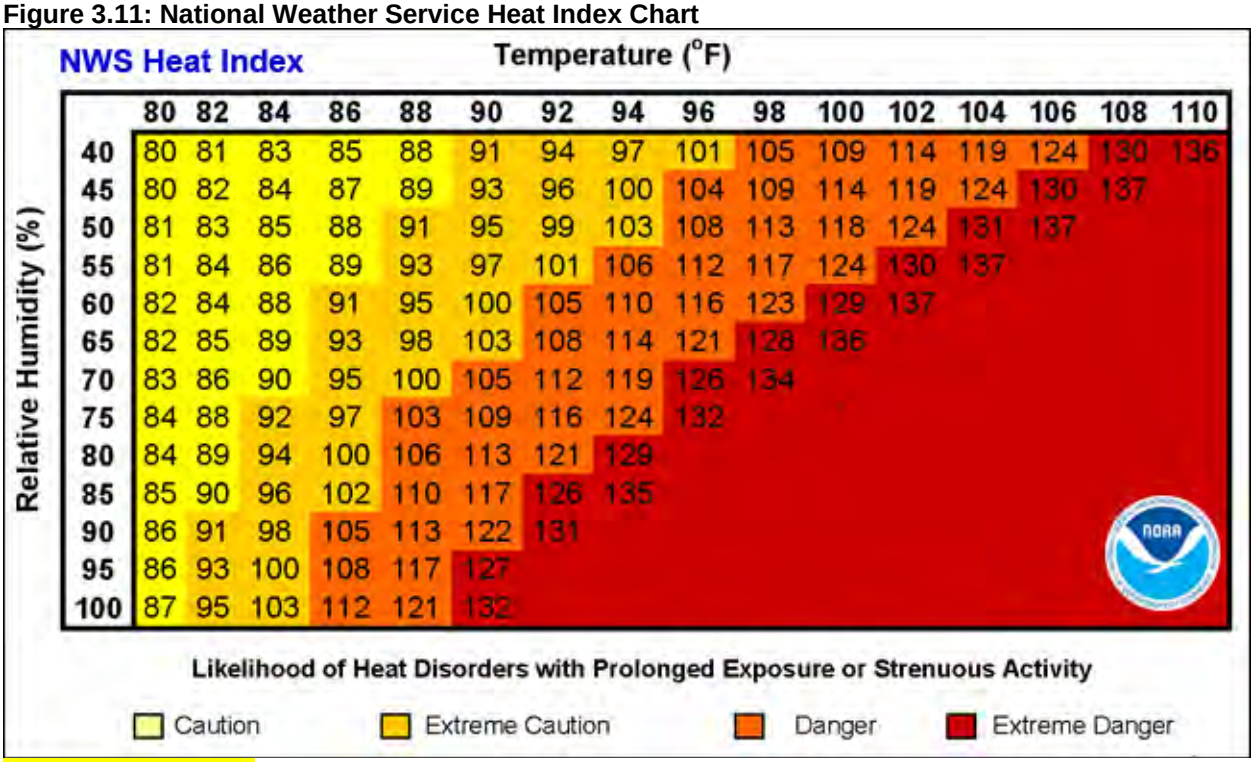
Extent.
The extent of extreme heat can be quantified in terms of the heat index which is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature. As an example, if the air temperature is 96°F and the relative humidity is 65 percent, the heat index, or how hot it feels, is 121°F. The National Weather Service provides a heat index chart, shown in Figure 3.11, that enables calculation of the heat index depending on local temperatures and humidity. The heat index is color-coded and categorized into four levels of danger: caution, extreme caution, danger and extreme danger. The danger levels are also defined in Figure 3.11. The National Weather Service will initiate alert procedures when the heat index is expected to exceed 105°F to 110°F for at least two consecutive days. Extreme heat can endanger the health of persons living and working within the planning area and can also threaten economical damage by resulting in crop losses.

Health conditions that result from extreme heat range from mild to severe. These conditions include sunburn, heat cramps, heat exhaustion, heat syncope, and heat stroke, as described below:

- Heatstroke is considered a medical emergency and is often fatal. It exists when body temperature rises above 104°F because of environmental temperatures. Patients may be delirious, stuporous, or comatose. The death to care ratio in reported cases averages about 15 percent.
- Heat Exhaustion is much less severe than heatstroke. The body temperature may be normal or slightly elevated. A person suffering from heat exhaustion may complain of dizziness, weakness or fatigue. The primary cause of heat exhaustion is fluid and electrolyte imbalance. The normalization of fluids will typically alleviate the situation.

- Heat Syncope is typically associated with exercise by people who are not acclimated to exercise. The symptom is a sudden loss of consciousness. Consciousness returns promptly when the person lies down. The cause is primarily associated with circulatory instability as a result of heat. The condition typically causes little or no harm to the individual.
- Heat Cramps are typically a problem for individuals who exercise outdoors but are unaccustomed to heat. Similar to heat exhaustion it is thought to be a result of a mild imbalance of fluids and electrolytes.

Figure 3.11: National Weather Service Heat Index Chart



80°-89°	Fatigue is possible with prolonged exposure and/or physical activity.
90°-104°	Sunstroke, heat cramps and heat exhaustion are possible with prolonged exposure and/or physical activity.
105°-129°	Sunstroke, heat cramps and heat exhaustion are likely. Heat stroke is possible with prolonged exposure and/or physical activity.
130°+	Heatstroke/sunstroke is highly likely with continued exposure.

Source: NOAA, National Weather Service. https://www.weather.gov/safety/heat-index

August is the generally the hottest month in the planning area. According to the NCEI Climate at a Glance data, Lowndes County had its highest recorded temperature in August of 1954, at 98.0°F. In the last 21 years from 2000 through 2020, the hottest temperatures occurred in August 2007 at 97.6°F, July 2000 at 97.5°F, and in September 2019 at 96.2°F. Macon County also had its highest recorded temperature in August of 1954, at 98.0°F. In the last 21 years from 2000 through 2020, the hottest temperatures in Macon County occurred in August 2007 at 97.6°F, July 2000 at 96.1°F, and in June 2011 at 95.5°F. A heat index value for these temperature dates is not available. If a moderate relative humidity of 65% is applied, however, any temperature above 92.0°F would

result in a heat index in the danger zone, and temperatures of 98.0°F and above would be in the extreme danger zone.

Figure 3.12.1: Lowndes County Maximum Temperature, 2000 through 2020

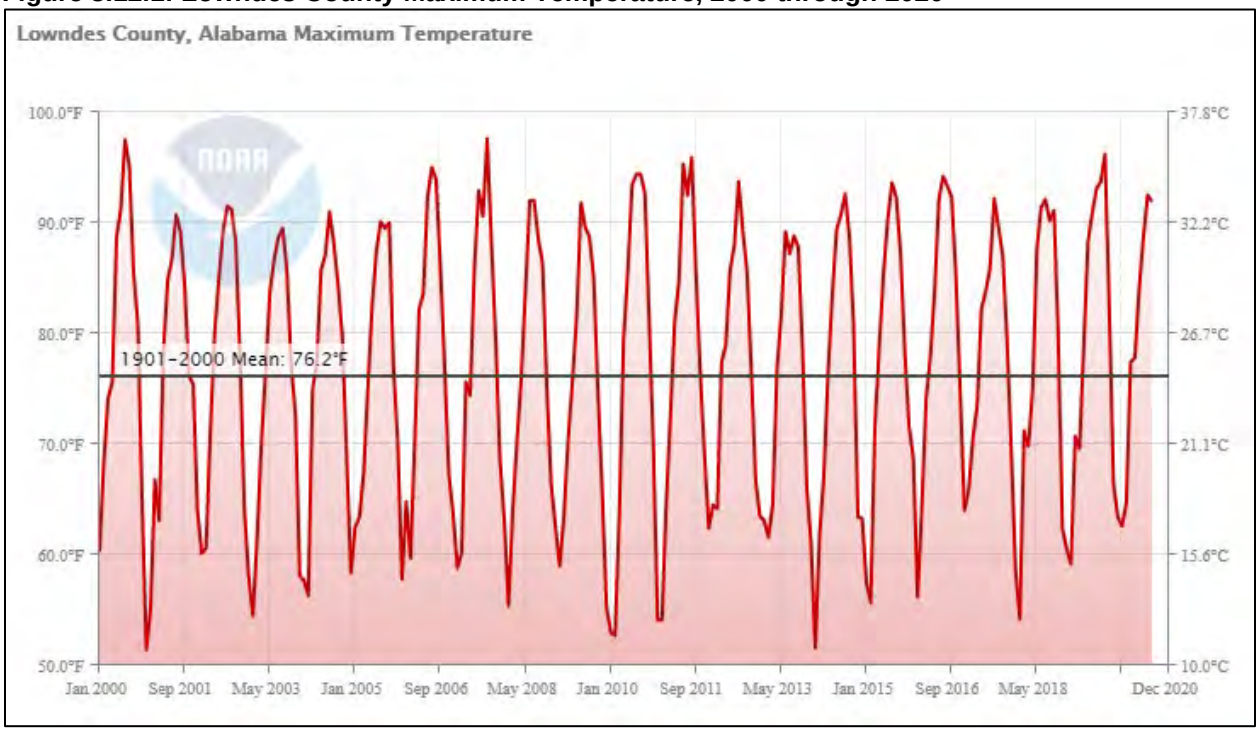
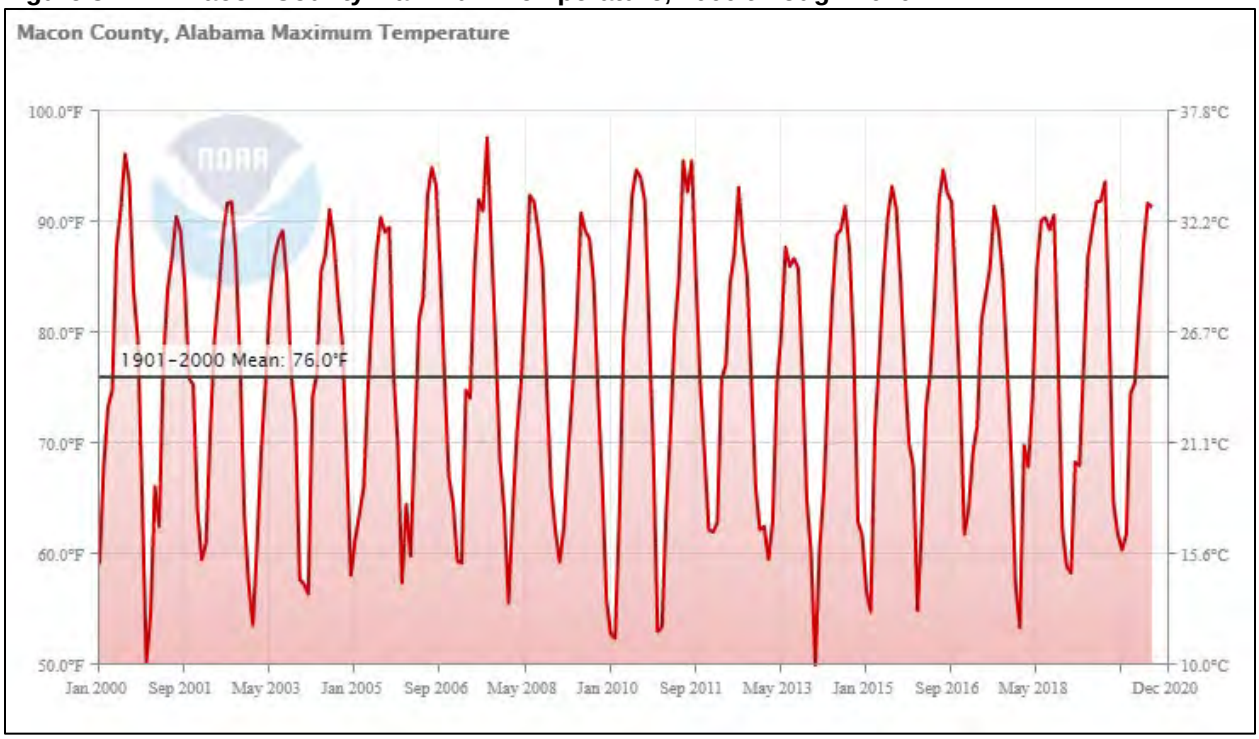


Figure 3.12.2: Macon County Maximum Temperature, 2000 through 2020



Source: NOAA National Centers for Environmental information, Climate at a Glance: County Time Series. https://www.ncdc.noaa.gov/cag/

Event notes in the NCEI Storm Events Database report that in August 2007, Lowndes County and Macon County were included in a 35-county heat wave that saw temperatures above 105.0°F up to 109.0°F. As a result of the multiple county event, 11 people died due to heat-related illness and 408 people required medical treatment due to the heat. In June 2012, both Lowndes and Macon Counties were included in a heat wave event that lasted through early July and affected 39 counties. According to the database report, afternoon highs rose to 100.0°F or greater. With a moist airmass in place, heat index values reached over 105.0°F degrees in many places. Two fatalities resulted from heat stress due to the above normal heat conditions, and 19 heat-related illnesses were reported to the Alabama Department of Public Heath during the heat wave. In July and August 2012, Lowndes and Macon Counties again had unseasonably warm weather and record setting temperatures that began in June and extended into early September. Temperatures were over 100.0°F with heat indexes over 105.0°F. The 2012 heatwave impacted 38 counties and resulted in one death and 47 heat-related illnesses in July, and 79 reported heat-related illnesses in August.

Historical Occurrences.

The NOAA National Centers for Environmental Information (NCEI) was utilized to obtain data for extreme heat events from January 1, 2000 through December 31, 2020. NCEI data indicates that there was a total of four heat events affecting Lowndes County and four heat events affecting Macon County in the 21-year time period. The August 2007 heat event resulted in one death in Lowndes County and one injury in Macon County, as shown in Tables 3.12.1 and 3.12.2. The detailed data for deaths and injuries is taken from event notes, which did not provide the jurisdiction location for deaths and injuries. Therefore, the one death in Lowndes County and the one injury in Macon County are included in the countywide summary but are not assigned to a jurisdiction within either county. There was no report of property damage or crop damage in the four events in either county.

Table 3.12.1: Lowndes County Extreme Heat Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	8/8/2007	Heat		1	0	$0	$0
Countywide	6/29/2012	Heat		0	0	$0	$0
Countywide	7/1/2012	Heat		0	0	$0	$0
Countywide	8/1/2012	Heat		0	0	$0	$0
Jurisdictional Summary: Lowndes County Extreme Heat							
Countywide		4 Events		1	0	$0	$0
Benton		4 Events		n/a	0	$0	$0
Fort Deposit		4 Events		n/a	0	$0	$0
Gordonville		4 Events		n/a	0	$0	$0
Hayneville		4 Events		n/a	0	$0	$0
Lowndesboro		4 Events		n/a	0	$0	$0
Mosses		4 Events		n/a	0	$0	$0
White Hall		4 Events		n/a	0	$0	$0
Unincorporated Lowndes County		4 Events		n/a	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.12.2: Macon County Extreme Heat Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	8/8/2007	Heat		0	1	0	0
Countywide	6/30/2012	Heat		0	0	0	0
Countywide	7/1/2012	Heat		0	0	0	0
Countywide	8/1/2012	Heat		0	0	0	0
Jurisdictional Summary: Macon County Extreme Heat							
Countywide		4 Events		0	1	$0	$0
Franklin		4 Events		0	n/a	$0	$0
Shorter		4 Events		0	n/a	$0	$0
Notasulga		4 Events		0	n/a	$0	$0
Tuskegee		4 Events		0	n/a	$0	$0
Unincorporated Lowndes County		4 Events		0	n/a	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.

Extreme heat conditions can potentially affect the entire county by stressing citizens and the municipal and agricultural water supply. Lowndes and Macon Counties each experienced four heat events in a 21-year period resulting in a greater than **19.0%** probability that a heat event will occur on an annual basis. The total amount of damages for the four heat events was $0. With no heat events causing damage in the past, the expected annual damages from future events is also $0. Although the probability of future events of extreme heat in Lowndes and Macon Counties is relatively high, most jurisdictions can manage mild cases of heat waves, rendering minor impacts most of the time. Therefore, the likelihood of probability for impactful extreme heat events for the counties and all jurisdictions is **Medium**, with probable major damage in a 10 to 50-year period.

Table 3.13: Extreme Heat Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**4 Events**	**Extreme Danger @105°F**	**19%**	**N/A**	**Medium**
Unincorp. Lowndes County	4 Events	Extreme Danger	19%	N/A	Medium
Town of Benton	4 Events	Extreme Danger	19%	N/A	Medium
Town of Fort Deposit	4 Events	Extreme Danger	19%	N/A	Medium
Town of Gordonville	4 Events	Extreme Danger	19%	N/A	Medium
Town of Hayneville	4 Events	Extreme Danger	19%	N/A	Medium
Town of Lowndesboro	4 Events	Extreme Danger	19%	N/A	Medium
Town of Mosses	4 Events	Extreme Danger	19%	N/A	Medium
Town of White Hall	4 Events	Extreme Danger	19%	N/A	Medium
Macon County	**4 Events**	**Extreme Danger @105°F**	**19%**	**N/A**	**Medium**
Unincorp. Macon County	4 Events	Extreme Danger	19%	N/A	Medium
Town of Franklin	4 Events	Extreme Danger	19%	N/A	Medium
Town of Notasulga	4 Events	Extreme Danger	19%	N/A	Medium
Town of Shorter	4 Events	Extreme Danger	19%	N/A	Medium
City of Tuskegee	4 Events	Extreme Danger	19%	N/A	Medium

3.7 Flooding

Description.
Flooding is considered the most frequent and costly natural hazard in the United States. A flood, or flooding, is a general and temporary condition of partial or complete inundation of two or more acres of normally dry land or two or more properties are inundated by water or mudflow. Flooding can also be described as the accumulation of water within a water body (e.g., stream, river, lake, or reservoir) and the overflow of excess water onto adjacent floodplains. Floodplains are usually lowlands adjacent to water bodies that are subject to recurring floods. Conditions that can result in a flood include, but are not limited to, hurricanes, overtopped levees, outdated or clogged drainage systems, and rapid accumulation of rainfall. Floods are natural events that are considered hazards only when people and property are affected, making them one of the most common hazards. Most floods fall into one of three major categories: (1) Riverine Flooding; (2) Coastal Flooding; or (3) Shallow Flooding.

The most common kind of flooding event is riverine flooding, also known as overbank flooding. Riverine flooding also includes flash flooding, riverine erosion, ice jams, and dam failures. Riverine floodplains range from narrow, confined channels in the steep valleys of mountainous and hilly regions, to wide, flat areas in plains and coastal regions. The amount of water in the floodplain is a function of the size and topography of the contributing watershed, the regional and local climate, and land use characteristics. In steep valleys, flooding is usually rapid and deep, but of short duration, while flooding in flat areas is typically slow, relatively shallow, and may last for long periods of time. While the planning area is not highly susceptible to severe inundation of riverside flood waters which impacts low lying agricultural areas, it is susceptible to the rapid occurrence of localized flash floods and flooding in areas that make parts of the county inaccessible by road and interrupt the delivery of services and the ability to respond in an emergency and in localized conditions in more urban development in Union Springs and Midway due to storm drainage limitations.

Flash floods involve a rapid rise in water level, high velocity, and large amounts of debris, which can lead to significant damage that includes the tearing out of trees, undermining of buildings and bridges, and scouring new channels. The intensity of flash flooding is a function of the intensity and duration of rainfall, steepness of the watershed, stream gradients, watershed vegetation, natural and artificial flood storage areas, and configuration of the streambed and floodplain. Dam failure and ice jams may also lead to flash flooding. Alluvial fan floods occur in the deposits of rock and soil that have eroded from mountainsides and accumulated on valley floors in the pattern of a fan. Alluvial fan floods often cause greater damage than overbank flooding due to the high velocity of the flow, amount of debris, and broad area affected. Human activities may exacerbate flooding and erosion on alluvial fans via increased velocity along roadway acting as temporary drainage channels or changes to natural drainage channels from fill, grading, and structures. Ice jam floods are primarily a function of the weather and are most likely to occur where the channel slope naturally decreases, culverts freeze solid, reservoir headwaters, natural channel constructions (e.g., bends and bridges), and along shallows. Dam-break floods may occur due to structural failures (e.g., progressive erosion), overtopping or breach from flooding, or earthquakes.

Lowndes County and Macon County are not susceptible to coastal storm flooding and coastal erosion due to the county's location more than 200 miles away from Alabama's Gulf Coast. Both counties are susceptible, however, to shallow flooding which occurs in flat areas where a lack of channels prevents water from draining easily. Shallow flood problems include flooding and drainage issues related to land development, including sheet flow, ponding, and urban drainage. Sheet flow occurs where there are inadequate drainage channels and floodwater spreads out over a large area at a somewhat uniform depth. Sheet flows occur after an intense or prolonged rainfall during which the rain cannot soak into the ground. During sheet flow, the floodwaters move downhill and cover a wide area. In some flat areas, runoff collects in depressions and cannot drain out, creating a ponding effect. Ponding floodwaters do not move or flow away. Floodwaters will remain in the temporary ponds until they infiltrate into the soil, evaporate or are pumped out. An urban drainage system is generally made up of the ditches, storm sewers, retention ponds and other facilities constructed to store runoff or carry it to a receiving stream, lake or the ocean. Other man-made features in such a system include yards and swales that collect runoff and direct it to the sewers and ditches. When larger storms overload an urban drainage system, the result is backed-up sewers and overloaded ditches that produce shallow flooding.

Location.

The Office of Water Resources, located within the Alabama Department of Economic and Community Affairs, maintains the Alabama Flood Risk Information System (FRIS) which provides floodplain maps for Alabama communities. The following information was compiled from the Alabama FRIS, the Lowndes County Flood Insurance Study, and the Macon County Flood Insurance Study. Additionally, Lowndes County was included in a FEMA Flood Risk Report (FRR) for the Upper Alabama Watershed, HUC 03150201 (03/27/2013). Information contained in the FRR was also used to develop the Lowndes County portion of the hazard mitigation plan. Flood hazard maps have been created to show different degrees of risk for each community in the planning area.

A review of the FRIS maps, and the Flood Insurance Rate Maps (FIRM) for more detailed areas, and the Upper Alabama Watershed FRR, flooding in Lowndes County is most likely to be in the riverine category in a floodplain associated with the Alabama River and its tributaries including, Big Swamp Creek, Dry Cedar Creek, Pintlala Creek, and Tallawassee Creek. Flood Insurance Rate Maps (FIRM), effective 2009, have been developed for all of Lowndes County. With the Upper Alabama Watershed FRR, some of the FIRM maps were updated and are now effective 2014. Detailed FIRMs are available for the waterbodies listed below and have an impact of the Town of Benton, the Town of White Hall and an unincorporated part of Lowndes County:

- Alabama River
- Big Swamp Creek
- Jack Creek
- Pintlalla Creek
- Spratt Branch
- Steep Creek

Flooding in Macon County is also most likely to be in the riverine category in a floodplain associated with the Tallapoosa River and its tributaries including Calebee Creek, Cubahatchee Creek, Line Creek, and Uphapee Creek. FIRM Maps, effective 2009, have been developed for all of Macon County. Detailed FIRMs are available for the waterbodies listed below and have an impact of the City of Tuskegee, and unincorporated parts of Macon County:

- Bulger Creek
- Calebee Creek
- Branch One of Calebee Creek
- Branch Two of Calebee Creek
- Persimmon Creek
- Uphapee Creek
- Branch of Uphapee Creek

Maps of floodplain areas in the jurisdictions of Lowndes County, as listed below are provided in Figures 3.13.1 through 3.13.9. Maps of floodplain areas in the jurisdictions of Macon County, also listed below are provided in Figures 3.14.1 through 3.14.5.

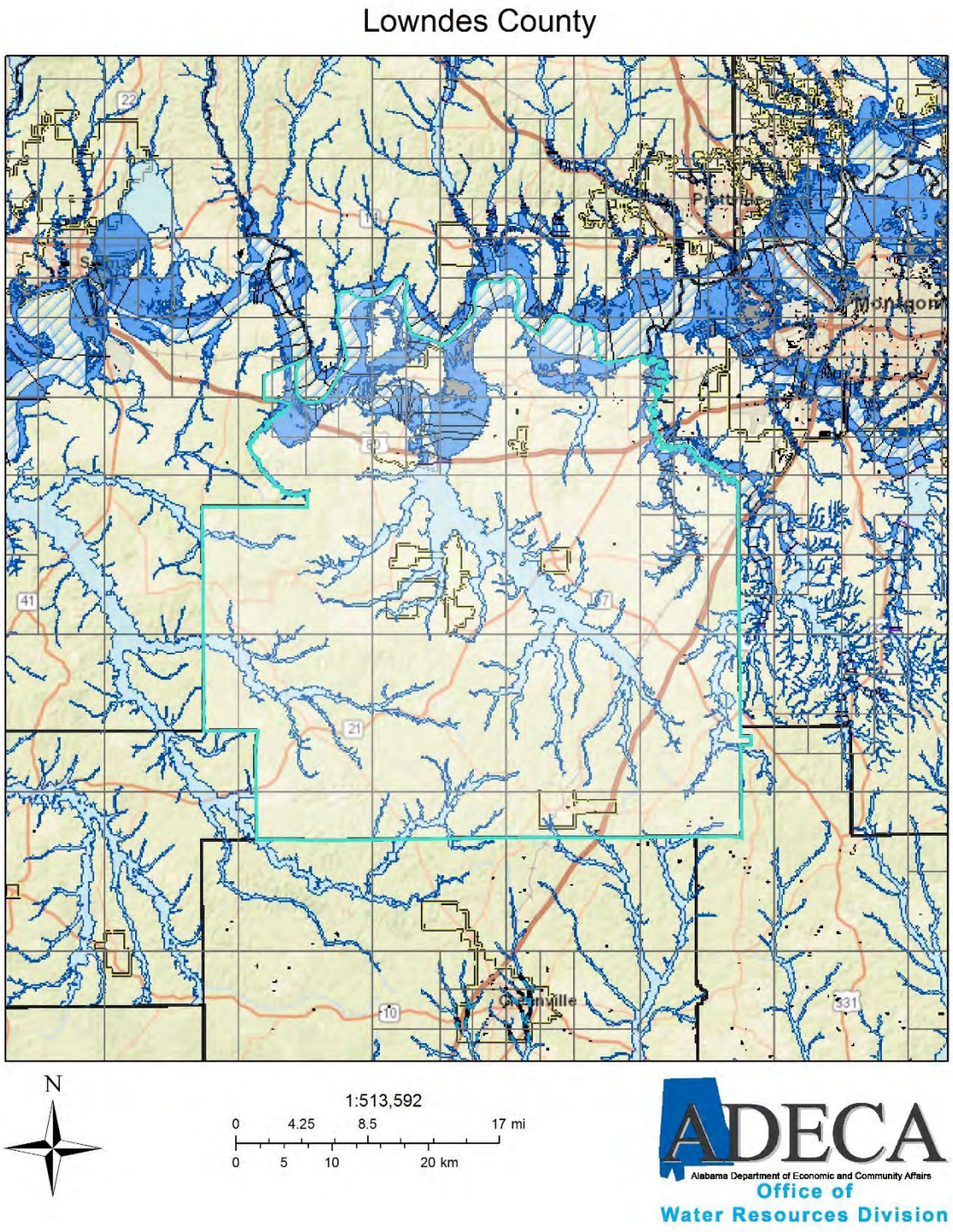
Lowndes County
Town of Benton
Town of Fort Deposit
Town of Gordonville
Town of Hayneville
Town of Lowndesboro
Town of Mosses
Town of White Hall
Lowndes County Schools

Macon County
Town of Franklin
Town of Notasulga
Town of Shorter
City of Tuskegee
Macon County Schools
Tuskegee University

Of the 14 jurisdictions included in this hazard mitigation plan, the Town of Lowndesboro in Lowndes County is the only municipal jurisdiction that has no floodplain area located within its borders. Jurisdictions that have minimal floodplain issues include Fort Deposit and Hayneville in Lowndes County and Franklin in Macon County. The remaining seven jurisdictions either have significant floodplain areas or the location of a floodplain within a jurisdiction is problematic. None of the schools in Lowndes County or Macon County are located within a floodplain, as seen in Figures 3.13.9 and 3.14.6. Further, there are no floodplains on the Tuskegee University campus.

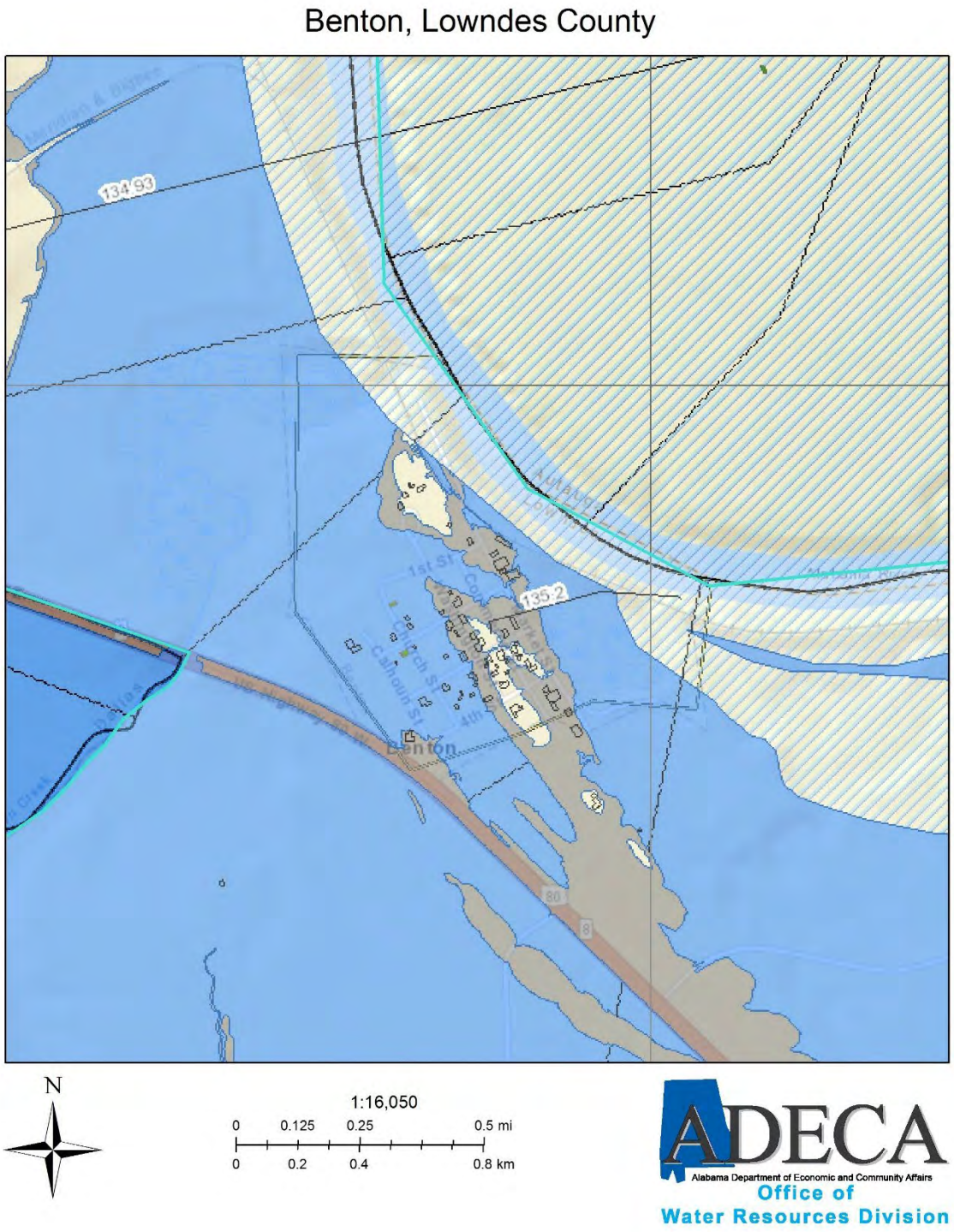
Along with the riverine flooding potential, there have been reports of flash flooding due to heavy rains in various locations throughout Lowndes County and Macon County. According to the National Centers for Environmental Information Storm Database, most flooding events in both counties have occurred on secondary roads in the unincorporated parts of the county because of heavy rains; however, state and federal highways have also become impassable for a short period of time because of flash flooding. In Lowndes County, NCEI storm event notes identify several roads in the county that have become impassable due to flash flooding at one time or another. The roads include: CR 9, CR 33, CR 37, CR 39, Brown Street, Knights Place Road, Henderson Road, Old Letohatchee Road, and Robert Gordon Road. Also noted were road in and around Hayneville and Lowndesboro. In one event, a family in the unincorporated Collirene community had to be rescued after being trapped in their home by flood waters. In another event, five homes were flooded in the Knights community, also unincorporated. Residential units have also been flooded in the unincorporated communities of Palmyra (two brick homes) and Mount Willing (three mobile homes). NCEI storm event notes in Macon County identified CR 59, roads in and around Tuskegee, and US Highway 80 in downtown Tuskegee.

Figure 3.13.1: Floodplains in Lowndes County



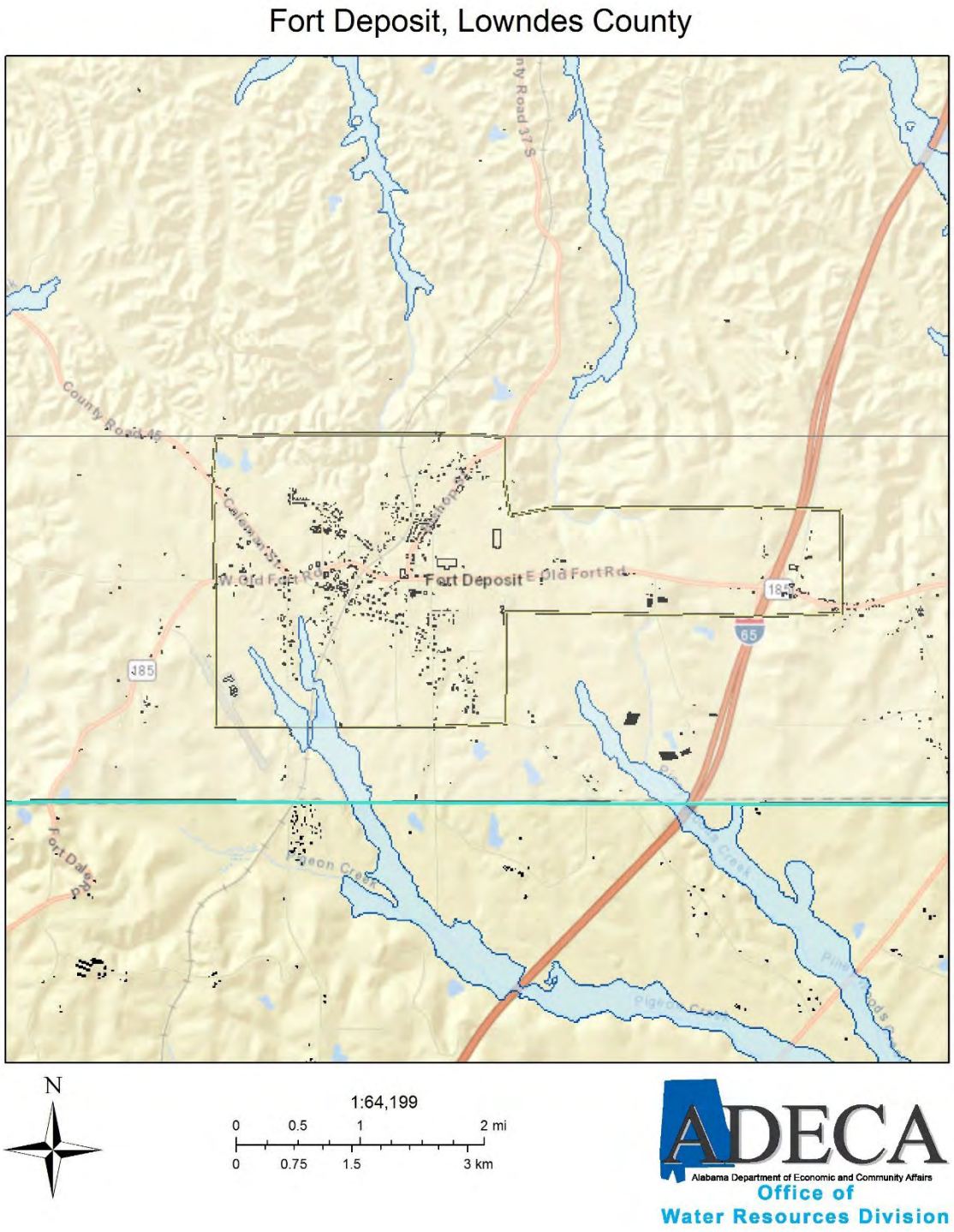
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.2: Floodplains in the Town of Benton



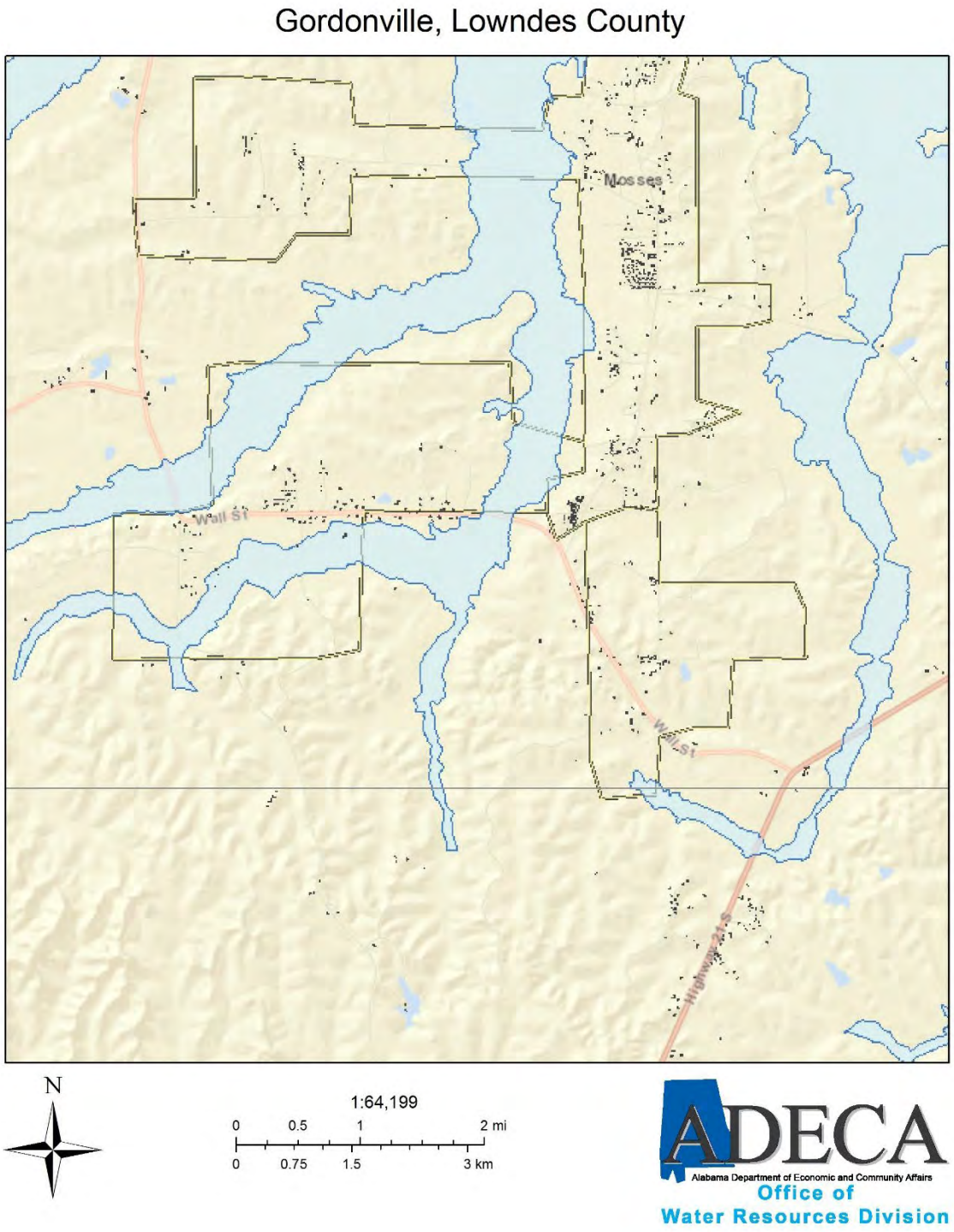
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.3: Floodplains in the Town of Fort Deposit



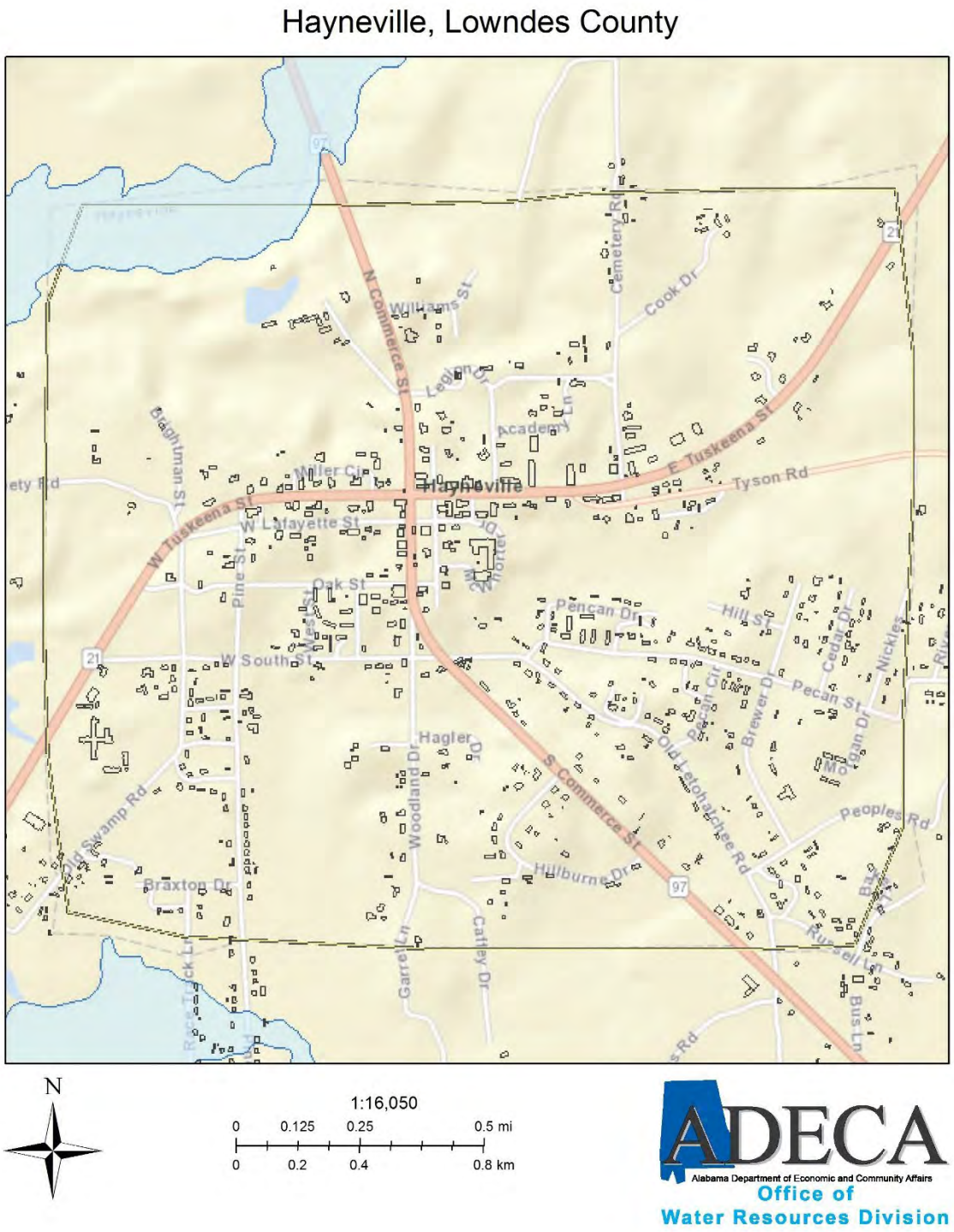
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.4: Floodplains in the Town of Gordonville



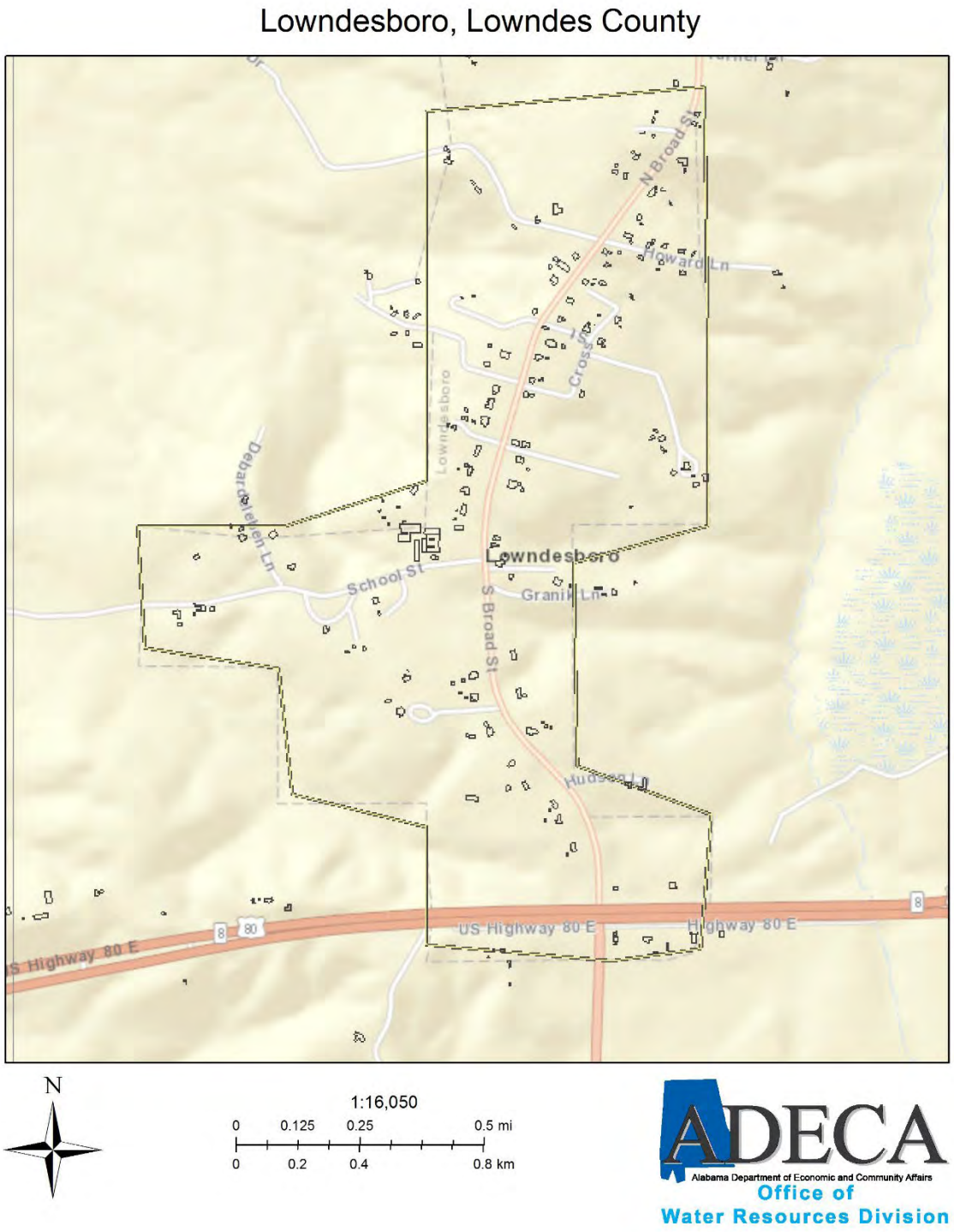
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.5: Floodplains in the Town of Hayneville



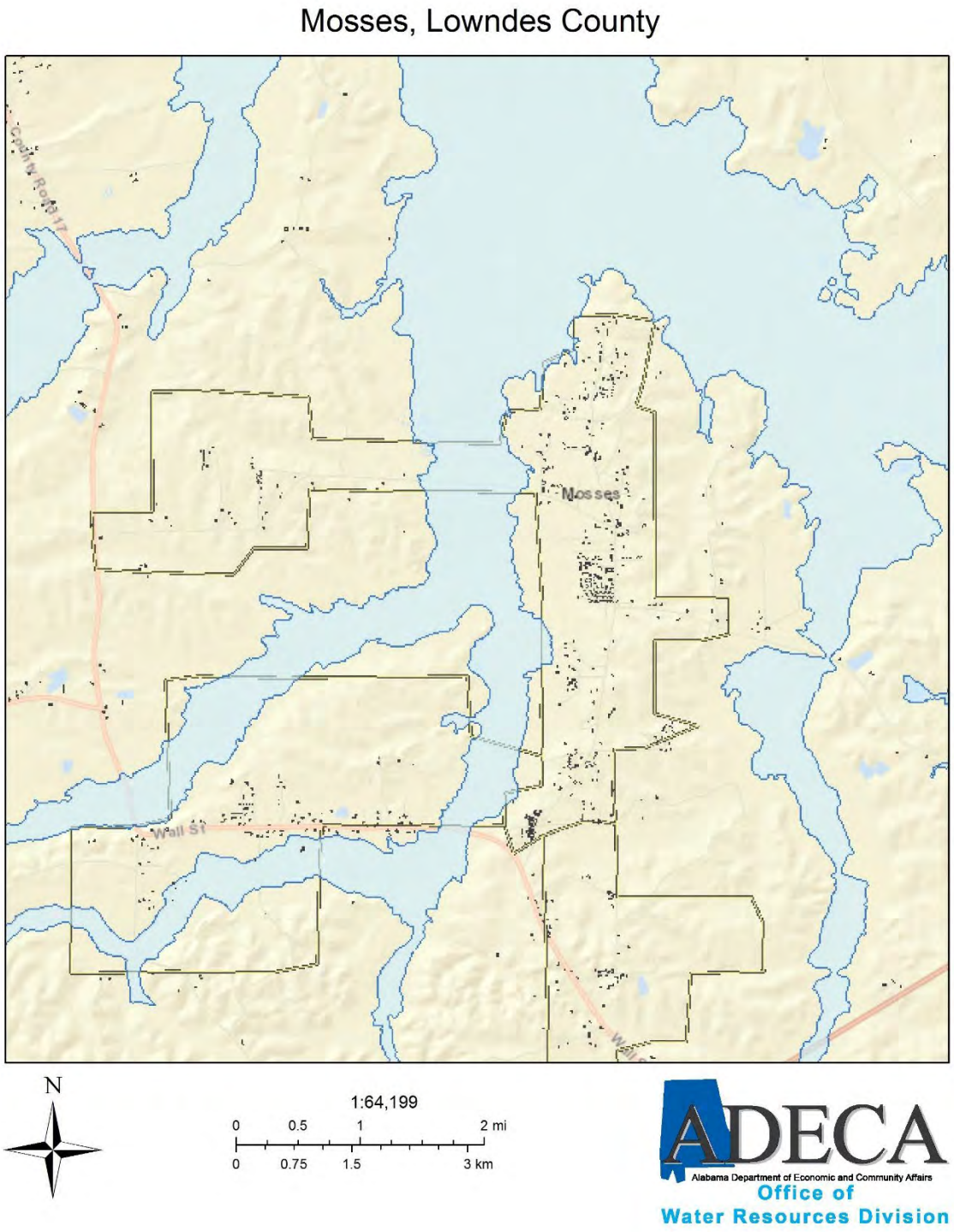
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.6: Floodplains in the Town of Lowndesboro



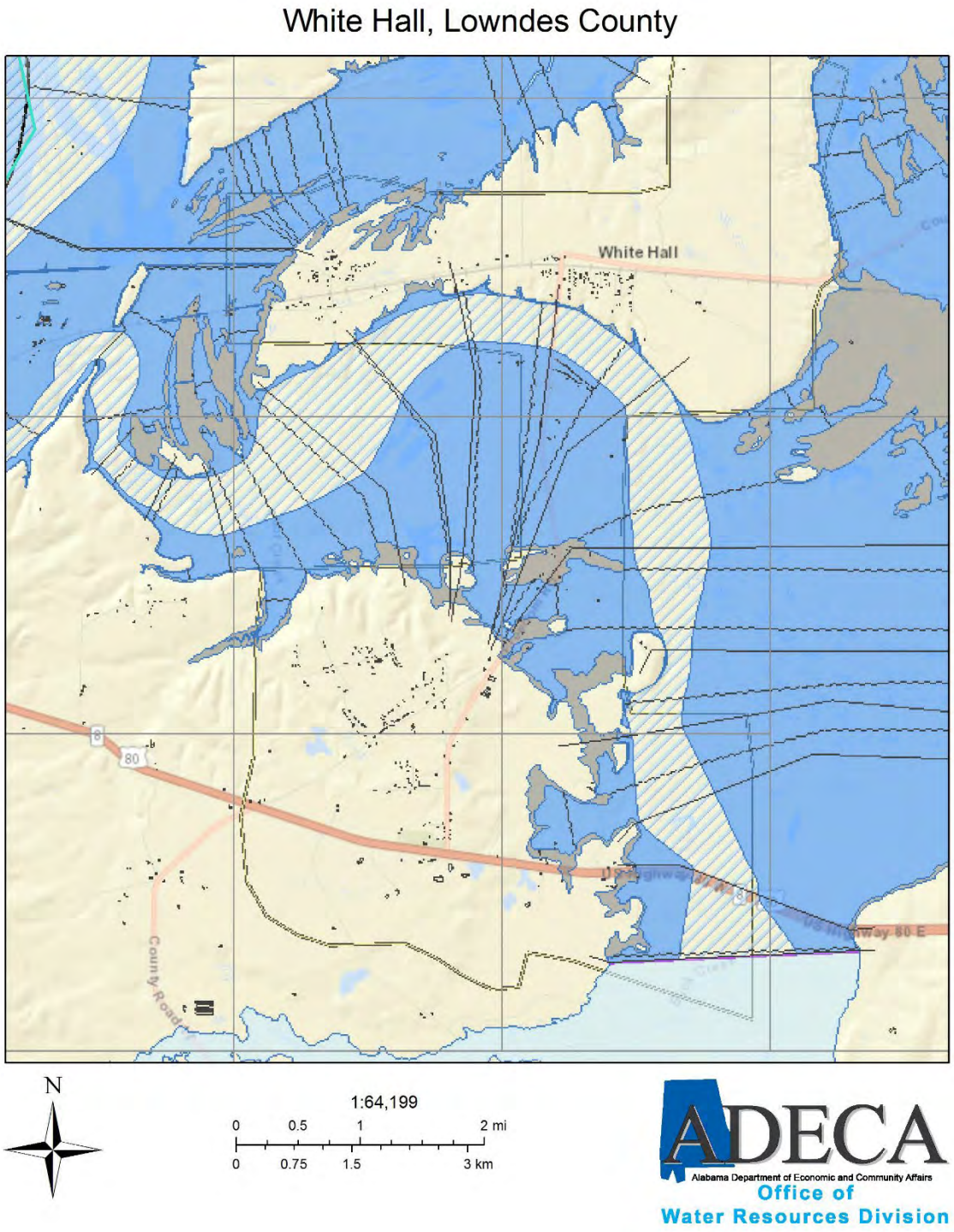
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.7: Floodplains in the Town of Mosses



Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.8: Floodplains in the Town of White Hall



Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.13.9: Floodplain Locations Relative to Lowndes County Schools

Calhoun High School, 8213 Co Rd 33, Letohatchee



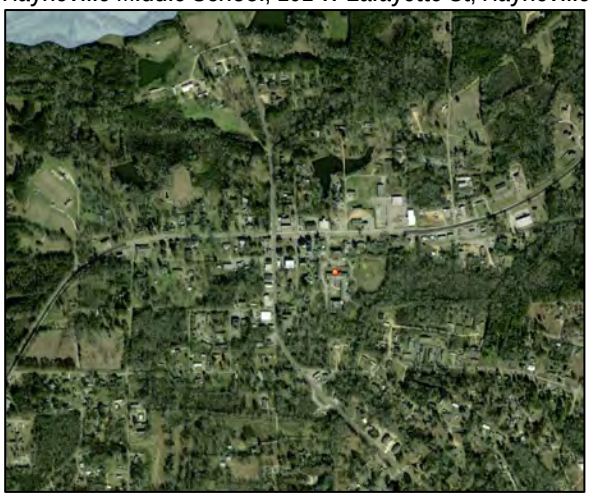
Fort Deposit Elementary, 200 Gilmer Hills Rd, Fort Deposit



Central Elementary School, 141 Main St, Gordonville



Hayneville Middle School, 101 W Lafayette St, Hayneville



Central High School, 145 Main St, Gordonville
Lowndes County 147 Main St, Gordonville



Jackson Steele Elementary School, 570 White Hall Rd, White Hall



Lowndes Middle School, 301 Old Fort Rd, Fort Deposit

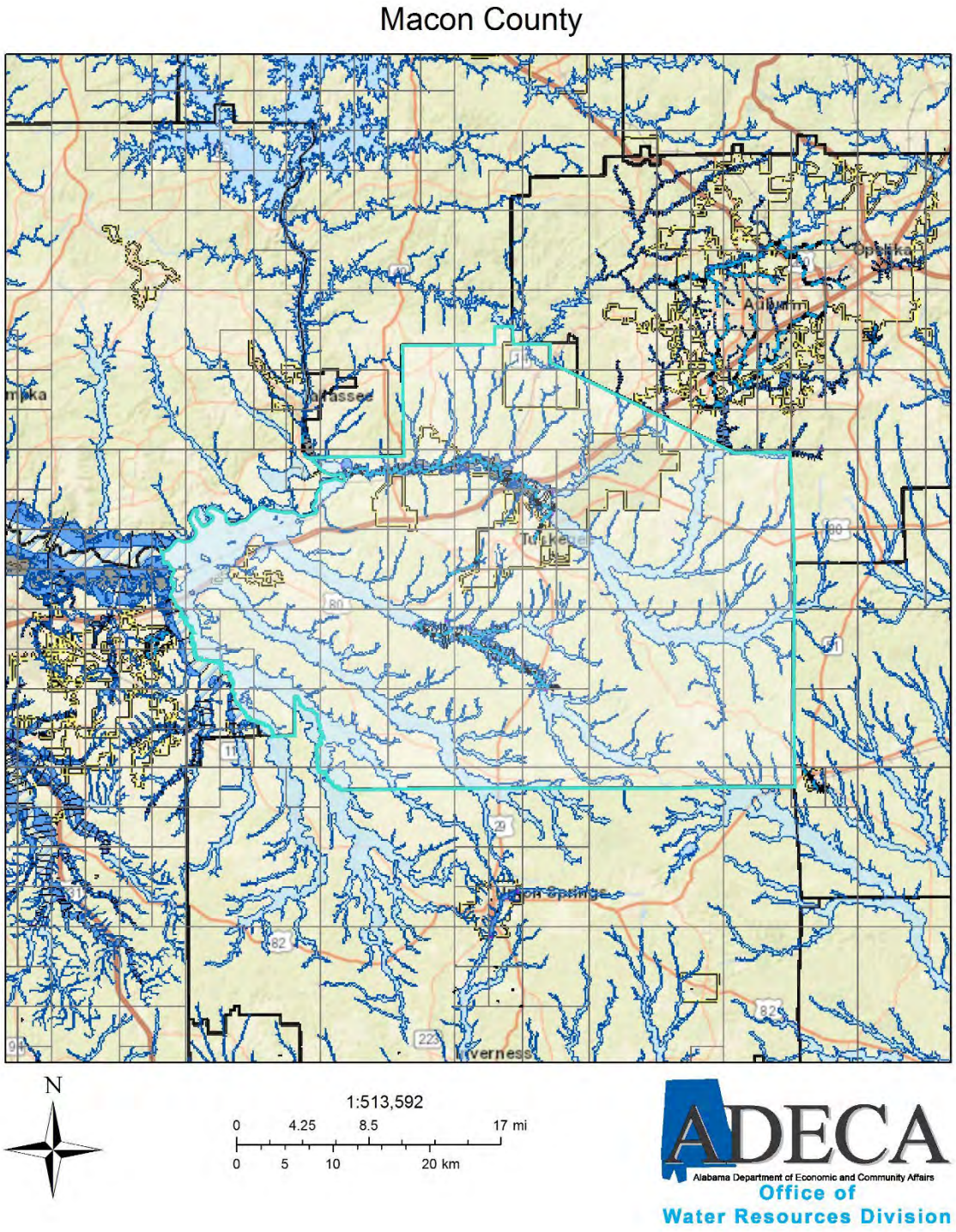


Lowndes County Head Start, 107 W Lafayette St, Hayneville



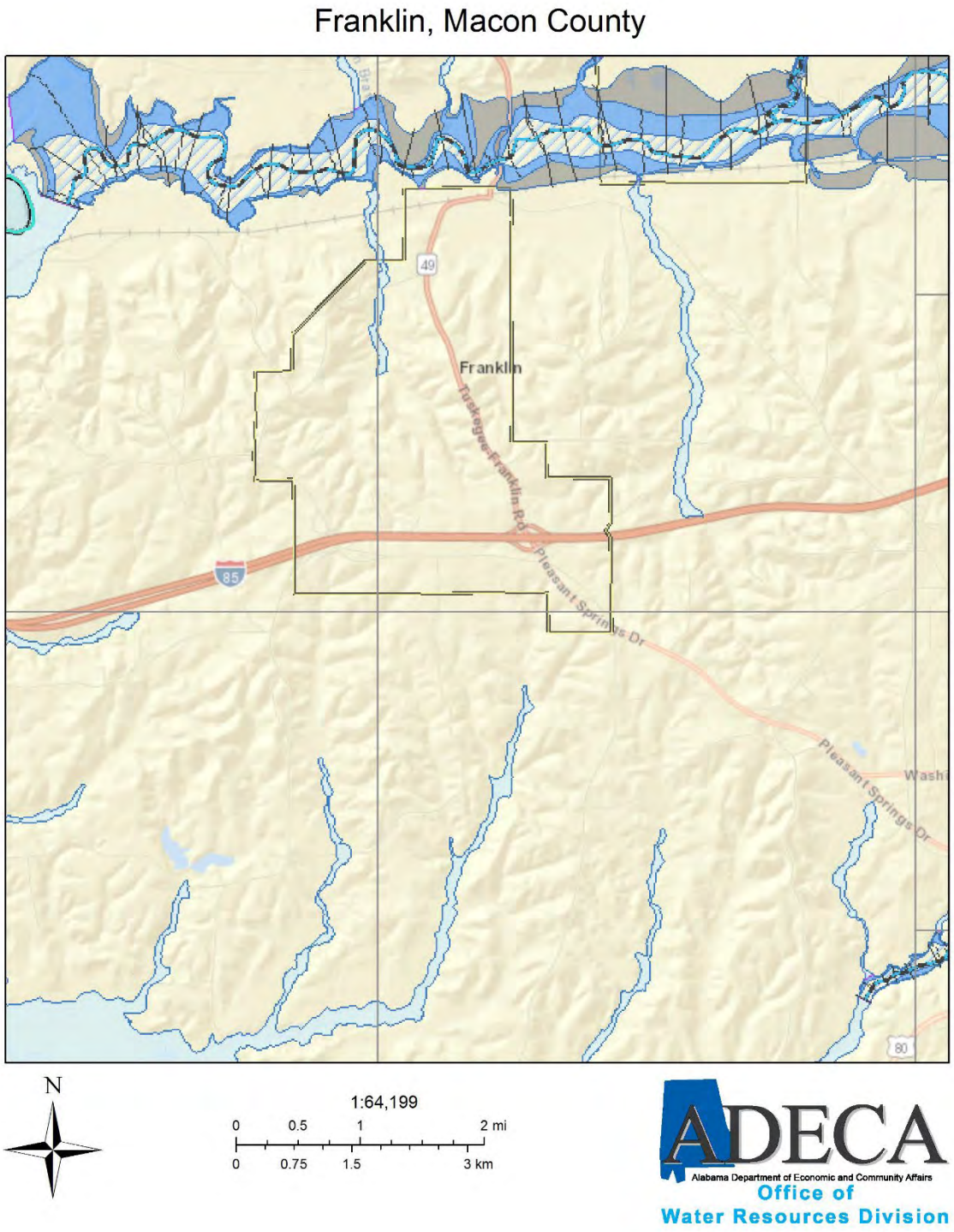
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.1: Floodplains in Macon County



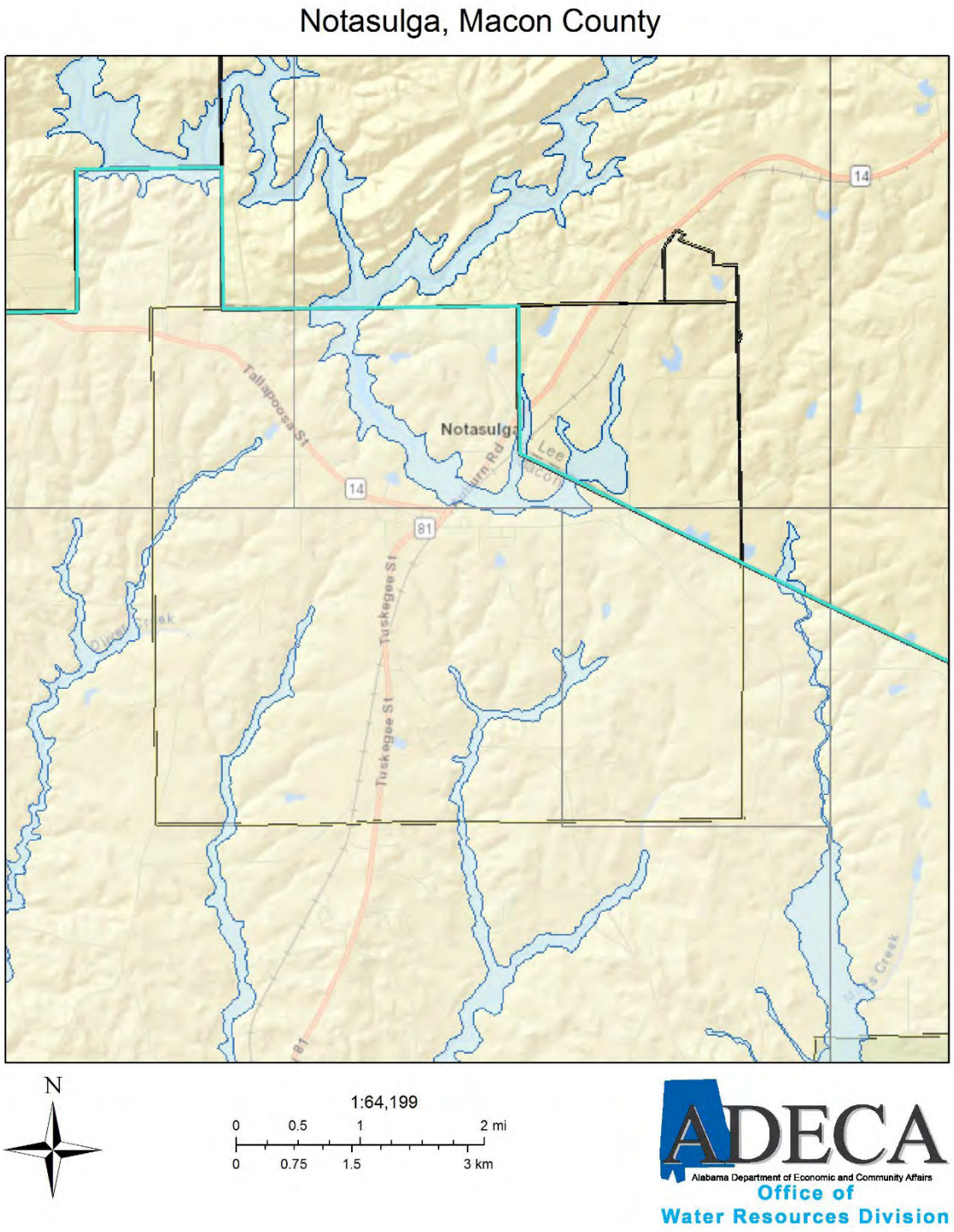
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.2: Floodplains in the Town of Franklin



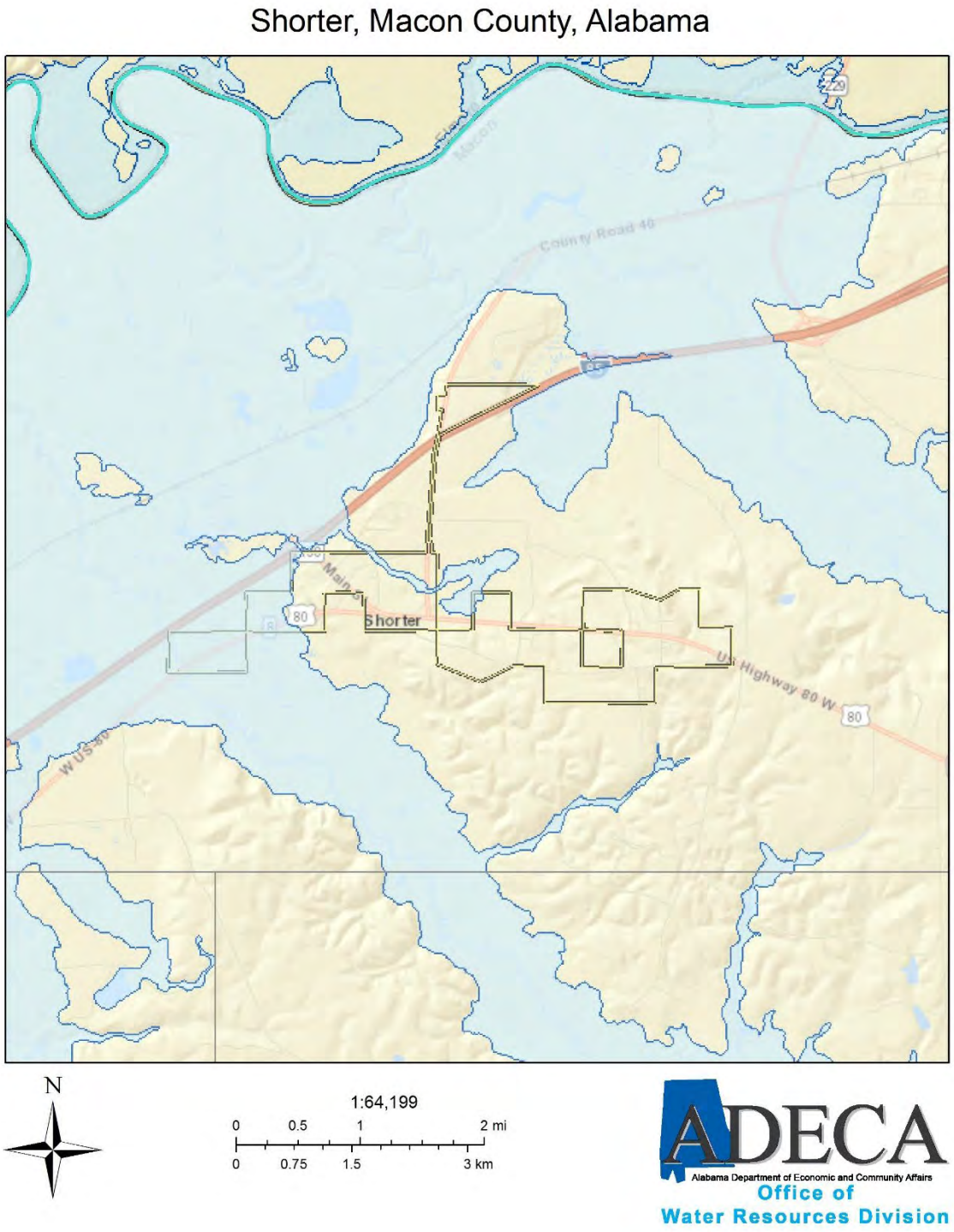
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.3: Floodplains in the Town of Notasulga



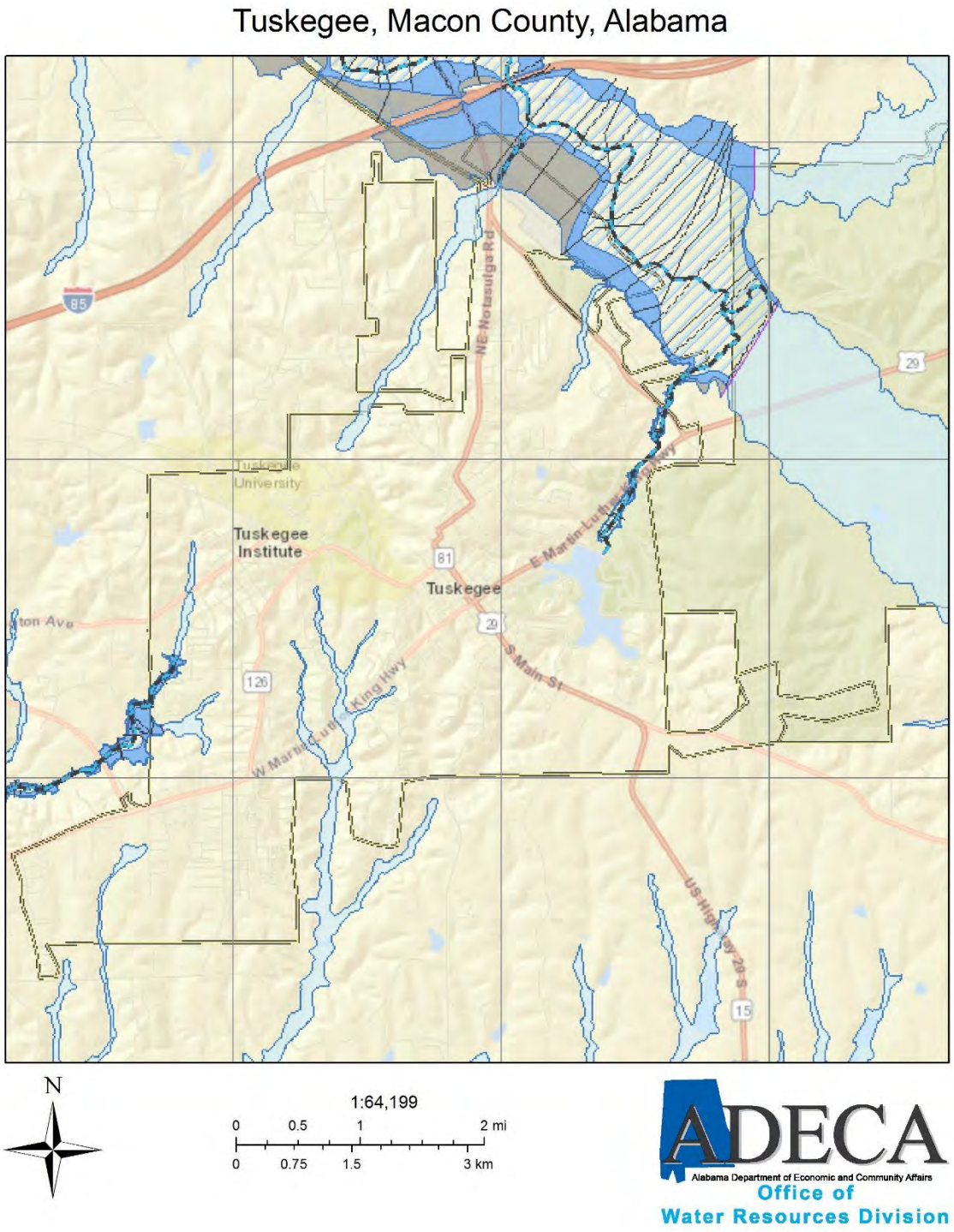
Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.4: Floodplains in the Town of Shorter



Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.5: Floodplains in the City of Tuskegee



Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.6: Floodplain Locations Relative to Macon County Schools

Booker T. Washington High School, 3803 W Martin Luther King Hwy, Tuskegee



Notasulga High School, 500 E Main St, Notasulga



Deborah Cannon Wolfe School, 4450 Cross Keys Rd, Shorter



Tuskegee Institute Middle School, 1809 Franklin Rd, Tuskegee



George Washington Carver Elementary School, 303 Union Springs Rd, Tuskegee



Tuskegee Public School, 101 E Price St, Tuskegee



Source: Alabama Department of Community and Economic Development, Office of Water Resources, Flood Risk Information System. https://alabamaflood.com/map

Figure 3.14.7: Floodplain Locations on the Tuskegee University Campus



Extent.
The severity of a riverine flood event is typically dependent on several factors, including drainage basin topography, recent precipitation and weather occurrences, and land surface. Periodic riverine flooding on adjacent lands is a natural occurrence. The most common method used to express flood frequency is a percent chance of occurrence in a given year, or annual probability within a FEMA identified floodplain. A 100-year flood event has a one percent (1%) chance of occurring in any year within that floodplain. However, these type floods can occur multiple times during a 100-year period. Within the floodplain, a flood event can be expected to inundate the area with several feet of water, which varies across the region, but can be upwards of almost two feet above flood stage as noted by the highest recorded floods described at multiple points in the region. The extent of a flash flooding event varies greatly depending on the local geography and rainfall intensity and duration. Normally the extent of flash flooding is not as widespread as a riverine flooding event but is more variable due to the lack of advance warning before the occurrence of flooded streets and property damage that may occur during these events.

The magnitude of flooding events is not available through the National Centers for Environmental Information and there are few local official records of flooding depth available. Therefore, the 2014 Lowndes County Flood Insurance Study (FIS) and the 2009 Macon County FIS were used to determine the extent for flooding in parts of the planning area. The Lowndes County FIS states that the county's major flooding problems occur along Big Swamp Creek and its tributaries and along the Alabama River which is subject to frequent flooding. The study also states that large floods have developed along the banks of the Pintlala Creek.

The Macon County FIS reports that the county has experienced flooding in the past as the result of severe storms and hurricanes both of which generally occur in the summer months. In general, most of the streams are subject to overbank flooding. In the southern region the flooding of overbank areas is more extensive because of the low relief adjacent to the streams. The areas that are most susceptible to flood damage are in the vicinity of Old Auburn Wire Road on Uphapee Creek, along County Road 37 within the confluence of Uphapee and Bulger Creeks and the low lying land adjacent to the confluence of the Calebee and Persimmon Creeks. Many of the bridges over the Calebee Creeks are inundated during periods of heavy rainfall. Flooding in other parts of the county is not as severe primarily because the creeks are in less developed parts of the county.

It should be noted that 12 of 14 flood events in Lowndes County and 7 of 8 flood events in Macon County were flash floods resulting from exceptionally heavy thunderstorms and tropical storms. It is expected that these isolated events will continue to occur on an irregular basis in both counties. Detailed FIRMs are available for the following waterbodies in Lowndes County: Alabama River, Big Swamp Creek, Jack Creek, Pintlala Creek, Spratt Branch, and Steep Creek. Detailed FIRMs are available for the following waterbodies in Macon County: Bulger Creek, Calebee Creek, Branch One of Calebee Creek, Branch Two of Calebee Creek, Persimmon Creek, Uphapee Creek, Branch of Uphapee Creek. The detailed FIRMS and local reports were used to determine the extent of flooding in Lowndes County and Macon County. Table 3.14.1 and Table 3.14.2 provide an overview of flood extent for selected locations within all jurisdictions from the 2014 and 2009 flood profiles.

Table 3.14.1: Lowndes County Flood Extent

Jurisdiction	Waterbody	Location	Flood Extent
Unincorp Lowndes County	Pintlala Creek	Near Lake Ridge Road	8 - 16 ft
Unincorp Lowndes County	Steep Creek	Near Judge Road	6 ft
Unincorp Lowndes County	Dry Cedar Creek	Mt. Willing	3 to 4 ft
Unincorp Lowndes County	Unknown	Collirene	1 to 2 ft
Town of Benton	Alabama River	Near Benton Road	10 ft
Town of Fort Deposit	Piney Woods Creek Avinger Branch	Alabama Highway 185	1 ft
Town of Gordonville	Ash Creek	Wall St, Brooks Rd, Crosby Rd	1 ft
Town of Hayneville	Big Swamp Creek	Pine St, Race Track Ln, Old Swamp Rd	3 ft
Town of Lowndesboro	None	Not Applicable	0 ft
Town of Mosses	Ash Creek	Ash Creek Road	1 ft
Town of White Hall	Big Swamp Creek	Near Peterson Road	16 ft

Source: Flood Insurance Study; Lowndes County, Alabama, and Incorporated Areas. Effective Date: September 3, 2014; Community Development Block Grant Needs Assessments; Local Reports.

Table 3.14.2: Macon County Flood Extent

Jurisdiction	Waterbody	Location	Flood Extent
Unincorp Macon County	Line Creek	Near Barganier Road	8 ft
Unincorp Macon County	Calebee Creek	CR 67 – Morgan Russell road	14 ft
Unincorp Macon County/Franklin	Uphapee Creek	AL Hwy 49 at Franklin North Boundary	14 ft
Unincorp Macon County/Shorter	Tallapoosa River	NW of Tysonville Loop Road	10 ft
Town of Franklin	Minimal Floodplain	No local reports of flooding	0 ft
Town of Notasulga	Town Creek	Town Lake Road	3 to 5 ft
Town of Notasulga	Br to Uphapee Creek	Gerald Robinson Road	<1 ft
Town of Shorter	Cubahatchee Creek	Banks McDade Road	6 ft
City of Tuskegee	Br. 1, Calebee Creek	Alabama Avenue	8 ft
City of Tuskegee	Br to Uphapee Creek	Lake Tuskegee	4 ft
City of Tuskegee	Uphapee Creek*	NE of Moton Field* *Flood maps are under review for this area*	18 ft

Source: Flood Insurance Study; Macon County, Alabama, and Incorporated Areas. Effective Date: November 18, 2009; Community Development Block Grant Needs Assessments; Local Reports.

Historical Occurrences.

Per National Centers for Environmental Information data from 2000 through 2020, there were 14 flood events in Lowndes County resulting in $70,000 in property damage and eight flood events in Macon County that resulted in $156,000 in property damage. Of the combined 22 events, all but three events were flash floods. Two flash flood events affected both Lowndes and Macon Counties. One was a 2003 severe storm with three to eight inches of rain that impacted 11 counties and killed one person. The other was the 2005 impact of Hurricane Dennis that brought three to five inches of rain that resulted in flooded roads and some bridges washed away. Tables 3.15.1 and 3.15.2 provide a profile of flooding events in Lowndes County and Macon County, as available from the National Centers for Environmental Information. According to data provided by the Alabama Emergency Management Agency, there are no reported instances of repetitive structural loss due to flooding in either Lowndes County or Macon County, to date.

Table 3.15.1: Lowndes County Flood Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	3/3/2001	Flash Flood		0	0	$18,000	$0
Countywide	3/12/2001	Flash Flood		0	0	$5,000	$0
Countywide	4/7/2003	Flash Flood		0	0	$20,000	$0
Countywide	4/1/2005	Flood		0	0	$0	$0
Hayneville	7/10/2005	Flash Flood		0	0	$2,000	$0
Hayneville	1/7/2007	Flash Flood		0	0	$0	$0
Unincorporated	3/4/2008	Flash Flood		0	0	$0	$0
Unincorporated	11/10/2009	Flood		0	0	$15,000	$0
Unincorporated	7/27/2011	Flash Flood		0	0	$10,000	$0
White Hall	9/20/2011	Flash Flood		0	0	$0	$0
Unincorporated	3/23/2012	Flash Flood		0	0	$0	$0
Fort Deposit	9/4/2012	Flash Flood		0	0	$0	$0
Unincorporated	5/20/2017	Flash Flood		0	0	$0	$0
Lowndesboro	6/22/2017	Flash Flood		0	0	$0	$0
Jurisdictional Summary: Lowndes County Flooding							
Countywide		4 Events		0	0	$43,000	$0
Benton		0 Events		0	0	$0	$0
Fort Deposit		1 Event		0	0	$0	$0
Gordonville		0 Events		0	0	$0	$0
Hayneville		2 Events		0	0	$0	$0
Lowndesboro		1 Events		0	0	$2,000	$0
Mosses		0 Events		0	0	$0	$0
White Hall		1 Event		0	0	$0	$0
Unincorporated Lowndes County		5 Events		0	0	$25,000	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.15.2: Macon County Flood Events, 2000 through 2020

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Countywide	4/7/2003	Flash Flood		0	0	$10,000	$0
Countywide	5/7/2003	Flood		0	0	$0	$0
Countywide	7/1/2003	Flash Flood		0	0	$17,000	$0
Countywide	9/16/2004	Flash Flood		0	0	$6,000	$0
Countywide	3/27/2005	Flash Flood		0	0	$17,000	$0
Tuskegee	7/10/2005	Flash Flood		0	0	$6,000	$0
Shorter	5/7/2009	Flash Flood		0	0	$100,000	$0
Notasulga	12/24/2015	Flash Flood		0	0	$0	$0
Jurisdictional Summary: Macon County Flooding							
Countywide		5 Events		0	0	$50,000	$0
Franklin		0 Events		0	0	$0	$0
Notasulga		1 Event		0	0	$0	$0
Shorter		1 Event		0	0	$100,000	$0
Tuskegee		1 Event		0	0	$6,000	$0
Unincorporated Lowndes County		0 Events		0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.
Flooding is one of the most common hazards in the United States and kills an average of 150 people a year nationwide. While Lowndes and Macon Counties are not overly susceptible to frequent inundation of riverine flood waters, both counties are highly susceptible to the rapid occurrence of flash floods that make parts of the county inaccessible by road and interrupt the delivery of services and the ability to respond in an emergency. The probability for future riverine flood events based on magnitude and using best available data is illustrated in the Flood Hazard Area Maps in Figures 3.13.1 through 3.13.9 and Figures 3.14.1 through 3.14.7, which indicate the county and jurisdictional areas susceptible to the one-percent annual chance flood (100-year floodplain). Unfortunately, however, these maps do not always aid in gauging the extent of flash floods that can happen in any low-lying location where water can build up because of the slow percolation rates in the counties and a lack of drainage facilities in rural areas.

Jurisdictions in Lowndes County have experienced a combined total of 14 flood events in the last 21 years, which equates to a **66.7 percent** probability of future flooding events. There were no deaths, injuries or crop damage from the flood events. The combined property damage from the 14 events was $70,000, or **$5,000 per event**. In Macon County, there has been a combined total of eight flood events in the last 21 years, which equates to a **38.1 percent** probability of future flooding events. The total property damage from the eight events was $156,000, or **$19,500 per event**. The damage in both counties, however, from the events was not equitably spread among the jurisdictions. As shown in Table 3.16, the impact of a future flooding events varies from one jurisdiction to another. The impact of flooding in both Lowndes County and Macon County is considered to be **Medium** with probable major damage within a 10 to 50-year period.

Table 3.16: Flood Summary and Probability by Jurisdiction

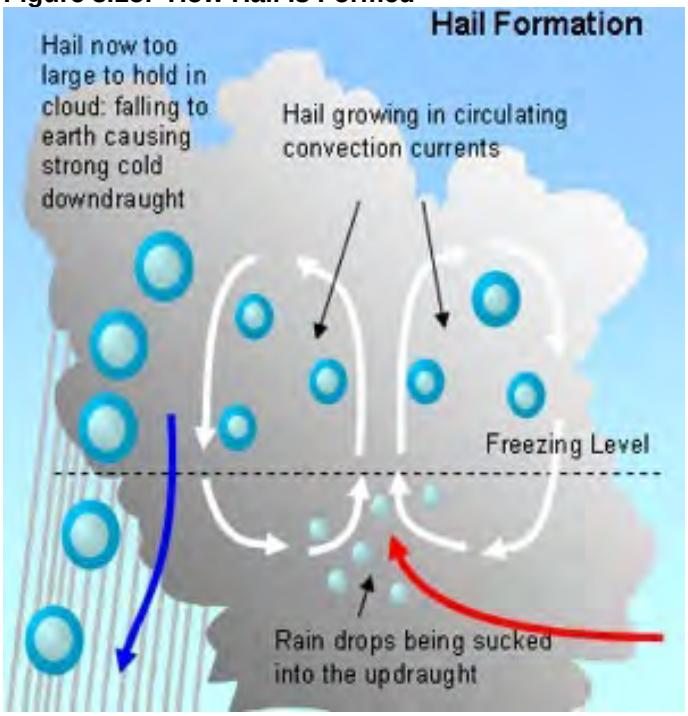
Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**14 Events**	**16 ft**	**66.7%**	**$5,000**	**Medium**
Countywide	4 Events	N/A	19.0%	$10,750	Medium
Unincorp. Lowndes County	5 Events	16 ft	23.8%	$5,000	Medium
Town of Benton	1 Event	10 ft	4.8%	$0	Medium
Town of Fort Deposit	0 Events	1 ft	0.0%	$0	Low
Town of Gordonville	2 Events	1 ft	9.5%	$0	Low
Town of Hayneville	1 Events	3 ft	4.8%	$2,000	Low
Town of Lowndesboro	0 Events	0 ft	0.0%	$0	Very Low
Town of Mosses	1 Event	1 ft	4.8%	$0	Low
Town of White Hall	0 Events	16 ft	0.0%	$0	Medium
Macon County	**8 Events**	**15 ft**	**38.1%**	**$19,500**	**Medium**
Countywide	5 Events	N/A	23.8%	$10,000	Medium
Unincorp. Macon County	0 Events	15 ft	0.0%	$0	Low
Town of Franklin	0 Events	0 ft	0.0%	$0	Very Low
Town of Notasulga	1 Event	5 ft	4.8%	$0	Low
Town of Shorter	1 Event	6 ft	4.8%	$100,000	Medium
City of Tuskegee	1 Event	8 ft	4.8%	$6,000	Low

3.8 Hail

Description.

Hail is a form of solid precipitation that forms in strong thunderstorm clouds, particularly those with intense updrafts, high liquid water content, great vertical extent, large water droplets, and where a good portion of the cloud layer is below freezing. Hail is an outgrowth of severe thunderstorms and develops within a low-pressure front as warm air rises rapidly into the upper atmosphere and is subsequently cooled, as shown in Figure 3.15, leading to the formation of ice crystals. These are bounced about by high-velocity updraft winds and accumulate into frozen droplets, falling as precipitation after developing enough weight. Hailstones generally fall at higher speeds as they grow in size, though complicating factors such as melting, friction with air, wind, and interaction with rain and other hailstones can slow their descent through Earth's atmosphere. Severe weather warnings are issued for hail when the stones reach a damaging size, as it can cause serious damage to human-made structures and, most commonly, farmers' crops.

Figure 3.15: How Hail Is Formed



Source: North Carolina Climate Office, North Carolina State University, Severe Weather Hazards. https://climate.ncsu.edu/edu/SevereHazards

Location.

The occurrence of hail has not been isolated to any one part of Lowndes County or Macon County. Since 2000, Lowndes County has experienced a total of 37 hail events, of which nine were in Fort Deposit, ten were in Hayneville, six were in Lowndesboro, five were in White Hall, and seven were in the unincorporated areas. Macon County has experienced a total of 28 hail events, of which eight were in Notasulga, eight were in Shorter, one was in Tuskegee, and 11 were in the unincorporated areas.

Extent.

The extent of hail is measured using the TORRO Scale of the Tornado and Storm Research Organization that classifies the intensity of hail into ten categories based on size and probable kinetic energy, as shown in Figure 3.16. Of the hail events in the planning area, one event in Davenport, an unincorporated community in Lowndes County, produced 3.5 inch hail (88.9 mm), which is in the H9 Super Hailstorm category that is capable of structural damage and fatal injuries. Another event in Notasulga (Macon County) produced 2.5 inch hail (69.9 mm), which is in the H8 Destructive category and could severely damage aircraft bodywork. Further, nine events in Lowndes County and ten events in Macon County produced 1.75 inch hail (44.45 mm), which is the H5 to H6-Destructive intensity categories that are capable of the wholesale destruction of glass, cause damage to tile roofs, dent grounded aircraft, and pit brick walls.

Figure 3.16: TORRO Hailstorm Intensity Scale

Intensity Category		Typical Hail Diameter (mm)*	Probable Kinetic Energy, J-m^2	Typical Damage Impacts
H0	Hard Hail	5	0-20	No damage
H1	Potentially Damaging	5-**15**	>20	Slight general damage to plants, crops
H2	Significant	10-**20**	>100	Significant damage to fruit, crops, vegetation
H3	Severe	20-**30**	>300	Severe damage to fruit and crops, damage toglass and plastic structures, paint and wood scored
H4	Severe	25-**40**	>500	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-**50**	>800	Wholesale destruction of glass, damage to tiledroofs, significant risk of injuries
H6	Destructive	40-**60**		Bodywork of grounded aircraft dented; brick wallspitted
H7	Destructive	50-**75**		Severe roof damage, risk of serious injuries
H8	Destructive	60-**90**		(Severest recorded in the British Isles) Severedamage to aircraft bodywork
H9	Super Hailstorms	75-**100**		Extensive structural damage. Risk of severe oreven fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage. Risk of severe oreven fatal injuries to persons caught in the open

*Approximate range (typical maximum size in bold), since other factors (e.g. number and density ofhailstones, hail fall speed and surface wind speeds) affect severity.

Source: TORRO, The Tornado and Storm Research Organization; http://www.torro.org.uk/hscale.php

Historical Occurrences.

According to the National Centers for Environmental Information, Lowndes County experienced 37 hail events and Macon County experienced 28 events between 2000 and 2020. Tables 3.17.1 and 3.17.2 provide a list and summary of all hail events by jurisdiction. Property damage from hail events in Lowndes County was $83,000; and in Macon County, property damage was $181,000. The event with the largest hail in Lowndes County, surprisingly, did not result in reported property or crop damage, and no one was injured or hurt. The most damaging event in Macon County occurred on April 25, 2003 in Notasulga and resulted in $85,000 in property damage.

Table 3.17.1: Lowndes County Hail Events

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Fort Deposit	3/9/2003	Hail	1.75	0	0	$5,000	$0
Fort Deposit	3/9/2003	Hail	0.75	0	0	$0	$0
Fort Deposit	5/2/2003	Hail	0.88	0	0	$0	$0
Fort Deposit	3/27/2005	Hail	1.75	0	0	$11,000	$0
Fort Deposit	3/27/2005	Hail	1.75	0	0	$8,000	$0
Fort Deposit	3/27/2005	Hail	0.75	0	0	$0	$0
Fort Deposit	3/27/2005	Hail	0.75	0	0	$0	$0
Fort Deposit	4/22/2005	Hail	1.75	0	0	$4,000	$0
Fort Deposit	5/14/2006	Hail	0.75	0	0	$0	$0
Hayneville	3/27/2005	Hail	0.88	0	0	$0	$0
Hayneville	4/22/2005	Hail	1	0	0	$1,000	$0
Hayneville	11/28/2005	Hail	1.75	0	0	$1,000	$0
Hayneville	3/1/2007	Hail	1	0	0	$0	$0

Hayneville	4/14/2007	Hail	0.88	0	0	$0	$0
Hayneville	3/10/2010	Hail	0.75	0	0	$0	$0
Hayneville	2/24/2012	Hail	0.75	0	0	$0	$0
Hayneville	2/24/2012	Hail	1	0	0	$0	$0
Hayneville	5/21/2012	Hail	0.88	0	0	$0	$0
Hayneville	1/21/2017	Hail	1	0	0	$0	$0
Lowndesboro	1/9/2000	Hail	0.88	0	0	$0	$0
Lowndesboro	4/2/2000	Hail	1	0	0	$0	$0
Lowndesboro	4/30/2002	Hail	1	0	0	$0	$0
Lowndesboro	4/25/2003	Hail	1	0	0	$20,000	$0
Lowndesboro	2/22/2005	Hail	1	0	0	$0	$0
Lowndesboro	3/26/2005	Hail	0.88	0	0	$0	$0
White Hall	4/2/2000	Hail	1	0	0	$3,000	$0
White Hall	4/25/2003	Hail	1	0	0	$0	$0
White Hall	3/27/2005	Hail	0.75	0	0	$0	$0
White Hall	4/22/2005	Hail	1.75	0	0	$5,000	$0
White Hall	4/22/2005	Hail	1.75	0	0	$5,000	$0
Unincorporated	3/30/2005	Hail	1.75	0	0	$18,000	$0
Unincorporated	4/21/2005	Hail	1	0	0	$1,000	$0
Unincorporated	4/22/2005	Hail	0.75	0	0	$1,000	$0
Unincorporated	5/10/2006	Hail	1.75	0	0	$0	$0
Unincorporated	4/4/2008	Hail	0.75	0	0	$0	$0
Unincorporated	2/24/2012	Hail	0.88	0	0	$0	$0
Unincorporated	7/22/2018	Hail	3.5	0	0	$0	$0
Jurisdictional Summary: Lowndes County Hail Events							
Countywide		0 Events		0	0	$0	$0
Benton		0 Events		0	0	$0	$0
Fort Deposit		9 Events		0	0	$28,000	$0
Gordonville		0 Events		0	0	$0	$0
Hayneville		10 Events		0	0	$2,000	$0
Lowndesboro		6 Events		0	0	$20,000	$0
Mosses		0 Events		0	0	$0	$0
White Hall		5 Events		0	0	$13,000	$0
Unincorporated Lowndes County		7 Events		0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.17.2: Macon County Hail Events

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Shorter	3/10/2000	Hail	1.75	0	0	$4,000	$0
Unincorporated	3/10/2000	Hail	1.75	0	0	$3,000	$0
Unincorporated	3/10/2000	Hail	1	0	0	$0	$0
Unincorporated	3/10/2000	Hail	1.75	0	0	$3,000	$0
Unincorporated	3/10/2000	Hail	1	0	0	$0	$0
Unincorporated	3/10/2000	Hail	1.75	0	0	$3,000	$0
Shorter	8/20/2002	Hail	1.75	0	0	$2,000	$0
Notasulga	4/25/2003	Hail	2.75	0	0	$85,000	$0
Shorter	4/25/2003	Hail	1.75	0	0	$50,000	$0
Unincorporated	6/27/2004	Hail	0.75	0	0	$0	$0
Shorter	3/27/2005	Hail	1.75	0	0	$11,000	$0
Unincorporated	3/27/2005	Hail	0.88	0	0	$0	$0
Shorter	3/30/2005	Hail	1.75	0	0	$18,000	$0

Notasulga	4/22/2005	Hail	1	0	0	$1,000	$0
Unincorporated	4/22/2005	Hail	0.75	0	0	$1,000	$0
Shorter	8/16/2005	Hail	0.75	0	0	$0	$0
Shorter	8/16/2005	Hail	0.75	0	0	$0	$0
Unincorporated	9/28/2006	Hail	0.75	0	0	$0	$0
Shorter	11/15/2006	Hail	0.75	0	0	$0	$0
Notasulga	6/15/2010	Hail	1.75	0	0	$0	$0
Unincorporated	3/26/2011	Hail	1.75	0	0	$0	$0
Notasulga	3/27/2011	Hail	1	0	0	$0	$0
Notasulga	6/16/2011	Hail	1	0	0	$0	$0
Tuskegee	7/1/2011	Hail	0.88	0	0	$0	$0
Unincorporated	1/21/2012	Hail	0.75	0	0	$0	$0
Notasulga	3/18/2013	Hail	1	0	0	$0	$0
Notasulga	3/25/2019	Hail	0.88	0	0	$0	$0
Notasulga	4/8/2020	Hail	1	0	0	$0	$0
Jurisdictional Summary: Macon County Hail							
Countywide		0 Events		0	0	$0	$0
Franklin		0 Events		0	0	$0	$0
Notasulga		8 Events		0	0	$86,000	$0
Shorter		8 Events		0	0	$85,000	$0
Tuskegee		1 Event		0	0	$0	$0
Unincorporated Lowndes County		11 Events		0	0	$10,000	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.

Lowndes County has experienced 37 hail events in the last 21 years, which equates to a greater **100.0 percent** (1.76) probability of future hail events. There were no deaths, injuries or crop damage from the events. The combined property damage from the 37 events was $83,000, or **$2,243 per event**. Macon County has experienced 37 hail events in the last 21 years, which equates to a greater **100.0 percent** (1.33) probability of future hail events. There were no deaths, injuries or crop damage from the events. The combined property damage from the 37 events was $181,000, or **$6,464 per event**. As shown in Table3.18, the impact of future hail events for all jurisdictions in Lowndes County and Macon County is considered to be **Medium** with probable major damage within a 10 to 50-year period throughout the planning area. Each community is equally susceptible to hail, although some do not have any reported events. It is unlikely, however, that a hail storm will be a countywide event.

Table 3.18: Hail Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**37 Events**	3.5 in (88.9 mm)	**>100.0%**	**$6,464**	**Medium**
Countywide	0 Events	N/A	0.0%	$0	Low
Unincorp. Lowndes Co.	7 Events	3.5 in (88.9 mm)	33.3%	$2,857	Medium
Town of Benton	0 Events	N/A	0.0%	$0	Medium
Town of Fort Deposit	9 Events	1.75 in (44.5 mm)	42.9%	$3,111	Medium
Town of Gordonville	0 Events	N/A	0.0%	$0	Medium
Town of Hayneville	10 Events	1.75 in (44.5 mm)	47.6%	$200	Medium

Town of Lowndesboro	6 Events	1.0 in (25.4 mm)	28.6%	$3,333	Medium
Town of Mosses	0 Events	N/A	0.0%	$0	Medium
Town of White Hall	5 Events	1.75 in (44.5 mm)	23.8%	$2,600	Medium
Macon County	**28 Events**	**3.5 inches (889 mm)**	**>100.0%**	**$19,500**	**Medium**
Countywide	0 Events	N/A	0.00%	$0	Low
Unincorp. Macon County	0 Events	N/A	52.4%	$909	Medium
Town of Franklin	0 Events	N/A	0.0%	$0	Medium
Town of Notasulga	8 Events	2.75 in (69.9 mm)	38.1%	$10,750	Medium
Town of Shorter	8 Events	1.75 in (44.5 mm)	38.1%	$10,625	Medium
City of Tuskegee	11 Events	1.75 in (44.5 mm)	4.8%	$0	Medium

3.9 High winds, Thunderstorms, Severe Storms

Description.
Lowndes County and Macon County are susceptible to high winds, thunderstorms and severe storms. These types of high wind events may occur any time of year but occur more often in spring, summer, and fall seasons. Thunderstorms are generated by atmospheric imbalance due to the combination of unstable warm air rising rapidly into the atmosphere, sufficient moisture to form clouds and rain, and an upward lift of air currents caused by colliding waterfronts, sea breezes, or mountains. The effects of thunderstorms may impact a small area or multiple jurisdictions. Severe thunderstorms may produce damage equivalent to tornadoes over a larger spatial area. Thunderstorm events may occur year-round, but the peak of severe thunderstorm events is in spring with a smaller peak in fall. Thunderstorms can produce hail, floods, lightning, and tornados. All of these hazards caused by severe storms and thunderstorms, however, are addressed as separate hazard events.

Location.
The occurrence of high winds, thunderstorms and severe storms has not been isolated to any one part of the planning area. From January 1, 2000 through December 31, 2020 (a 21-year time period), Lowndes County experienced 55 high wind, severe storm, and thunderstorm events, according to the National Centers for Environmental Information. Of the 55 events, six were countywide events, 21 events occurred in the unincorporated part of Lowndes County, six events were in Fort Deposit, one event was in Gordonville, 11 events were in Hayneville, four events were in Lowndesboro, six events were in White Hall. The Town of Benton and the Town of Mosses are the only jurisdictions in Lowndes County that did not have a reported high wind, thunderstorm, or severe storm event.

During the same time frame, Macon County experienced 52 high wind, severe storm, and thunderstorm events. Of the 52 events, nine were countywide events, 16 events occurred in the unincorporated area, two events were in Franklin, nine events were in Notasulga, seven events were in Shorter, and nine events were in Tuskegee.

Extent.
Severe thunderstorms are defined by the National Weather Service as having one or more of the following: wind speeds of 58 miles per hour or higher (50 knots), producing hail at least 0.75-inches in diameter, or possessing tornadic capabilities. Severe thunderstorms have varying spatial effects throughout an area from widespread to localized impacts. Severe thunderstorms with straight line winds can create wind gusts up to the equivalence of an EF1 tornado.

High winds, severe storms, and thunderstorms have been common events for all the planning area in the past and will continue to be so in the future. The most extreme of these events in Lowndes County was associated with Hurricane Ivan and occurred on September 16, 2004. This event was a countywide thunderstorm and wind event that produced the county's strongest winds, with estimated winds of 77 knots (88.6 mph), causing $3.5 million in property damage and $200,000 in crop damage. Reports stated that thousands of trees and power lines were snapped off or blown down and utilities were not restored for at least one week. The storm damaged several dozen homes with varying degrees of wind damage and debris removal took up to one month in some locations.

Additionally, a thunderstorm in the Hayneville area on April 30, 2005 with 60 knot winds resulted in four injuries and $100,000 in property damages.

In Macon County, the storm event with the strongest winds, at 65 knots (74.8 mph), occurred on August 22, 2010 near the Town of Franklin and resulted in $5,000 in property damage. The storm that had the most impact was a countywide event associated with Hurricane Ivan that occurred on September 16, 2004. Macon County experienced estimated winds of 60 knots (69 mph) and five inches of rain. The 2004 storm resulted in $400,000 in property damages and $35,000 in crop damages. Reports state that hundreds of trees and power lines were blown down across Macon County and at least 300 homes suffered varying degrees of wind damage. A few roads and creeks were briefly flooded, and although power was restored to most location in two days, debris removal took up to two weeks.

Historical Occurrences.

Lowndes County had 55 high wind and storm events, causing $3,779,000 in property damage and $200,000 in crop damage. According to the National Centers for Environmental Information event descriptions, 49 events were classified as thunderstorm wind, two were strong wind, two were high wind, and two were heavy rain. Macon County had 44 thunderstorm wind events, five strong wind events, two heavy rain events, and on high wind event. Tables 3.19.1 and 3.19.2 provide a list of events over a 21-year time period from January 1, 2000 through December 31, 2020, including the type of event, and a summary of events by jurisdiction, with the extent and total damages.

Table 3.19.1: Lowndes County High Wind, Thunderstorm and Severe Storm Events

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Hayneville	8/10/2000	Thunderstorm Wind	50	0	0	$1,000	$0
White Hall	8/10/2000	Thunderstorm Wind	50	0	0	$2,000	$0
Hayneville	1/19/2001	Thunderstorm Wind	50	0	0	$3,000	$0
Countywide	8/6/2001	Heavy Rain		0	0	$0	$0
Hayneville	4/7/2003	Thunderstorm Wind	50	0	0	$5,000	$0
Lowndesboro	4/7/2003	Thunderstorm Wind	55	0	0	$20,000	$0
Unincorporated	4/7/2003	Thunderstorm Wind	55	0	0	$5,000	$0
Countywide	9/16/2004	High Wind	77	0	0	$3,500,000	$200,000
Unincorporated	10/19/2004	Thunderstorm Wind	50	0	0	$2,000	$0
Lowndesboro	11/24/2004	Thunderstorm Wind	52	0	0	$14,000	$0
Countywide	3/7/2005	Thunderstorm Wind	50	0	0	$2,000	$0
Fort Deposit	3/27/2005	Thunderstorm Wind	50	0	0	$4,000	$0
White Hall	4/21/2005	Thunderstorm Wind	51	0	0	$3,000	$0
Hayneville	4/30/2005	Thunderstorm Wind	60	0	4	$100,000	$0
White Hall	4/30/2005	Thunderstorm Wind	55	0	0	$26,000	$0
Countywide	6/11/2005	Strong Wind	40	0	0	$2,000	$0
Fort Deposit	4/14/2007	Thunderstorm Wind	50	0	0	$5,000	$0
Unincorporated	7/10/2007	Thunderstorm Wind	50	0	0	$2,000	$0
White Hall	7/10/2007	Thunderstorm Wind	50	0	0	$2,000	$0
Unincorporated	8/30/2007	Thunderstorm Wind	50	0	0	$2,000	$0
Gordonville	10/23/2007	Thunderstorm Wind	50	0	0	$2,000	$0
Unincorporated	10/23/2007	Thunderstorm Wind	50	0	0	$5,000	$0
Unincorporated	10/23/2007	Thunderstorm Wind	50	0	0	$7,000	$0
Countywide	1/29/2008	Strong Wind	39	0	0	$20,000	$0
Fort Deposit	2/26/2008	Thunderstorm Wind	50	0	0	$5,000	$0

Hayneville	6/28/2008	Thunderstorm Wind	39	0	0	$500	$0
Hayneville	6/29/2008	Thunderstorm Wind	50	0	0	$2,000	$0
White Hall	6/29/2008	Thunderstorm Wind	50	0	0	$2,000	$0
White Hall	7/13/2008	Thunderstorm Wind	50	0	0	$1,000	$0
Unincorporated	2/27/2009	Thunderstorm Wind	50	0	0	$1,000	$0
Hayneville	5/3/2009	Thunderstorm Wind	50	0	0	$10,000	$0
Unincorporated	5/3/2009	Thunderstorm Wind	50	0	0	$1,000	$0
Fort Deposit	8/8/2010	Heavy Rain		0	0	$1,500	$0
Unincorporated	8/8/2010	Thunderstorm Wind	55	0	0	$3,000	$0
Unincorporated	4/4/2011	Thunderstorm Wind	50	0	0	$8,000	$0
Unincorporated	6/21/2011	Thunderstorm Wind	50	0	0	$2,000	$0
Hayneville	11/16/2011	Thunderstorm Wind	50	0	0	$5,000	$0
Lowndesboro	11/16/2011	Thunderstorm Wind	65	0	0	$1,000	$0
Unincorporated	11/16/2011	Thunderstorm Wind	52	0	0	$2,000	$0
Unincorporated	1/23/2012	Thunderstorm Wind	60	0	0	$0	$0
Hayneville	2/24/2012	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	2/24/2012	Thunderstorm Wind	50	0	0	$0	$0
Fort Deposit	4/7/2014	Thunderstorm Wind	50	0	0	$0	$0
Lowndesboro	6/6/2014	Thunderstorm Wind	50	0	0	$0	$0
Hayneville	6/24/2015	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	1/21/2017	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	1/22/2017	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	4/18/2019	Thunderstorm Wind	50	0	0	$0	$0
Hayneville	5/9/2019	Thunderstorm Wind	50	0	0	$0	$0
Fort Deposit	3/31/2020	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	4/19/2020	Thunderstorm Wind	50	0	0	$0	$0
Countywide	4/23/2020	High Wind	50	0	0	$0	$0
Unincorporated	7/12/2020	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	7/12/2020	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	7/12/2020	Thunderstorm Wind	50	0	0	$0	$0
Jurisdictional Summary: Lowndes County High Winds, Thunderstorms and Severe Storms							
Countywide		6 Events		0	0	$3,524,000	$200,000
Benton		0 Events		0	0	$0	$0
Fort Deposit		6 Events		0	0	$15,500	$0
Gordonville		1 Event		0	0	$2,000	$0
Hayneville		11 Events		0	4	$126,500	$0
Lowndesboro		4 Events		0	0	$35,000	$0
Mosses		0 Events		0	0	$0	$0
White Hall		6 Events		0	0	$36,000	$0
Unincorporated Lowndes County		21 Events		0	0	$40,000	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.19.1: Macon County High Wind, Thunderstorm and Severe Storm Events

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Tuskegee	3/19/2000	Thunderstorm Wind	55	0	0	$2,000	$0
Countywide	7/20/2000	Thunderstorm Wind	55	0	0	$50,000	$0
Notasulga	8/10/2000	Thunderstorm Wind	50	0	0	$2,000	$0
Tuskegee	8/10/2000	Thunderstorm Wind	50	0	0	$3,000	$0
Tuskegee	1/19/2001	Thunderstorm Wind	55	0	0	$2,000	$0
Notasulga	3/15/2001	Thunderstorm Wind	60	0	0	$18,000	$0
Shorter	6/14/2001	Thunderstorm Wind	50	0	0	$3,000	$0

Countywide	8/6/2001	Heavy Rain		0	0	$0	$0
Shorter	8/20/2002	Thunderstorm Wind	50	0	0	$2,000	$0
Tuskegee	8/20/2002	Thunderstorm Wind	50	0	0	$8,000	$0
Tuskegee	4/24/2003	Thunderstorm Wind	55	0	0	$3,000	$0
Shorter	6/17/2003	Thunderstorm Wind	50	0	0	$5,000	$0
Countywide	9/7/2004	Strong Wind	33	0	0	$1,000	$0
Countywide	9/16/2004	High Wind	60	0	0	$400,000	$35,000
Notasulga	11/24/2004	Thunderstorm Wind	52	0	0	$20,000	$0
Unincorporated	3/31/2005	Thunderstorm Wind	52	0	0	$5,000	$0
Unincorporated	3/31/2005	Thunderstorm Wind	52	0	0	$7,000	$0
Countywide	4/12/2005	Strong Wind	40	0	0	$1,000	$0
Countywide	4/30/2005	Thunderstorm Wind	52	0	0	$3,000	$0
Tuskegee	3/20/2006	Thunderstorm Wind	50	0	0	$10,000	$0
Unincorporated	1/5/2007	Thunderstorm Wind	50	0	0	$3,000	$0
Shorter	4/4/2008	Thunderstorm Wind	50	0	0	$2,000	$0
Unincorporated	6/15/2008	Thunderstorm Wind	50	0	0	$2,000	$0
Unincorporated	7/21/2008	Thunderstorm Wind	50	0	0	$500	$0
Unincorporated	4/10/2009	Thunderstorm Wind	50	0	0	$2,000	$0
Unincorporated	4/19/2009	Thunderstorm Wind	50	0	0	$500	$0
Unincorporated	4/19/2009	Thunderstorm Wind	50	0	0	$500	$0
Tuskegee	5/3/2009	Thunderstorm Wind	50	0	0	$15,000	$0
Unincorporated	7/5/2009	Thunderstorm Wind	50	0	0	$1,000	$0
Unincorporated	6/5/2010	Thunderstorm Wind	55	0	0	$50,000	$0
Franklin	8/22/2010	Thunderstorm Wind	65	0	0	$5,000	$0
Unincorporated	2/28/2011	Thunderstorm Wind	50	0	0	$5,000	$0
Tuskegee	4/4/2011	Thunderstorm Wind	52	0	0	$0	$0
Unincorporated	7/1/2011	Thunderstorm Wind	50	0	0	$15,000	$0
Countywide	9/5/2011	Strong Wind	39	0	0	$8,000	$0
Unincorporated	9/5/2011	Heavy Rain		0	0	$7,000	$0
Shorter	11/16/2011	Thunderstorm Wind	50	0	0	$2,000	$0
Tuskegee	7/5/2012	Thunderstorm Wind	50	0	0	$0	$0
Franklin	12/10/2012	Thunderstorm Wind	50	0	0	$0	$0
Shorter	12/10/2012	Thunderstorm Wind	50	0	0	$0	$0
Notasulga	12/25/2012	Thunderstorm Wind	55	0	0	$0	$0
Unincorporated	7/23/2013	Thunderstorm Wind	55	0	0	$0	$0
Countywide	4/18/2014	Strong Wind	35	0	0	$3,000	$0
Notasulga	6/24/2015	Thunderstorm Wind	50	0	0	$0	$0
Notasulga	6/17/2016	Thunderstorm Wind	50	0	0	$0	$0
Shorter	7/11/2016	Thunderstorm Wind	50	0	0	$0	$0
Notasulga	6/15/2017	Thunderstorm Wind	58	0	0	$0	$0
Notasulga	8/8/2019	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	1/11/2020	Thunderstorm Wind	50	0	0	$0	$0
Unincorporated	2/6/2020	Thunderstorm Wind	50	0	0	$0	$0
Notasulga	4/12/2020	Thunderstorm Wind	59	0	0	$0	$0
Countywide	9/16/2020	Strong Wind	39	0	0	$0	$50,000
Jurisdictional Summary: Macon County High Winds, Thunderstorms and Severe Storms							
Countywide		9 Events		0	0	$466,000	$85,000
Franklin		2 Events		0	0	$5,000	$0
Notasulga		9 Events		0	0	$40,000	$0
Shorter		7 Events		0	0	$14,000	$0
Tuskegee		9 Event		0	0	$43,000	$0
Unincorporated Lowndes County		16 Events		0	0	$98,500	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.
Lowndes County has experienced 55 high wind, severe storm and thunderstorm events in the last 21 years, which equates to **greater than 100 percent** (2.6) probability that such an event will occur on an annual basis. There were no deaths but four injuries from the events. The combined property and crop damage from the events was just under $3.98 million, or **$620,667 per event**. Macon County experienced 52 high wind, severe storm and thunderstorm events in the last 21 years, which equates to **greater than 100 percent** (2.5) probability that such an event will occur on an annual basis. There were no deaths or injuries from the events. The combined property and crop damage from the events was $751,500, or **$14,452 per event**. As shown in Table 3.20, the impact of future high wind, thunderstorm and severe storm events for all jurisdictions in Lowndes County and Macon County is considered to be **High** with probable major damage within a 10-year period throughout the planning area.

Table 3.20: High Winds/Thunderstorms/Severe Storms Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**55 Events**	**77 kts**	**>100.0%**	**$72,345**	**High**
Countywide	6 Events	77 kts	28.6%	$620,667	High
Unincorp. Lowndes Co.	21 Events	60 kts	100.0%	$1,905	High
Town of Benton	0 Events	n/a	0.0%	$0	High
Town of Fort Deposit	6 Events	50 kts	28.6%	$2,583	High
Town of Gordonville	1 Event	50 kts	4.8%	$2,000	High
Town of Hayneville	11 Events	60 kts	52.4%	$11,500	High
Town of Lowndesboro	4 Events	65 kts	19.0%	$8,750	High
Town of Mosses	0 Events	n/a	0.0%	$0	High
Town of White Hall	6 Events	55 kts	28.6%	$6,000	High
Macon County	**52 Events**	**65 kts**	**>100.0%**	**$114,452**	**High**
Countywide	9 Events	60 kts	42.9%	$61,222	High
Unincorp. Macon County	16 Events	55 kts	76.2%	$6,156	High
Town of Franklin	2 Events	65 kts	9.5%	$2,500	High
Town of Notasulga	9 Events	60 kts	42.9%	$4,444	High
Town of Shorter	7 Events	50 kts	33.3%	$2,000	High
City of Tuskegee	9 Events	55 kts	42.9%	$4,778	High

3.10 Landslides

Description.
The Geological Survey of Alabama (GSA) defines a landslide as a perceptible downward and outward movement of slope-forming soil, rock, and vegetation under the influence of gravity. In a landslide, masses of rock, earth or debris move down a slope. Debris and mud flows are rivers of rock, earth, and other debris saturated with water. They develop when water rapidly accumulates in the ground, during heavy rainfall or rapid snowmelt, changing the earth into a flowing river of mud or "slurry." They can flow rapidly, striking with little or no warning at avalanche speeds. They also can travel several miles from their source, growing in size as they pick up trees, boulders, cars and other materials. Landslides can be caused by a variety of factors including earthquakes, storms, volcanic eruptions, fire and by human modification of land. A combination of two or more landslide movements is referred to as a complex movement. Below is a brief discussion of the various types of landslide movements.

- Slides are downward displacements along one or more failure surfaces of soil or rock. The material may be a single intact mass or a number of pieces. The sliding may be rotational (turning about a point) or translational (movement roughly parallel to the failure surface).
- Flows are a form of rapid mass movement by loose soils, rocks, and organic matter, together with air and water that form slurry flowing rapidly downhill. Flows are distinguished from slides by high water content and velocities that resemble those of viscous liquids.
- Lateral spreads are large movements of rock, fine-grained soils (i.e., quick clays), or granular soils, distributed laterally. Liquefaction may occur in loose, granular soils, and can occur spontaneously due to changes in pore-water pressure or due to earthquake vibrations.
- Falls and topples are masses of rocks or material that detach from a steep slope or cliff that free-fall, roll, or bounce. Movements typically are rapid to extremely rapid. Earthquakes commonly trigger rock falls.
- Almost any steep or rugged terrain is susceptible to landslides under the right conditions. The most hazardous areas are steep slopes on ridges, hill, and mountains; incised stream channels; and slopes excavated for buildings and roads. Slide potentials are enhanced where slopes are destabilized by construction or river erosion. Road cuts and other altered or excavated areas are particularly susceptible to landslides and debris flows. Rainfall and seismic shaking by earthquakes or blasting can trigger landslides.
- Debris flows (also referred to as mudslides) generally occur during intense rainfall on water saturated soil. They usually start on steep hillsides as soil slumps or slides that liquefy and accelerate to speeds as great as 35 miles per hour. Multiple debris flows may merge, gain volume, and travel long distances from their source, making areas down slope particularly hazardous. Surface runoff channels along roadways and below culverts are common sites of debris flows and other landslides (USGS, 2000).
- Landslides often occur together with other major natural disasters, such as the following, thereby exacerbating relief and reconstruction efforts:
    - Floods and landslides are closely related and both involve precipitation, runoff, and

ground saturation that may be the result of severe thunderstorms or tropical storms.

- Earthquakes may cause landslides ranging from rock falls and topples, to massive slides and flows.
- Landslides into a reservoir may indirectly compromise dam safety or a landslide may even affect the dam itself.
- Wildfires may remove vegetation from hillsides, significantly increasing runoff and landslide potential.

Landslides can occur quickly, often with little notice and the best way to prepare is to stay informed about changes in and around your home that could signal that a landslide is likely to occur.

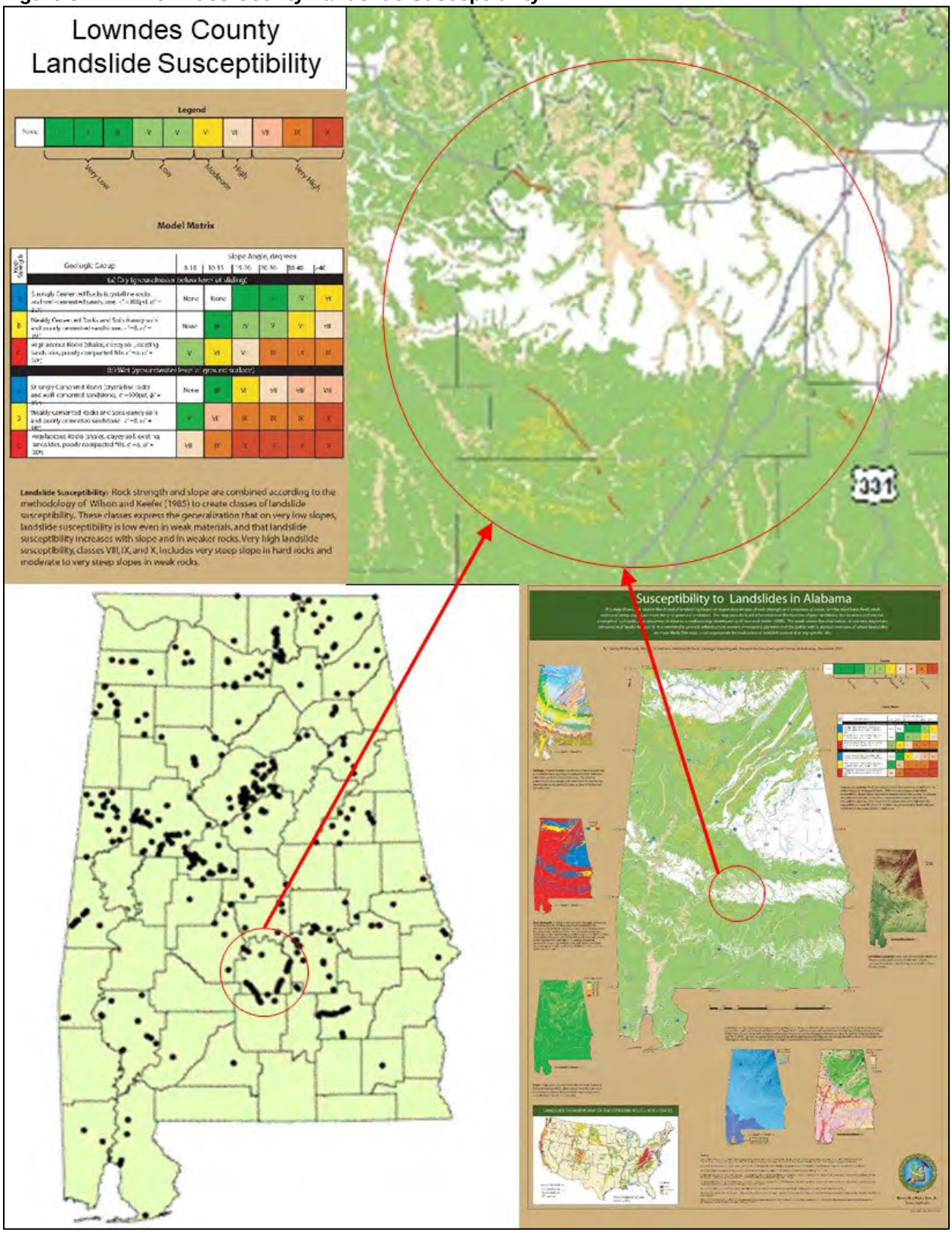
Location.
As shown in Figure 3.17.1 and 3.17.2, the GSA has mapped the State of Alabama to determine areas with high susceptibility for landslides based on geology, rock strength, slope, average precipitation, seismic potential, and historic landslides. The result of overlaying these geologic and natural components is a scale of 11 susceptibility categories from None to X (very high).

The northern and southern third of Lowndes County is rated as low in Categories IV and V, although the southern part of the county is underlain with sporadic areas of weakly cemented rocks and poorly cemented sandstone that fall into Category VI and rated as moderate susceptibility. The central part of Lowndes County is, for the most part, rated as no susceptibility. There are, however, fingers extending into Lowndes County from the Alabama River along Pintlala Creek, Tallawassee Creek, Dry Cedar Creek and Big Swamp Creek that are in Category VII and are rated as having a high susceptibility for landslides. And finally, there are small linear areas along the western part of U.S. Highway 80 as it passes through Lowndes County and along a ridge line in the southwest part of the county that coincides with weaker soils. These small linear areas fall into Category X and are rated as very high susceptibility.

The northern two-thirds of Macon County lies in Categories IV and V and is rated as having a low susceptibility to landslides. The southern third of Macon County is rated as having no susceptibility. As with Lowndes County, there are fingers extending into Macon County from the Tallapoosa River along the Uphapee, Cubahatchee, Calebee, and Line Creeks that are in Category VII with a high landslide susceptibility. Additionally, there is small linear area of Category X, very high susceptibility that is found in the eastern part of Macon County between Interstate 85 and US. Highway 80.

Extent.
There is no magnitude scale for landslides. Therefore, defining the extent of landslides is subjective and difficult to predict. Due to the low to moderate landslide susceptibility ratings throughout the planning area, the extent of landslide incidents is estimated to be primarily isolated damages to structures and infrastructure. To date there have been no reports of landslide damages in either Lowndes County or Macon County.

Figure 3.17.1: Lowndes County Landslide Susceptibility



Source: Geological Survey of Alabama. https://www.gsa.state.al.us/gsa/geologic/hazards/landslides

Figure 3.17.2: Macon County Landslide Susceptibility



Source: Geological Survey of Alabama. https://www.gsa.state.al.us/gsa/geologic/hazards/landslides

Historical Occurrences.
According to the U.S. Landslide Inventory, available through USGS and shown in Figure 3.18.1 for Lowndes County and 3.18.2 for Macon County, there have been eight potential landslides in Lowndes County and none in Macon County. The date, or even a time frame for the Lowndes County landslides is unknown. According to the Alabama State Hazard Mitigation Plan (2018), Alabama has not historically maintained a statewide record or reporting system of landslide events. The GSA has developed a map of historical landslide events based on topographic maps. It is presumed that these are how the potential landslide sites in Lowndes County were identified.

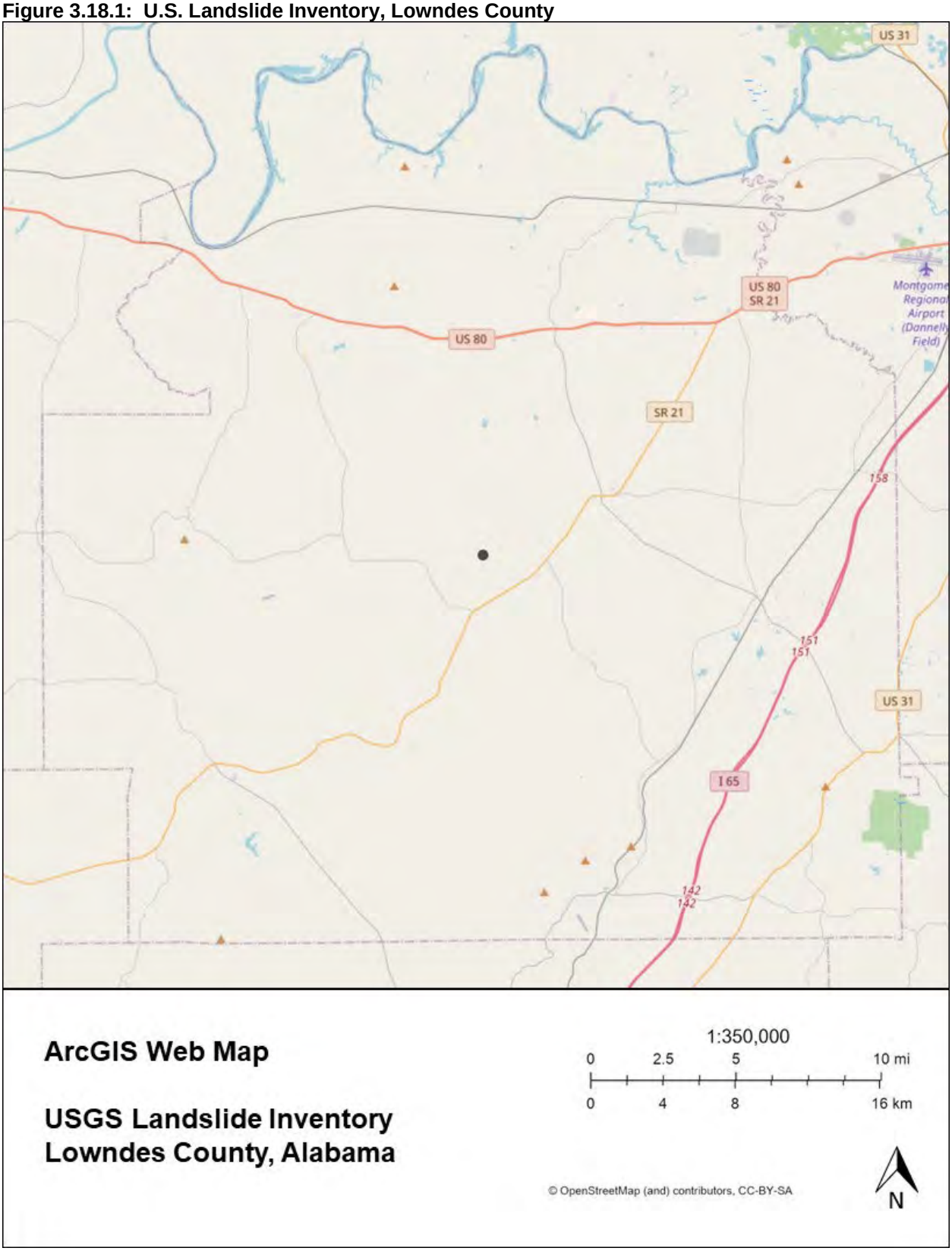
In Lowndes County, two of the eight potential landslides are in the vicinity of the Town of White Hall, south of the Alabama River. One is in the Collirene community south of the intersection of County Road 12 and County Road 9. Three of the potential landslide sites are located in the vicinity of Fort Deposit: one is northeast of Fort Deposit along County Road 37; and two are northwest of Alabama Highway 185. Another potential landslide site is in southeast Lowndes County, along U.S. Highway 31 near the intersection with Julian Town Road. The final potential landslide site is in extreme southern Lowndes County on the Lowndes-Butler County Line, near Bender Road. There are no damage estimates available for any of the potential landslide sites.

Probability of Future Events.
Based on historical information and susceptibility data from the USGS and the GSA, the probability of future landslide events for all jurisdictions in Lowndes County is **Low to Moderate** and probability in Macon County is **Very Low.** It is anticipated that most future incidents of landslides will be due to human activity and not due to natural events.

Table 3.21: Landslide Summary and Probability by Jurisdiction

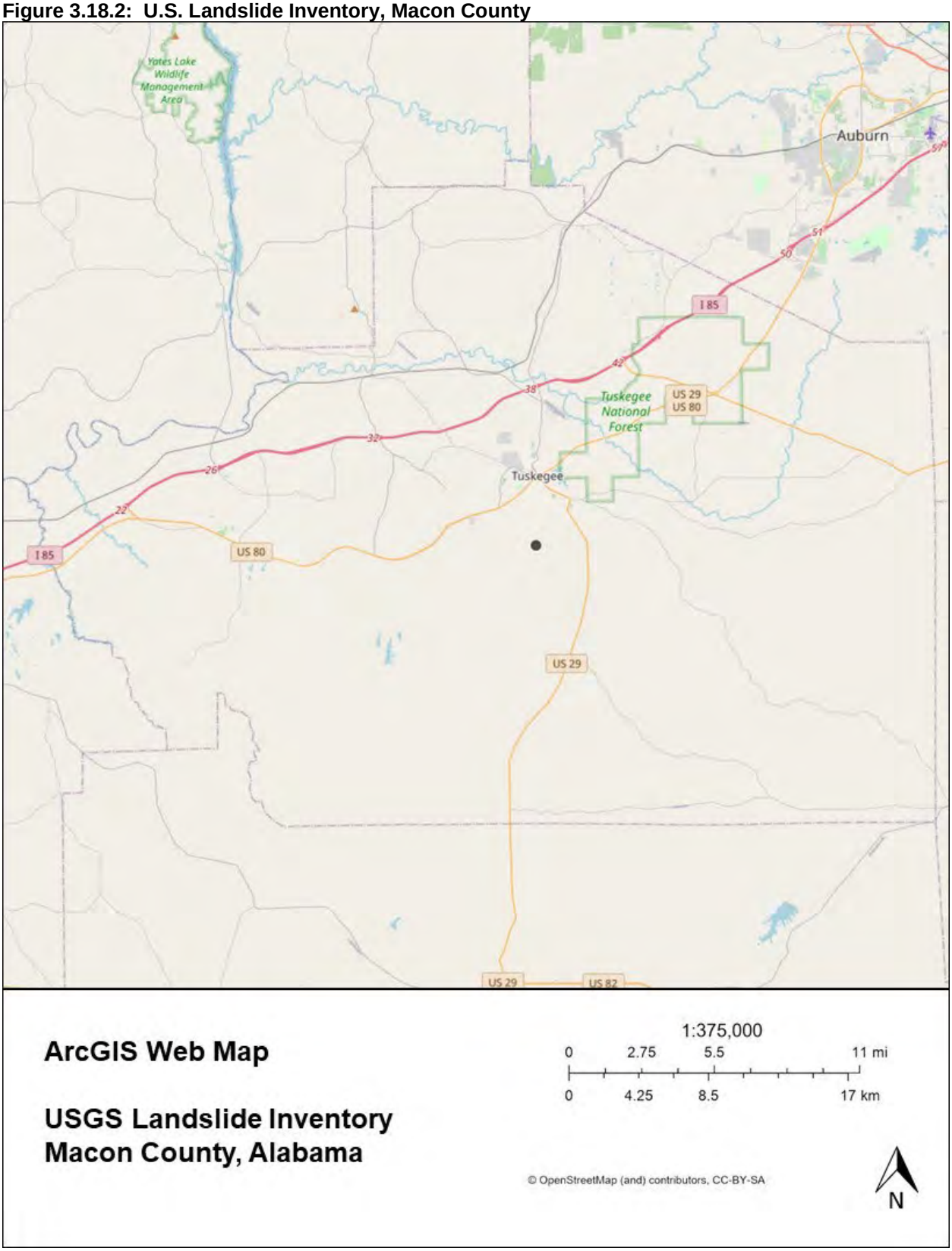
Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**8 Sites**	**unknown**	**38.1%**	**$0**	**Moderate**
Countywide	0 Sites	Unknown	0.0%	$0	Very Low
Unincorp. Lowndes Co.	6 Sites	Unknown	0.0%	$0	Moderate
Town of Benton	0 Sites	Unknown	0.0%	$0	Low
Town of Fort Deposit	0 Sites	Unknown	0.0%	$0	Low
Town of Gordonville	0 Sites	Unknown	0.0%	$0	Low
Town of Hayneville	0 Sites	Unknown	0.0%	$0	Low
Town of Lowndesboro	0 Sites	Unknown	0.0%	$0	Low
Town of Mosses	0 Sites	Unknown	0.0%	$0	Low
Town of White Hall	2 Sites	Unknown	9.5%	$0	Moderate
Macon County	**0 Sites**	**Unknown**	**0.0%**	**$0**	**Very Low**
Countywide	0 Sites	Unknown	0.0%	$0	Very Low
Unincorp. Macon County	0 Sites	Unknown	0.0%	$0	Very Low
Town of Franklin	0 Sites	Unknown	0.0%	$0	Very Low
Town of Notasulga	0 Sites	Unknown	0.0%	$0	Very Low
Town of Shorter	0 Sites	Unknown	0.0%	$0	Very Low
City of Tuskegee	0 Sites	Unknown	0.0%	$0	Very Low

Figure 3.18.1: U.S. Landslide Inventory, Lowndes County



USGS US Landslide Inventory, Lowndes County, Alabama.
https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d

Figure 3.18.2: U.S. Landslide Inventory, Macon County



USGS US Landslide Inventory, Macon County, Alabama.
https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=ae120962f459434b8c904b456c82669d

3.11 Lightning

Description.
The National Severe Storms Laboratory of NOAA defines lightning as a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges build up enough, this insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again. Lightning can occur between opposite charges within the thunderstorm cloud (intra-cloud lightning) or between opposite charges in the cloud and on the ground (cloud-to-ground lightning). Lightning is one of the oldest observed natural phenomena on earth. It can be seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms, in large hurricanes, and obviously, thunderstorms.

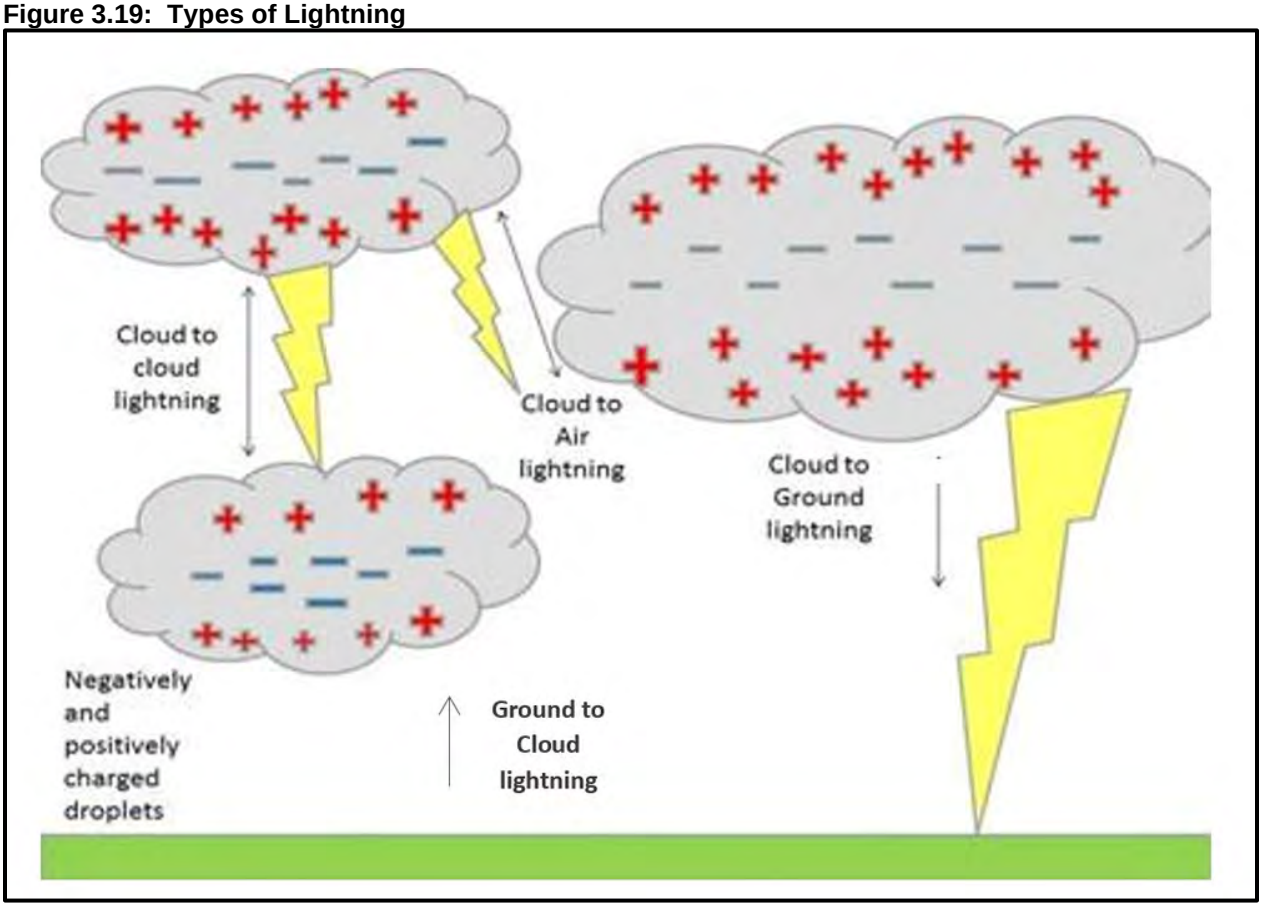
Lightning typically occurs as a by-product of a thunderstorm. The action of rising and descending air in a thunderstorm separates positive and negative charges, with lightning the result of the buildup and discharge of energy between positive and negative charge areas. Water and ice particles may also affect the distribution of the electrical charge. In only a few millionths of a second, the air near a lightning strike is heated to 50,000°F, a temperature hotter than the surface of the sun. Thunder is the result of the very rapid heating and cooling of air near the lightning that causes a shock wave.

The National Severe Storms Laboratory further explains that there are two ways that cloud to ground (CG) lightning flashes can strike ground: naturally downward (those that occur because of normal electrification in the environment), and artificially initiated or triggered upward. Artificially initiated lightning is associated with things like very tall structures, rockets and towers. Triggered lightning starts at the “ground,” which in this case may mean the top of a tower, and travels upward into the cloud, while “natural” lightning starts in the cloud and travels to ground. Upward triggered lightning usually occurs in response to a natural lightning flash, but on rare occasions can be “self-triggered”—usually in winter storms with strong winds. Lightning can also be triggered by aircraft flying through strong electric fields. If the plane is below the cloud, then a CG flash could result.

In the most common type of cloud-to-ground lightning, a channel of negative charge, called a stepped leader, will zigzag downward in roughly 50-yard segments in a forked pattern. This stepped leader is invisible to the human eye, and shoots to the ground in less time than it takes to blink. As it nears the ground, the negatively charged stepped leader causes streamer channels of positive charge to reach upward, normally from taller objects in the area, such as a tree, house, or telephone pole. When the oppositely-charged leader and streamer connect, a powerful electrical current begins flowing. This return stroke current of bright luminosity travels about 60,000 miles per second back towards the cloud. A negative CG flash consists of one or perhaps as many as 20 return strokes. We see lightning flicker when the process rapidly repeats itself several times along the same path. The actual diameter of the lightning channel current is one to two inches, surrounded by a region of charged particles.

The more common cloud-to-ground flash has a negative stepped leader that travels downward through the cloud, followed by an upward traveling return stroke. The net effect of this flash is to lower negative charge from the cloud to the ground so it is commonly referred to as a negative CG (or -CG). Less commonly, a downward traveling positive leader followed by an upward return stroke will lower positive charge to earth, referred to as a positive CG (or +CG). +CG flashes typically have only a single return stroke, and they are more likely than -CGs to have a sustained current flow. Some storms produce more +CGs and, more commonly some more -CGs (and some both) because of the charge distributions within the storms. Storms which produce mostly negative CGs tend to produce CGs earlier in the storm lifecycle and produce significantly more CGs than similar storms which instead produce mostly positive CGs.

Figure 3.19: Types of Lightning



Source: AlabamaWx Weather Blog, The National Severe Storm Laboratory, and The National Weather Service. https://www.alabamawx.com/?p=173831

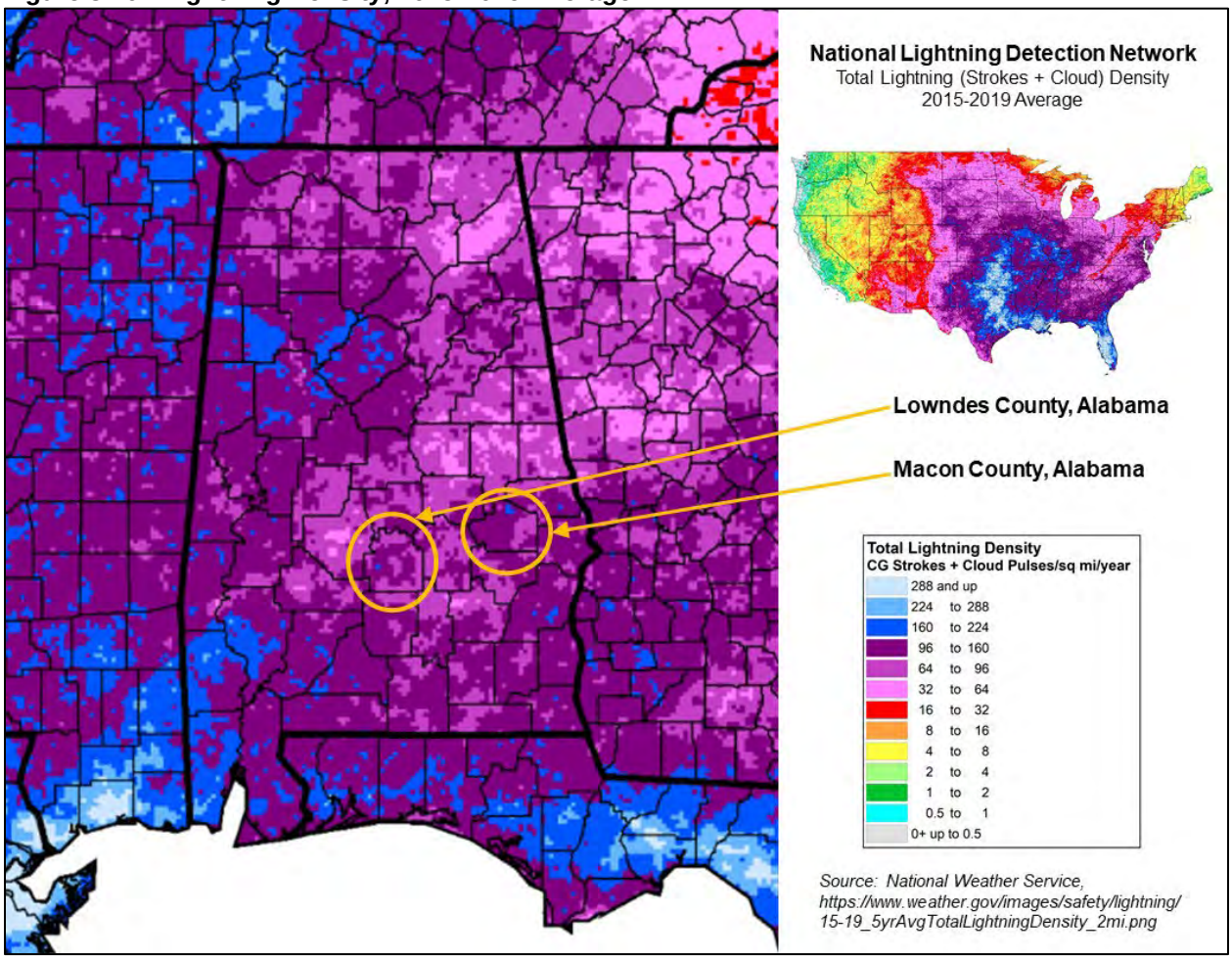
Location.

Just as thunderstorms are not limited to any one part of Lowndes or Macon County, neither is the occurrence of lightning isolated to any particular area of the county. In fact, it is impossible to have a thunderstorm without lightning. In Section 3.9 of this plan, data from the National Centers for Environmental Information indicated that all jurisdictions within Lowndes and Macon Counties had experienced thunderstorms, either as a individual location event or as part of a countywide event. Therefore, all jurisdictions in the planning area are uniformly susceptible to the occurrence of lightning.

Extent.

The extent of lightning is measured as lightning density which is the number of lightning strikes over a given period of time. According to the National Weather Service National Lightning Detection Network Map for the 2015-2019 average, lightning density is the cloud to ground (CG) strokes plus cloud pulses per square mile per year. As shown in Figure 3.20, the Lowndes County averages either 64 to 96 or 96 to 160 CG Strokes plus Cloud Pulses per square mile per year, with the exception of a small area near the Collirene community that averages 160 to 224 CG plus Cloud Pulses per square mile per year. Western and central Macon County average 96 to 160 CG plus Cloud Pulses per square mile per year; the eastern part of the county averages 64 to 96 plus Cloud Pulses per square mile per year; and a small portion of the northeast part of the county averages 160 to 224 CG plus Cloud Pulses per square mile per year.

Figure 3.20: Lightning Density, 2015-2019 Average



Historical Occurrences.

According to the National Centers for Environmental Information, there here have been no recorded lightning events in Lowndes County between 2000 and 2020; and only one reported event in Macon County in the Town of Shorter. In the August 20, 2002 event in Shorter, the town and surrounding area experienced golf ball size hail, winds that blew trees down, and a lightning strike

that caused a grass fire. There were no reported deaths, injuries or damage as a part of the 2002 lightning event. However, local reports from the Town of Notasulga identified two lightning events. On August 16, 2016, a lightning strike resulted in a house fire in Notasulga. The volunteer fire department assisted and a Fire Incident Report was filed. In August 2019, lightning struck another house in Notasulga. There was no fire from this incident, however, electrical lines were damaged. Monetary damages are not available for either event. As previously mentioned however, it is impossible to have thunder without lightning; and the NCEI data does report that Lowndes County has experienced 49 thunderstorm events while Macon County had 44 thunderstorm events during the same time. See Section 3.9.

Probability of Future Events.

The probability of a lightning strike causing damage somewhere in Lowndes County or Macon County is high. Because the impacts are so localized, however, the site-specific incidence of a lightning strike occurring is considered very low. Only three lightning events were reported in Macon County and none in Lowndes County during the 21-year period of January 1, 2000 through December 31, 2020, although thunderstorm events were recorded in both counties. Due to lack of lightning-specific historical records, it is impossible to determine probability that a lightning event will occur in the future. Table 3.22 provides an estimate of lightning probability based on previously reported lightning events. Although the likelihood of future lightning events would be considered very high in Lowndes and Macon Counties based on the extent, the impact of future lightning events is considered to be **Low** with probable major damage in a 100 year period.

Table 3.22: Lightning Summary and Probability by Jurisdiction

Jurisdiction	Historical Events	Extent (CG Strokes + Cloud Pulses/sq mi/yr)	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**0 Events**	**96-160**	**0.0%**	**$0**	**Low**
Countywide	0 Events	96-160	0.0%	$0	Low
Unincorp. Lowndes Co.	0 Events	96-160	0.0%	$0	Low
Town of Benton	0 Events	64-96	0.0%	$0	Low
Town of Fort Deposit	0 Events	96-160	0.0%	$0	Low
Town of Gordonville	0 Events	96-160	0.0%	$0	Low
Town of Hayneville	0 Events	64-96	0.0%	$0	Low
Town of Lowndesboro	0 Events	96-160	0.0%	$0	Low
Town of Mosses	0 Events	96-160	0.0%	$0	Low
Town of White Hall	0 Events	64-96	9.5%	$0	Low
Macon County	**3 Events**	**96-160**	**14.3%**	**$0**	**Low**
Countywide	0 Events	96-160	0.0%	$0	Low
Unincorp. Macon County	0 Events	96-160	0.0%	$0	Low
Town of Franklin	0 Events	96-160	0.0%	$0	Low
Town of Notasulga	2 Events	160-224	9.5%	$0	Low
Town of Shorter	1 Event	96-160	4.8%	$0	Low
City of Tuskegee	0 Events	96-160	0.0%	$0	Low

3.12 Sinkholes and Land Subsidence

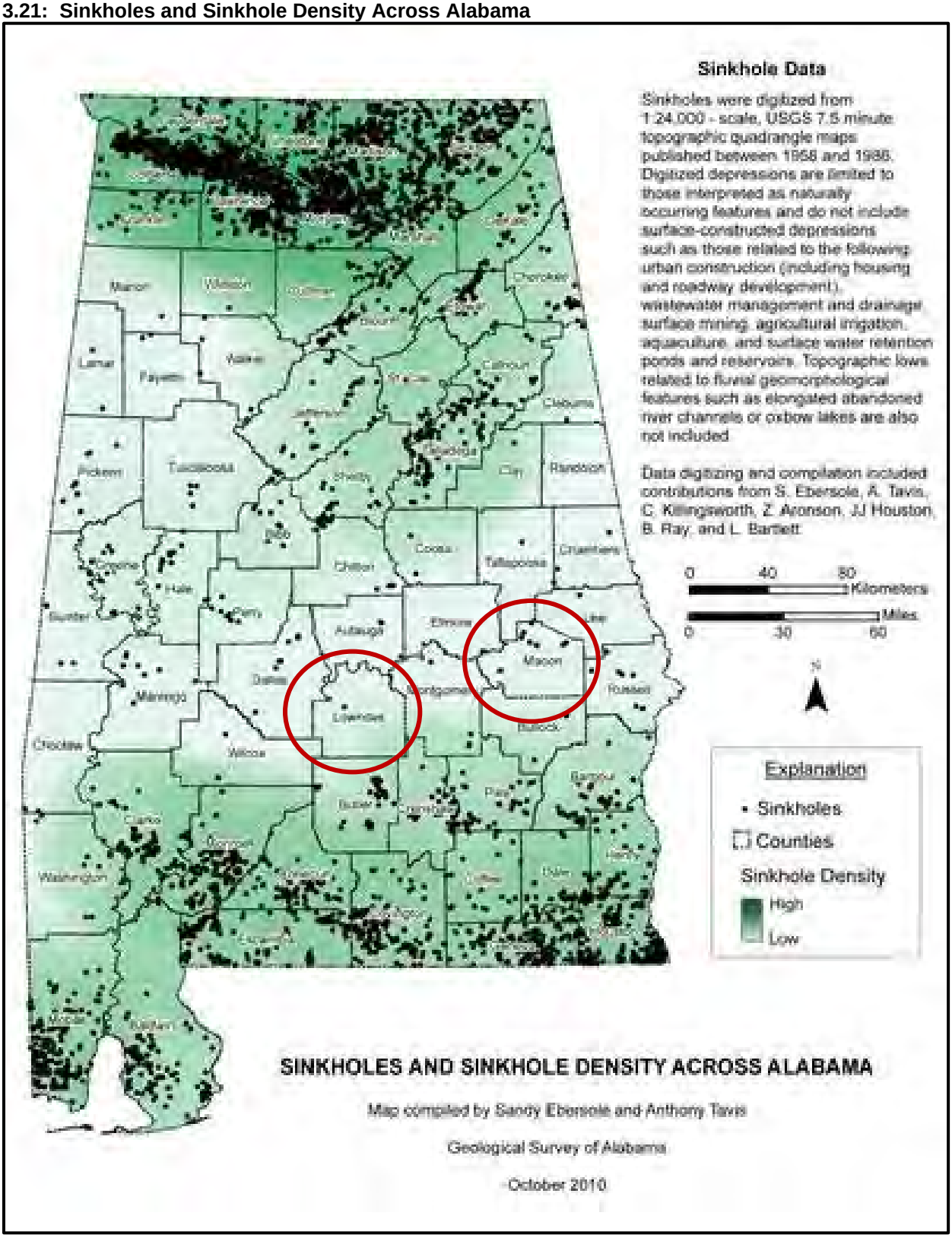
Description.
Subsidence is the motion of a surface (usually, the Earth's surface) as it shifts downward relative to a datum such as sea-level. The opposite of subsidence is uplift, which results in an increase in elevation. Subsidence frequently causes major problems in karst terrains, where dissolution of limestone by fluid flow in the subsurface causes the creation of voids (i.e. caves). If the roof of these voids becomes too weak, it can collapse and the overlying rock and earth will fall into the space, causing subsidence at the surface. This type of subsidence can result in sinkholes which can be many hundreds of meters deep. Sinkholes are caused by a loss of support, roof collapse and/or raveling in the ground's surface layers. Loss of support occurs when decreases of groundwater reduce the buoyant support of groundwater cavities. The collapse of the cavity's roof causes a subsurface breach. Raveling is the erosion of unconsolidated sediments and soils moving from one area into another underground gap. A visible sinkhole is created when the collapse of an unsupported cavity results in the magnification of the opening beyond the ability of the covering soil or rock material to bridge the opening.

Land subsidence ranges from broad, regional lowering of the land surface to localized collapse. The primary cause of land subsidence is a direct result of human activity often in areas of karsts geology. The human activities that may trigger subsidence include mining and the withdrawal of groundwater and/or petroleum. The most dramatic form of subsidence is the collapse of superficial material into underground voids.

A sinkhole is a natural depression or hole in the surface topography caused by the removal of soil or bedrock, often both, by water. They may be formed gradually or suddenly. Sinkholes are common where the rock below the land surface is limestone, carbonate rock, salt beds, or rocks that can naturally be dissolved by circulating ground water. As the rock dissolves, spaces and caverns develop underground. These sinkholes can be dramatic because the surface land usually stays intact until there is not enough support. Then a sudden collapse of the land surface can occur.

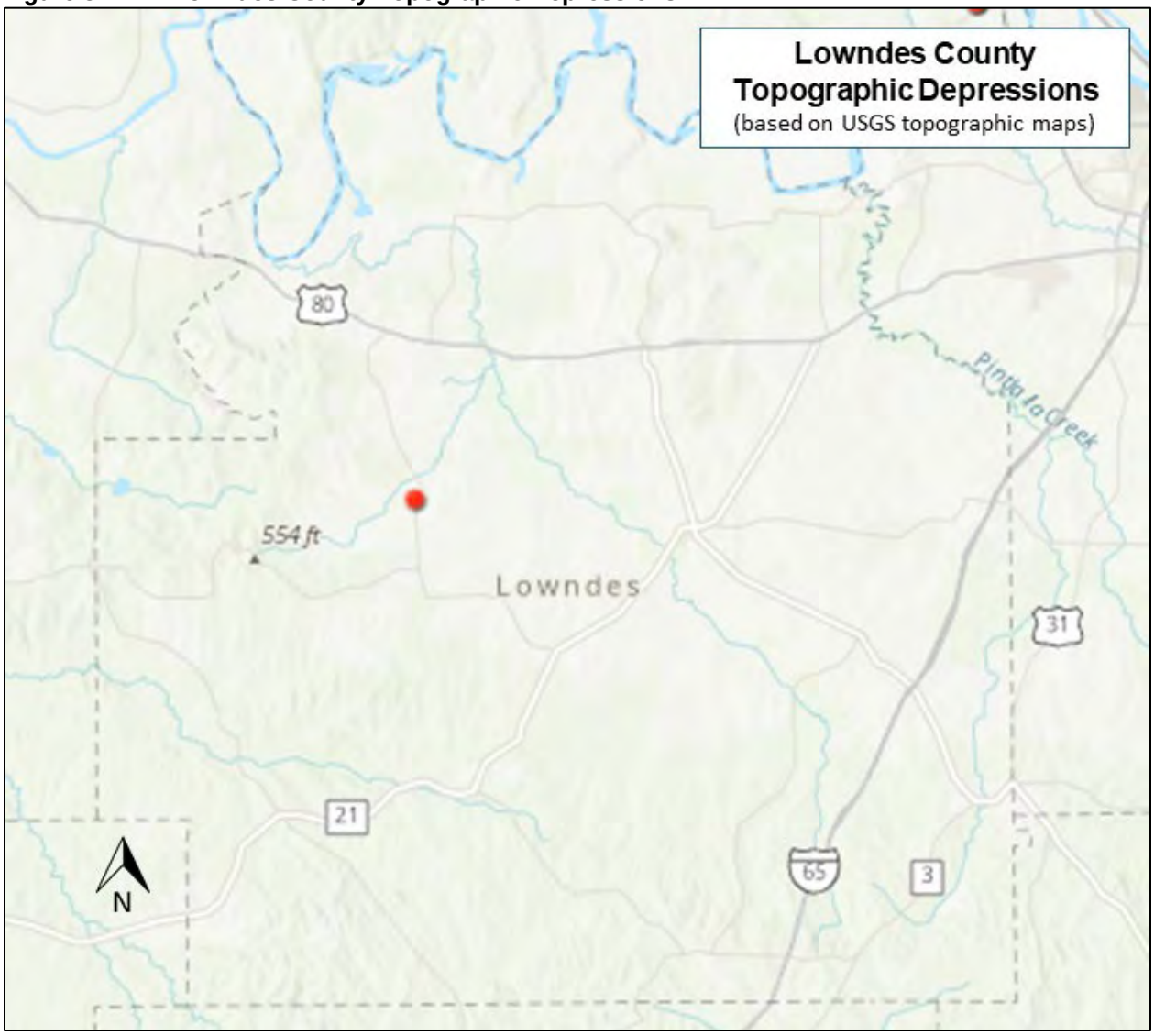
Location.
As shown in Figures 3.21, and 3.22.1 and 3.22.2, the GSA has mapped the topographic depressions across the State of Alabama to determine areas where sinkholes are most likely to occur. There is one recognized topographic depression in Lowndes County found near County Road 17 northwest of the Town of Mosses in the unincorporated part of the county. Eight topographic depressions are found in Macon County. Four are north of Interstate 85: one is west of the Town of Notasulga near the intersection of Alabama Highway 14 and County Road 39; one is east of Alabama Highway 199 near the intersection of County Road 60; one is west of Alabama Highway 199 near the intersection of County Road 56; and another is east of Alabama Highway 199 just south of Uphapee Creek. A fifth topographical depression is found just south of Interstate 85 Exit 38 at Alabama Highway 8. Two topographical depressions are located east of the intersection of U.S. Highway 29 and U.S. Highway 80 and west of Chewacla Creek. The only topographical depression in the western part of Macon County is located northwest of the crossing of Cubahatchee Creek at County Road 9. Of the eight topographical depressions in Macon County, all appear to be located in unincorporated areas except for the one found near Interstate 85 Exit 38 in the northern part of the City of Tuskegee.

3.21: Sinkholes and Sinkhole Density Across Alabama



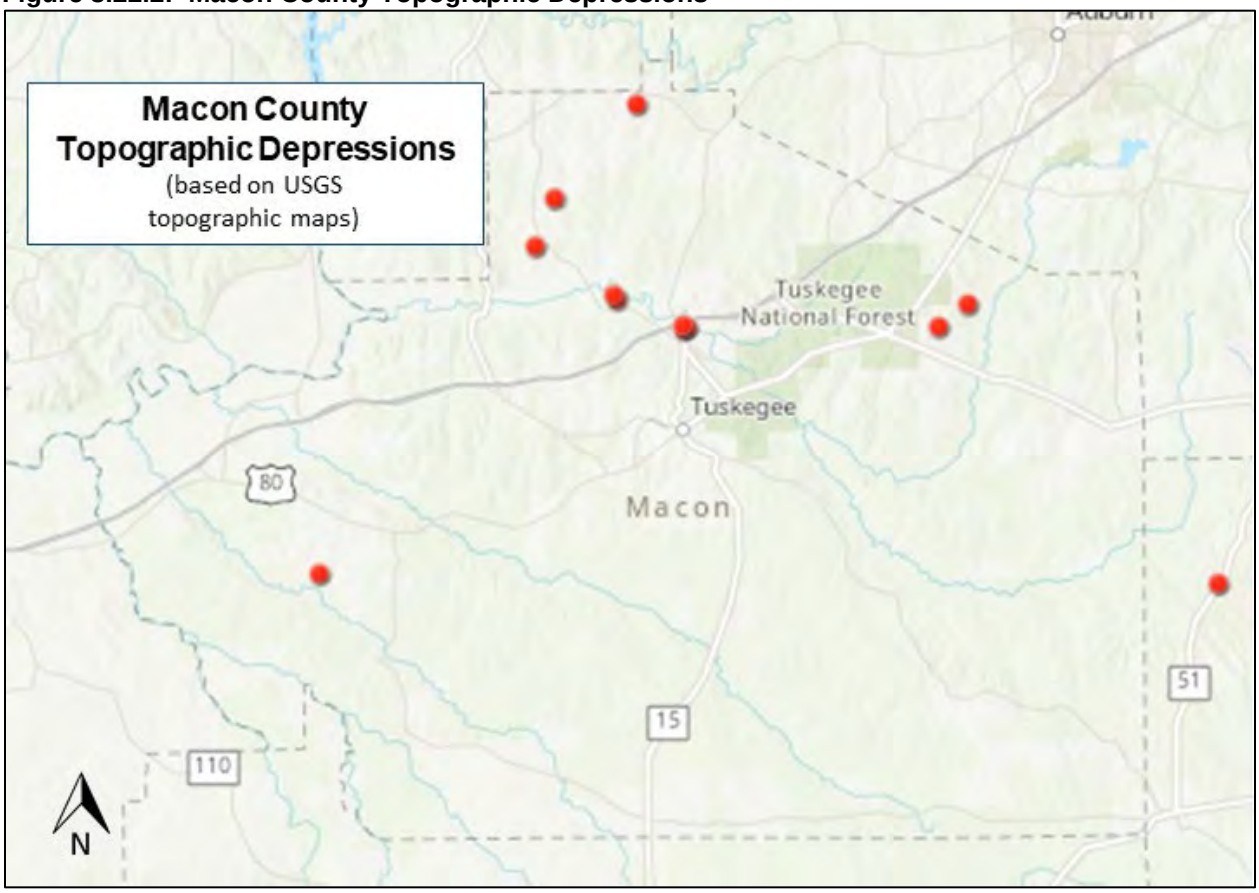
Source: Geological Survey of Alabama.
https://www.gsa.state.al.us/gsa/geologic/hazards/sinkholes#sinkholesAddInfo

Figure 3.22.1: Lowndes County Topographic Depressions



Source: Geological Survey of Alabama.
https://www.gsa.state.al.us/gsa/geologic/hazards/sinkholes#sinkholesAddInfo

Figure 3.22.2: Macon County Topographic Depressions



Source: Geological Survey of Alabama.
https://www.gsa.state.al.us/gsa/geologic/hazards/sinkholes#sinkholesAddInfo

Extent.
The Alabama State Hazard Mitigation Plan states that the GSA considers sinkholes to be more prevalent in northern Alabama due to geology. The state plan also indicates that groundwater withdrawal is an important driver of sinkhole development in Alabama. A previous study estimated that more than 4,000 human-induced sinkholes and areas of subsidence have occurred in Alabama since 1900. Most have occurred since 1950, and most have resulted from a decline in the water table associated with groundwater withdrawals. There is no magnitude scale for land subsidence or sinkholes. Therefore, defining the extent of these hazards is subjective and difficult to predict. GSA does provide a sinkhole and sinkhole density map for Alabama (Figure 3.21) that indicates the density of sinkholes in both Lowndes County and Macon County is low. Due to the lack of historical data pertaining to the damage of land subsidence in either Lowndes County or Macon County, the extent of land subsidence incidents is estimated to be primarily isolated damages to structures and infrastructure.

Historical Occurrences.
There is little documentation from the USGS, the Geological Survey of Alabama, or previous local plans regarding historical land subsidence incidents or impacts in the planning area. Utilizing the location of topographical depressions shown in Figures 3.22.1 and 3.22.2, it is believed that each area

of land subsidence has been localized and relatively minor in nature. There are no damage estimates available for the recorded incidents.

Probability of Future Events.

Based on historical information and susceptibility data from the USGS and the GSA, the probability of future land subsidence and sinkhole events for all jurisdictions in Lowndes County is **Very Low** with no probable major damage in a 100-year period. The probability of future land subsidence and sinkhole events for jurisdictions in Macon County is **Low** with probable major damage in a 100-year period. Although the City of Tuskegee is the only municipality with a topographical depression within the corporate limits, there are enough depressions near other municipalities to rate all areas of the county as low.

Table 3.23: Sinkhole and Land Subsidence Probability by Jurisdiction

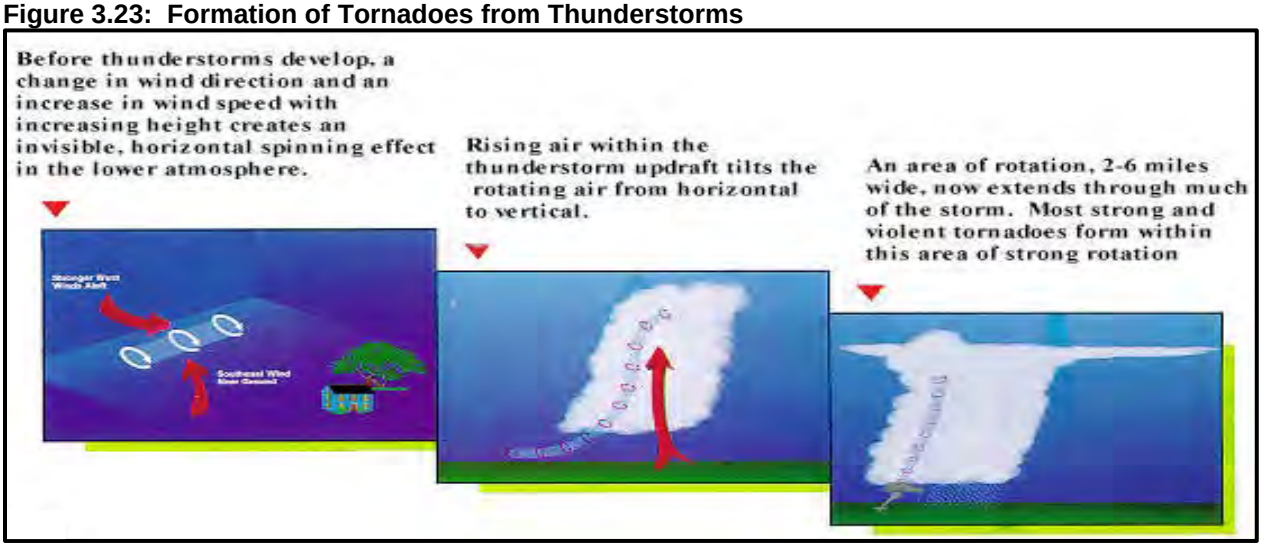
Jurisdiction	Historical Events	Extent (CG Strokes + Cloud Pulses/sq mi/yr)	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**1 Site**	**Unknown**	**4.8%**	**$0**	**Very Low**
Countywide	0 Sites	Unknown	0.0%	$0	Very Low
Unincorp. Lowndes Co.	1 Site	Unknown	4.8%	$0	Very Low
Town of Benton	0 Sites	Unknown	0.0%	$0	Very Low
Town of Fort Deposit	0 Sites	Unknown	0.0%	$0	Very Low
Town of Gordonville	0 Sites	Unknown	0.0%	$0	Very Low
Town of Hayneville	0 Sites	Unknown	0.0%	$0	Very Low
Town of Lowndesboro	0 Sites	Unknown	0.0%	$0	Very Low
Town of Mosses	0 Sites	Unknown	0.0%	$0	Very Low
Town of White Hall	0 Sites	Unknown	9.5%	$0	Very Low
Macon County	**8 Sites**	**Unknown**	**38.1%**	**$0**	**Low**
Countywide	0 Sites	Unknown	0.0%	$0	Low
Unincorp. Macon County	7 Sites	Unknown	33.3%	$0	Low
Town of Franklin	0 Sites	Unknown	0.0%	$0	Low
Town of Notasulga	0 Sites	Unknown	0.0%	$0	Low
Town of Shorter	0 Sites	Unknown	0.0%	$0	Low
City of Tuskegee	1 Site	Unknown	4.8%	$0	Low

3.13 Tornadoes

Description.

A tornado is a rapidly rotating funnel (or vortex) of air that extends toward the ground from a cumulonimbus cloud. Tornadoes often form in convective cells such as thunderstorms or at the front of hurricanes. Most tornadoes do not touch the ground, but when the lower tip of a tornado touches the earth, it can cause extensive damage. The most violent of tornados are capable of tremendous destruction with wind speeds of 250 miles per hour or more. Damage paths can be in excess of one mile wide and 50 miles long. Tornado season is generally March-August and again in November-December, although tornadoes can occur at any time of the year. The damage from a tornado is a result of the high wind velocity and wind-blown debris. Tornadoes are the most unpredictable weather event. According to NOAA, 13 minutes is the average amount of time a person has to find a safe place from a tornado. The entire state is susceptible to tornadoes. Tornadoes can be assumed to potentially affect any location in the region, due to occurrences being randomly located and the impossibility of predicting specific area of tornado strikes.

Figure 3.23: Formation of Tornadoes from Thunderstorms

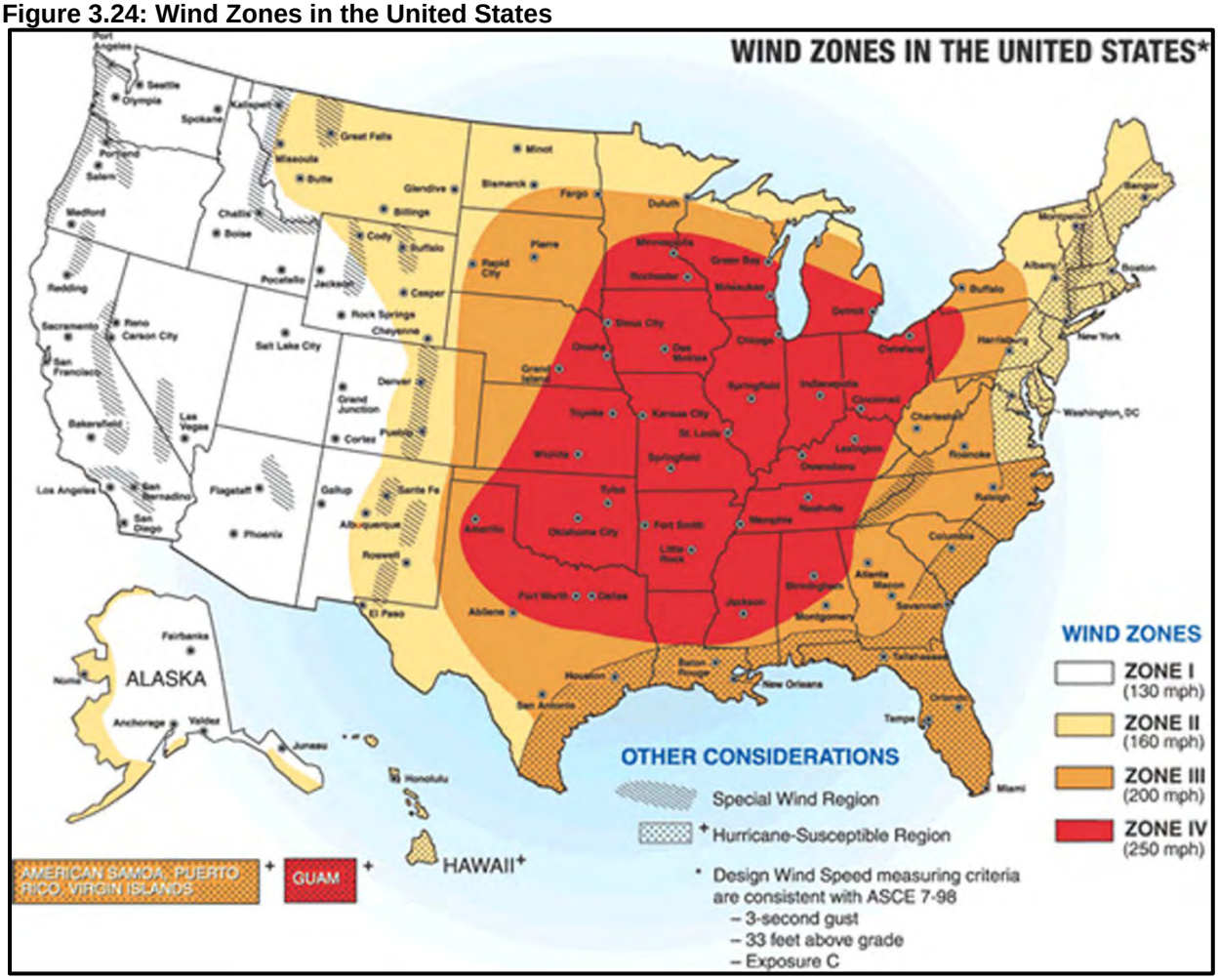


Source: National Weather Service Phoenix

Location.

Tornados are a significant hazard risk for all of Lowndes and Macon Counties due to the severity of destruction and the limited warning time for response. Both counties are located in Wind Zone III, as shown in Figure 3.24: Wind Zones in the United States map, which shows the frequency and strength of extreme windstorms across the U. S. The map is based on 40 years of tornado history and more than 100 years of hurricane history. Zone III has experienced both frequent and strong tornadoes, with wind speeds reaching 200 mile per hour. According to a national map of the number of tornadoes recorded per 1,000 square miles, found in the FEMA publication *Taking Shelter From the Storm: Building a Safe Room Inside Your House*, it is estimated that there are one to five tornadoes per 1,000 square miles in the region in which Lowndes and Macon County are located.

Figure 3.24: Wind Zones in the United States



Source: Federal Emergency Management Agency; Taking Shelter From the Storm: Building a Safe Room Inside Your Home; https://www.fema.gov/pdf/library/ism2_s1.pdf.

Tornado paths are not localized and have the potential to affect any portion of the entire county during an event. The tornado track maps, shown in Figures 3.25.1 and 3.25.2 show that previous tornadoes have not been isolated to any one part of either county. The tornado track maps, however, do not necessarily show all of the tornado events that have occurred. According to the NCEI, there have been 12 tornado events in Lowndes County and 15 tornadoes in Macon County. Of the 12 events in Lowndes County, two were in Hayneville, two were in Lowndesboro, one was in White Hall, and seven tornado events were in the unincorporated part of Lowndes County. Of the 15 tornado events in Macon County, two events were in Notasulga, two were in Shorter, three events were in Tuskegee, and eight events were in the unincorporated part of Macon County.The location of previous occurrences coupled with Lowndes County's and Macon County's location in Wind Zone III indicates that all of the planning area is highly susceptible to tornado hazards.

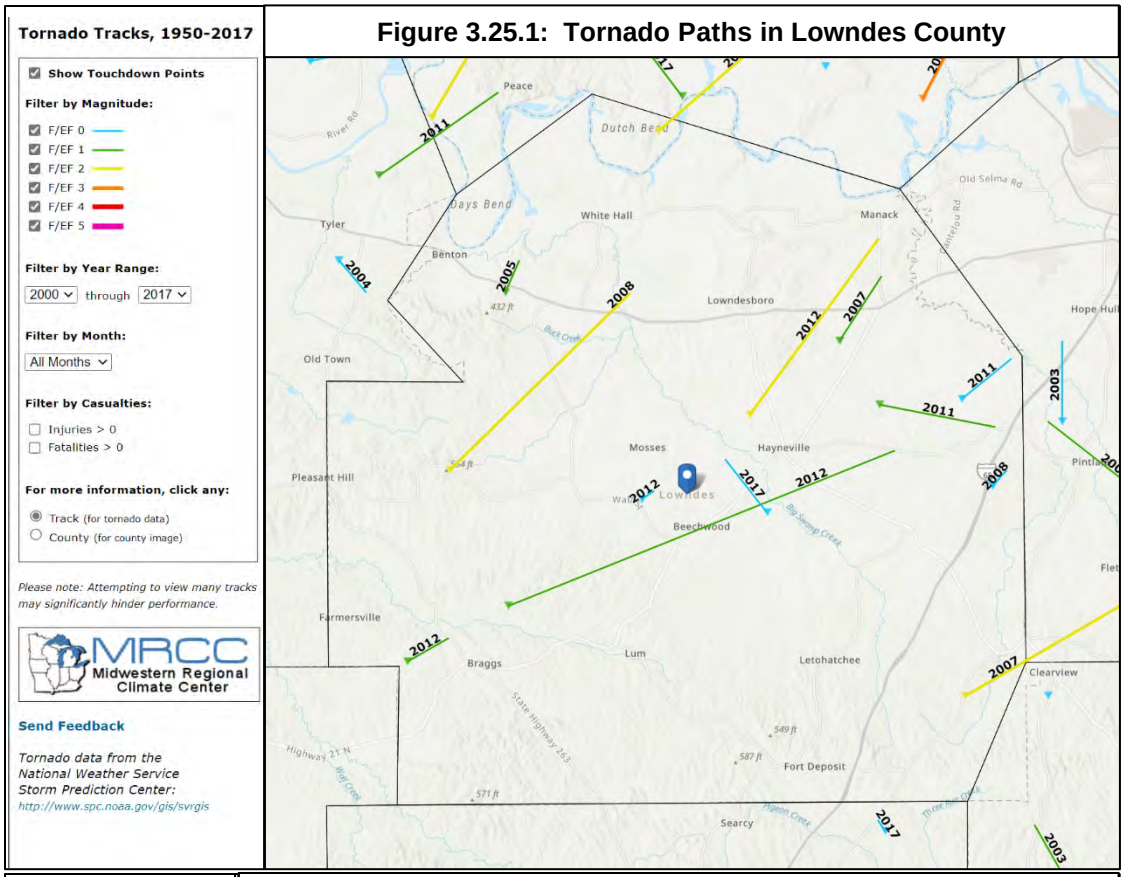


Figure 3.25.1: Tornado Paths in Lowndes County

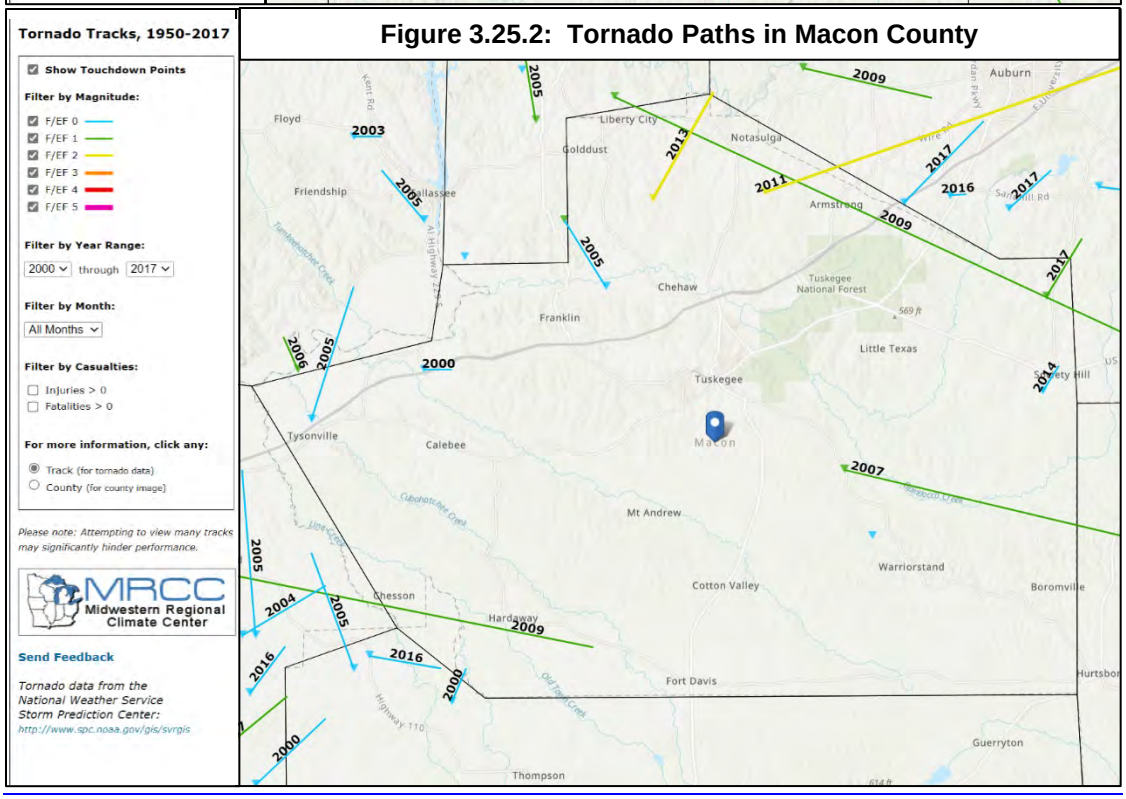


Figure 3.25.2: Tornado Paths in Macon County

Source for Figures 3.25.1 and 3.25.2: University of Illinois at Urbana-Champaign; Midwestern Regional Climate Center; Tornado Tracks Tool. https://mrcc.illinois.edu/gismaps/cntytorn.htm

Extent.

The extent, or magnitude, of tornadoes are measured using the Enhanced Fujita Scale which assigns a tornado a rating based on estimated wind speeds and related damage. The National Severe Storms Laboratory explains that the rating scale for tornadoes is based entirely on the damage they cause. The damage is used to estimate the wind speed of the tornado. In 2007, the Enhanced Fujita Scale was implemented by the National Weather Service to rate tornadoes in a more consistent and accurate manner. The EF-Scale takes into account more variables than the original Fujita Scale (F-Scale) when assigning a wind speed rating to a tornado, incorporating 28 damage indicators such as building type, structures and trees. For each damage indicator, there are 8 degrees of damage ranging from the beginning of visible damage to complete destruction of the damage indicator. The original F-scale did not take these details into account. Strong or violent tornadoes, however, can and do occur in areas where minimal damage occurs, leading to a low EF scale rating. Table 3.24 shows the breakdown of the Enhanced Fujita Scale, and shows the extent of damage all jurisdictions can receive.

Table 3.24: Enhanced Fujita Scale

EF-Scale	Class	Wind speed		Description	
		mph	km/h		
EF-0	weak	65-85	105-137	Gale	Light damage. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over.
EF-1	weak	86-110	138-177	Moderate	Moderate damage. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
EF-2	strong	111-135	178-217	Significant	Considerable damage. 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
EF-3	strong	136-165	218-266	Severe	Severe damage. 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.
EF-4	violent	166-200	267-322	Devastating	Devastating damage. Well-constructed houses and whole frame houses completely leveled; cars thrown and small missiles generated.
EF-5	violent	> 200	> 322	Incredible	Incredible damage. 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: National Weather Service. https://www.weather.gov

Three EF2 events have occurred in Lowndes County, which is the maximum extent of tornado events in the last 21 years. On March 1, 2007, an EF2 tornado touched down in the unincorporated community of Sandy Ridge, injuring four people and causing $50,000 in property damage. On February 17, 2008, another EF2 tornado touched down in the unincorporated part of Lowndes County in the Collirene community, injuring 10 people and causing $215,000 in property damage. At least 11 structures, most of them mobile homes, were damaged with three of these being completely destroyed. Hundreds of trees were either snapped or were uprooted along the damage path. On December 25, 2012, an EF2 tornado touched down in Hayneville and continued northeast

toward GE Plastics on U.S. Highway 80. Although hundreds of trees, power lines, barns, and houses were either damaged or destroyed, there were no injuries and no reported property damage.

The maximum extent for tornadoes in Macon County is also EF2, which has occurred on two occasions. On April 11, 2013, an EF2 touched down in an unincorporated in northern Macon County and continued into Lee County. Wind speeds in Macon County were estimated at 120 miles per hour. The 2013 tornado resulted in one injury and no reported monetary damages, although notes from the NCEI database report that trees, power lines, mobile homes and residential structures were damaged or destroyed. On March 3, 2019, an EF2 hit the Mount Andrew community with maximum sustained winds of 115 miles per hour. There were no injuries or monetary damages reported from this event. The tornado that caused the most damage in Macon County was an EF1 tornado that struck Notasulga on November 16, 2011 and resulted in $500,000 worth of property damage.

Historical Occurrences.

In the last 21 years, between January 1, 2000 and December 31, 2020, Lowndes County has experienced 12 tornado events and Macon County has experienced 15 tornado events. As discussed previously, there is no pattern to the location of the tornado events in either county. Tables 3.25.1 and 3.25.2 provide a list of historical tornado events and a summary by jurisdiction. The 12 tornado events in Lowndes County resulted in a total of 15 injuries and $541,000 in property damages. The 15 tornado events in Macon County resulted in one injury and $836,000 in property damages.

Table 3.25.1: Profile of Tornado Events in Lowndes County

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Lowndesboro	3/3/2000	Funnel Cloud		0	0	$0.00	$0.00
White Hall	4/30/2005	Tornado	F1	0	1	$110,000.00	$0.00
Unincorporated	3/1/2007	Tornado	EF2	0	4	$50,000.00	$0.00
Lowndesboro	10/23/2007	Tornado	EF1	0	0	$85,000.00	$0.00
Unincorporated	2/17/2008	Tornado	EF2	0	10	$215,000.00	$0.00
Unincorporated	2/28/2011	Tornado	EF1	0	0	$60,000.00	$0.00
Unincorporated	4/15/2011	Tornado	EF0	0	0	$21,000.00	$0.00
Unincorporated	3/2/2012	Tornado	EF1	0	0	$0.00	$0.00
Hayneville	12/25/2012	Tornado	EF2	0	0	$0.00	$0.00
Unincorporated	12/25/2012	Tornado	EF0	0	0	$0.00	$0.00
Unincorporated	12/25/2012	Tornado	EF1	0	0	$0.00	$0.00
Hayneville	10/7/2017	Tornado	EF0	0	0	$0	$0
Jurisdictional Summary: Lowndes County Tornadoes							
Countywide		0 Events		0	0	$0	$0
Benton		0 Events		0	0	$0	$0
Fort Deposit		0 Events		0	0	$0	$0
Gordonville		0 Events		0	0	$0	$0
Hayneville		2 Events		0	0	$0	$0
Lowndesboro		2 Events		0	0	$85,000	$0
Mosses		0 Events		0	0	$0	$0
White Hall		1 Event		0	1	$110,000	$0
Unincorporated Lowndes County		7 Events		0	14	$346,000	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.25.2: Profile of Tornado Events in Macon County

Location	Date	Event Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Shorter	12/16/2000	Tornado	F0	0	0	$15,000	$0
Tuskegee	9/16/2004	Tornado	F0	0	0	$2,000	$0
Shorter	7/6/2005	Tornado	F0	0	0	$18,000	$0
Tuskegee	7/6/2005	Tornado	F1	0	1	$48,000	$0
Tuskegee	8/29/2005	Tornado	F0	0	0	$30,000	$0
Unincorporated	4/11/2007	Tornado	EF1	0	0	$10,000	$0
Notasulga	4/10/2009	Tornado	EF1	0	0	$200,000	$0
Unincorporated	4/10/2009	Tornado	EF0	0	0	$3,000	$0
Unincorporated	4/10/2009	Tornado	EF1	0	0	$10,000	$0
Notasulga	11/16/2011	Tornado	EF1	0	0	$500,000	$0
Unincorporated	4/11/2013	Tornado	EF2	0	1	$0	$0
Unincorporated	4/29/2014	Tornado	EF0	0	0	$0	$0
Unincorporated	1/21/2017	Tornado	EF1	0	0	$0	$0
Unincorporated	3/3/2019	Tornado	EF2	0	0	$0	$0
Unincorporated	3/3/2019	Tornado	EF1	0	0	$0	$0
Jurisdictional Summary: Macon County Tornadoes							
Countywide		0 Events		0	0	$0	$0
Franklin		0 Events		0	0	$0	$0
Notasulga		2 Events		0	0	$700,000	$0
Shorter		2 Events		0	0	$33,000	$0
Tuskegee		3 Events		0	0	$80,000	$0
Unincorporated Macon County		8 Events		0	1	$23,000	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.

Lowndes County has experienced 12 tornado events in 21 years, which equates to an **57.1 percent** probability of an annual event. There were no reported deaths, 14 injuries, and no crop damage from the events. The combined property damage from the nine events was $541,000, or **$45,083 per event**. Macon County experienced 15 tornado events in the 21 years, which equates to a **71.4 percent** probability of an annual event. There were no reported deaths, one injury, and no crop damage from the events. The combined property damage from the nine events was $836,000, or **$55,733 per event**. It is likely that the damage per event is higher since monetary damages were not reported for multiple tornadoes although the event narratives discuss both structural and vegetative damage. As shown in Table 3.26, the impact of future tornado events for all jurisdictions in Lowndes County and Macon County is considered to be **High** with probable major damage within a 1 to 10-year period throughout the county.

Table 3.26: Tornado Probability by Jurisdiction

Jurisdiction	Historical Events	Extent (CG Strokes + Cloud Pulses/sq mi/yr)	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	12 Events	**EF2**	**57.1%**	**$45,083**	**High**
Countywide	0 Events	n/a	0.0%	$0	Very Low
Unincorp. Lowndes Co.	7 Events	EF2	33.3%	$49,429	High
Town of Benton	0 Events	n/a	0.0%	$0	High
Town of Fort Deposit	0 Events	n/a	0.0%	$0	High
Town of Gordonville	0 Events	n/a	0.0%	$0	High

Town of Hayneville	2 Events	EF2	9.5%	$0	High
Town of Lowndesboro	2 Events	EF1	9.5%	$42,500	High
Town of Mosses	0 Events	n/a	0.0%	$0	High
Town of White Hall	1 Event	F1	4.8%	$110,000	High
Macon County	**15 Events**	**EF2**	**71.4%**	**$55,733**	**High**
Countywide	0 Events	n/a	0.0%	$0	Very Low
Unincorp. Macon County	8 Events	EF2	38.1%	$2,875	High
Town of Franklin	0 Events	n/a	0.0%	$0	High
Town of Notasulga	2 Events	EF1	9.5%	$350,000	High
Town of Shorter	2 Events	F0	9.5%	$16,500	High
City of Tuskegee	3 Events	F1	14.3%	$26,667	High

3.14 Tropical Depressions, Tropical Storms, Hurricanes

Description.
Coastal Alabama borders a part of the northern Gulf of Mexico that has a high incidence of tropical depressions, tropical storms and hurricanes that can cause wind and water damage in Lowndes and Macon Counties. 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 rotating low-pressure weather system that has organized thunderstorms with constant wind speeds of 74 mph. At the center of a hurricane is an eye, which is a peaceful break from the storm. As a hurricane approaches shores, the sky will darken, winds will pick up, and the water will be pushed inland. Once a hurricane moves onto land it will quickly weaken due to the lack of access to warm water, which is the energy source of the storm.

As defined by FEMA, a tropical cyclone is a generic term for a cyclonic, low-pressure system over tropical or subtropical waters. Hurricanes are intense tropical systems that generate winds in excess of 74 mph. These storms are generally characterized by thunderstorms and defined surface wind circulation. They can produce high winds, heavy rains, erosion, flooding, and spawn tornados. Classifications of tropical cyclones are listed below:

- 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 39-73 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.

Extra-tropical storms generate similar effects but tend to occur in the fall or winter. Because tropical and extratropical cyclones are large, moving storm systems, they can impact not only coastal areas, but inland areas as well. Hurricanes Opal (1995), Ivan (2004), and Katrina (2005) are excellent examples of tropical systems having a large inland impact.

Location.
While neither Lowndes County nor Macon County are necessarily susceptible to the full effects of a tropical cyclone making landfall along the coast, they are highly susceptible to the other events that occur or spawn off the cyclonic system. Floods caused by the storm's rain can make parts of the counties inaccessible by road and interrupt the delivery of services and the ability to respond in an emergency. Tornados spawned off of a hurricane can cause loss of life, injuries, and cause damage to buildings and infrastructure. In this respect, hurricanes pose a threat to all of Lowndes County and Macon County. According to the National Centers for Environmental Information, when a tropical system has occurred in either Lowndes or Macon County, it has been a countywide event.

Extent.
The Saffir-Simpson Hurricane Wind Scale is used to categorize tropical storms and hurricanes into five categories based on sustained wind speed. Besides the hurricane categories, there are two additional classifications for tropical depressions and tropical storms before these storms reach hurricane strength. Due to Lowndes County's and Macon County's inland location, it is very unlikely that the counties will ever experience hurricane force winds greater than a Category 1 hurricane. Table 3.27 outlines the Saffir-Simpson Scale categories, wind speeds for each category, and the anticipated damage sustained for each category. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures.

Table 3.27: Saffir-Simpson Hurricane Scale

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	**Very dangerous winds will produce some damage:** 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	**Extremely dangerous winds will cause extensive damage:** 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 (major)	111-129 mph 96-112 kt 178-208 km/h	**Devastating damage will occur:** Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	**Catastrophic damage will occur:** 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.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	**Catastrophic damage will occur:** 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.

Source: NOAA, National Centers for Environmental Information. https://www.nhc.noaa.gov/aboutsshws.php

The maximum extent of tropical cyclone events in the last 21 years in both Lowndes County and Macon County is a tropical storm. Three tropical storms have impacted both counties: on July 10, 2005 as a part of Hurricane Dennis, a Category 3 storm; on August 29, 2005 as a part of Hurricane

Katrina, a Category 3 storm; and, on October 29, 2020 as a part of Hurricane Zeta, also a Category 3 storm. The maximum extent for all jurisdictions in the planning area is the same, at tropical storms.

Historical Occurrences.

Because of its interior location, Lowndes and Macon Counties are not especially susceptible to direct tropical or coastal storm events; however, history documents the fact that the region has experienced tropical cyclones, high winds, tornadoes and related flooding associated with tropical systems. Between 2000 and 2020, the National Centers for Environmental Information reports that the same two tropical depressions and three tropical storms and have impacted both Lowndes County and Macon County. The combined cyclone events caused $367,000 in property damages in Lowndes County and $92,000 in property damages in Macon County. All events had countywide impact. Details of these events are provided in Table 3.28.1 for Lowndes County and Table 3.28.2 for Macon County and shown in Figures 3.25.1 and 3.25.2.

Table 3.28.1: Profile of Tropical Depressions, Tropical Storms and Hurricanes in Lowndes County

National Centers for Environmental Information, Storm Events Database:							
Location	**Date**	**Type**	**Mag**	**Death**	**Injuries**	**Property Damage**	**Crop Damage**
Countywide	8/23/2008	TD	35	0	0	$5,000	$0
Countywide	11/9/2009	TD	30	0	0	$2,000	$0
Countywide	7/10/2005	TS	unknown	0	0	$250,000	$0
Countywide	8/29/2005	TS	145	0	0	$110,000	$0
Countywide	10/29/2020	TS	40 to 50	0	0	$0	$0

NOAA Historical Hurricane Tracks Data:					
Location	**Date**	**Type**	**Max Wind Sp**	**Min Pressure**	**Storm Name**
Countywide	9/12-9/15/2018	TS	50 mph	1001	Hanna 2002

Jurisdictional Summary: Lowndes County Tropical Depressions, Tropical Storms, Hurricanes					
Location	**Number of Events**	**Death**	**Injuries**	**Property Damage**	**Crop Damage**
Countywide	5 Events	0	0	$367,000	$0
Benton	0 Events	0	0	$0	$0
Fort Deposit	0 Events	0	0	$0	$0
Gordonville	0 Events	0	0	$0	$0
Hayneville	0 Events	0	0	$0	$0
Lowndesboro	0 Events	0	0	$0	$0
Mosses	0 Events	0	0	$0	$0
White Hall	0 Events	0	0	$0	$0
Unincorp. Lowndes County	0 Events	0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database; and NOAA, Historical Hurricane Tracks. https://www.ncdc.noaa.gov/stormevents and https://coast.noaa.gov/hurricanes/#map=4/32/-80

Table 3.28.2: Profile of Tropical Depressions, Tropical Storms and Hurricanes in Macon County

National Centers for Environmental Information, Storm Events Database:							
Location	**Date**	**Type**	**Mag**	**Death**	**Injuries**	**Property Damage**	**Crop Damage**
Countywide	8/23/2008	TD	35	0	0	$0	$0
Countywide	11/9/2009	TD	30	0	0	$2,000	$0
Countywide	7/10/2005	TS	unknown	0	0	$25,000	$0
Countywide	8/29/2005	TS	145	0	0	$65,000	$0
Countywide	10/29/2020	TS	40 to 50	0	0	$0	$0

NOAA Historical Hurricane Tracks Data:					
Location	**Date**	**Type**	**Max Wind Speed**	**Min Pressure**	**Storm Name**
Countywide	8/10-8/18/2010	TD	30 mph	1007	Five 2010
Countywide	5/25-5/31/2018	TS	55 mph	990	Alberto 2018

Jurisdictional Summary: Macon County Tropical Depressions, Tropical Storms, Hurricanes					
Location	**Number of Events**	**Death**	**Injuries**	**Property Damage**	**Crop Damage**
Countywide	5 Events	0	0	$92,000	$0
Franklin	0 Events	0	0	$0	$0
Notasulga	0 Events	0	0	$0	$0
Shorter	0 Events	0	0	$0	$0
Tuskegee	0 Events	0	0	$0	$0
Unincorp Macon County	0 Events	0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database; and NOAA, Historical Hurricane Tracks. https://www.ncdc.noaa.gov/stormevents and https://coast.noaa.gov/hurricanes/#map=4/32/-80

Figure 3.25.1: Hurricane Tracks in Lowndes County, 2000 to 2020

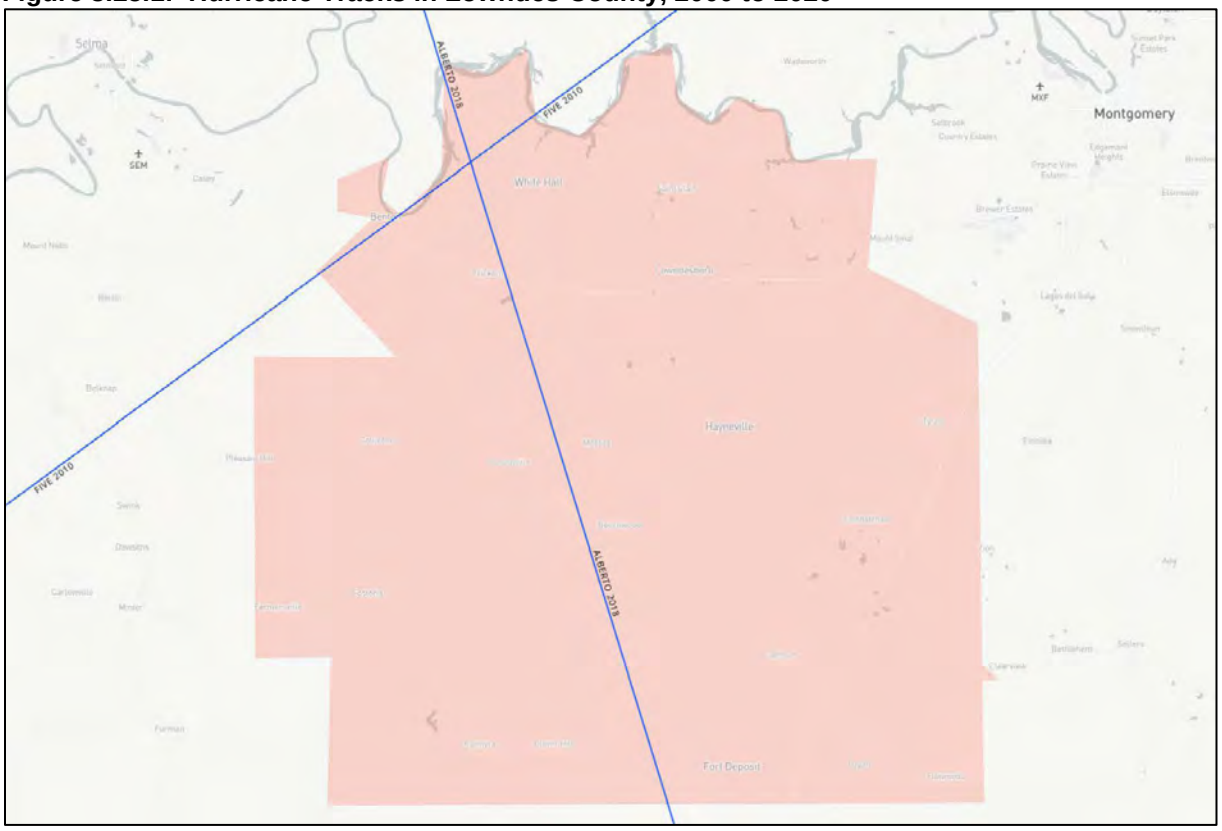
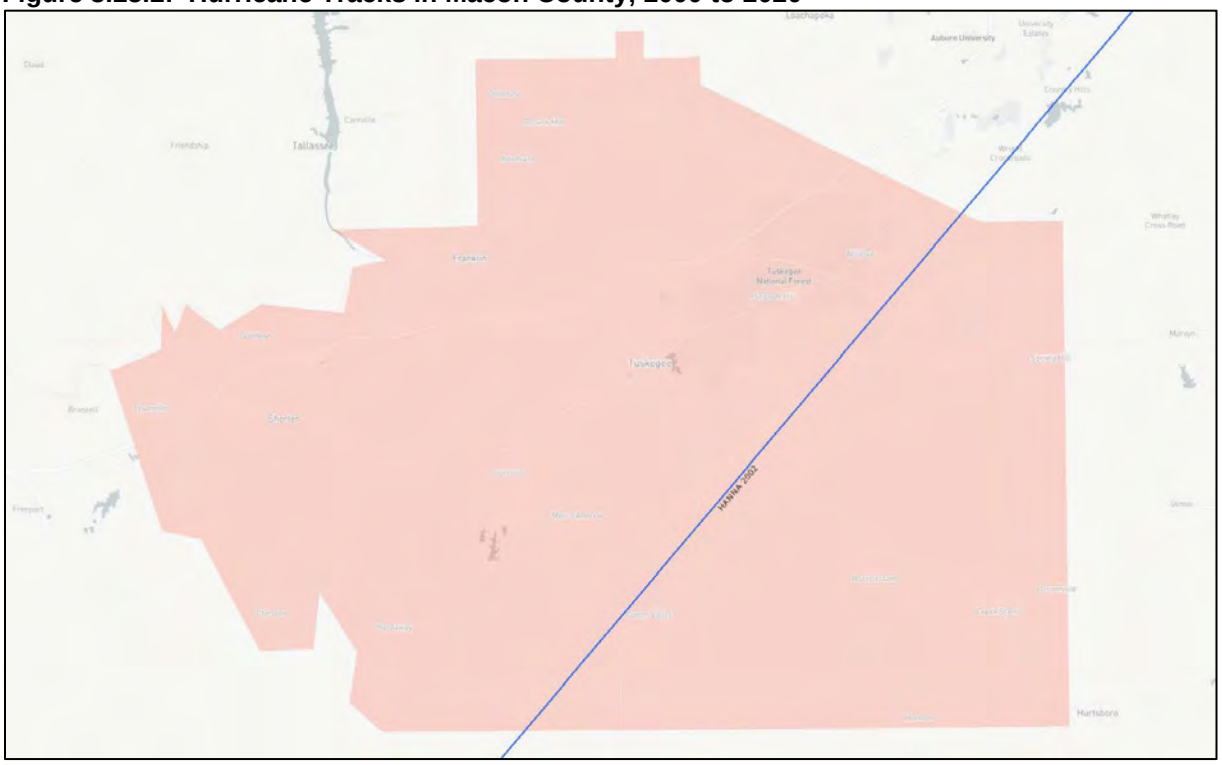


Figure 3.25.2: Hurricane Tracks in Macon County, 2000 to 2020



Source: NOAA, Historical Hurricane Tracks, Lowndes County, Macon County, Alabama. https://coast.noaa.gov/hurricanes/#map=4/32/-80

Probability of Future Events.

Lowndes County and Macon County have each experienced five tropical cyclone events in the last 21 years, which equates to a **23.8 percent** probability of an annual event. There were no reported deaths, injuries or crop damage from the events. The combined property damage from the five events in Lowndes County was $367,000, or **$73,400 per event**. The combined property damage from the five events in Macon County was $92,000, or **$18,400 per event** It is possible that the damage per event is event could be event higher. As shown in Table 3.29, the impact of future hurricane, tropical storm and tropical depression events for all jurisdictions in Lowndes County and Macon County is considered to be **Medium** with probable major damage within a 10 to 50-year period throughout the county.

Table 3.29: Tropical Depressions, Tropical Storms, Hurricanes Probability by Jurisdiction

Jurisdiction	Historical Events	Extent (CG Strokes + Cloud Pulses/sq mi/yr)	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**5 Events**	**Unknown**	**23.8%**	**$73,400**	Medium
Countywide	5 Events	Unknown	23.8%	$73,400	Medium
Unincorp. Lowndes Co.	0 Events	Unknown	4.8%	$0	Medium
Town of Benton	0 Events	Unknown	0.0%	$0	Medium
Town of Fort Deposit	0 Events	Unknown	0.0%	$0	Medium
Town of Gordonville	0 Events	Unknown	0.0%	$0	Medium
Town of Hayneville	0 Events	Unknown	0.0%	$0	Medium
Town of Lowndesboro	0 Events	Unknown	0.0%	$0	Medium

Town of Mosses	0 Events	Unknown	0.0%	$0	Medium
Town of White Hall	0 Events	Unknown	9.5%	$0	Medium
Macon County	**5 Events**	**Unknown**	**23.8%**	**$18,400**	Medium
Countywide	5 Events	Unknown	23.8%	$18,400	Medium
Unincorp. Macon County	0 Events	Unknown	0.0%	$0	Medium
Town of Franklin	0 Events	Unknown	0.0%	$0	Medium
Town of Notasulga	0 Events	Unknown	0.0%	$0	Medium
Town of Shorter	0 Events	Unknown	0.0%	$0	Medium
City of Tuskegee	0 Events	Unknown	0.0%	$0	Medium

3.15 Wildfire

Description.

A wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. They often begin unnoticed, spread quickly, and are usually signaled by dense smoke that may fill the area for miles around. Wildfires can be human-caused through acts such as arson or campfires, or can be caused by natural events such as lightning. Wildfires can be categorized into three types:

- **Wildland fires** occur in very rural areas and are fueled primarily by natural vegetation. In the planning area, the vast majority of these fires occur on privately owned land. Wildland fire suppression is the responsibility of the State of Alabama, through the Alabama Forestry Commission.
- **Interface fires** occur in areas where homes or other structures are endangered by the wildfires. The fires are fueled by both natural vegetation and man-made structures. These are often referred to as Wild land Urban Interface fires. Interface fire suppression is the responsibility of the Alabama Forestry Commission, working closely with local volunteer fire departments.
- **Firestorms** occur during extreme weather (e.g., high temperatures, low humidity, and high winds) with such intensity that fire suppression is virtually impossible. These events typically burn until the conditions change, or the fuel is exhausted.

Location.

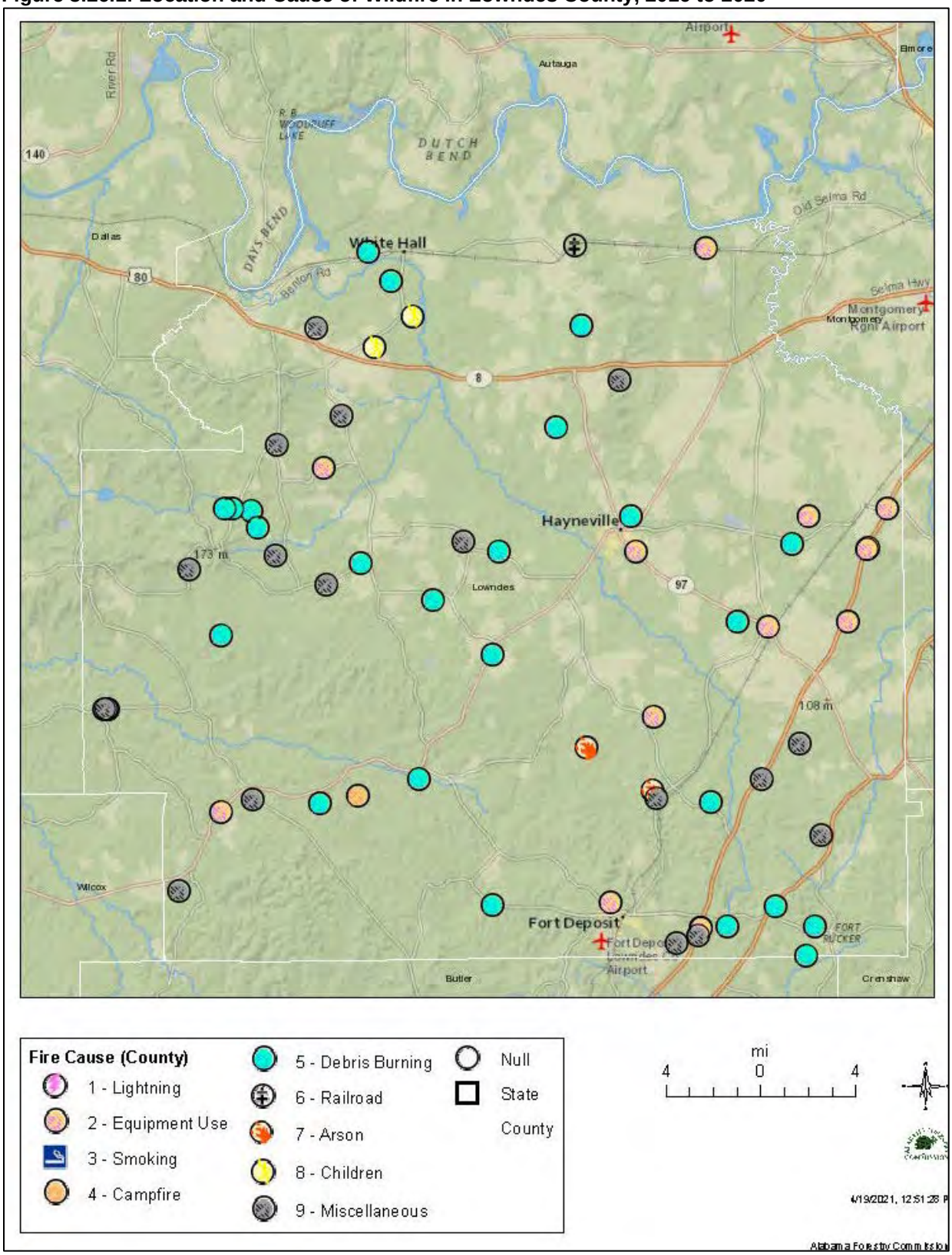
Wildfire location data was compiled from the Alabama Forestry Commission. The Alabama Forestry Commission data covers the time period from 2007 to 2020 in data tables and 2016 through 2020 in locational maps and tables. Lowndes County has experienced 65 wildfires from 2016 through 2020, the location of which have been spread throughout the county, as seen in Figure 3.26.1. Of the 65 wildfires, one each was in Fort Deposit and Gordonville, two were in Hayneville, one was in Lowndesboro, two were in Mosses, and four were in White Hall, with the remaining 54 wildfires occurring in the unincorporated area of Lowndes County. During the 5-year period, there were seven causes of wildfire, with burning debris being the biggest contributor with the highest number of events, at 24 wildfires, and burning the largest amount of land, at 303.9 acres. There does not appear to be any correlation between location and cause of wildfire.

Table 3.30: Cause of Wildfire in Lowndes County, 2016 to 2020

Wildfire Cause	Number of Events	Acres Burned
2 - Equipment Use	16	30.06
4 - Campfire	1	0.5
5 - Debris Burning	24	303.9
6 - Railroad	1	1.0
7 - Arson	2	29.0
8 - Children	2	2.6
9 - Miscellaneous	19	125.45
Total Lowndes County	**65**	**492.51**

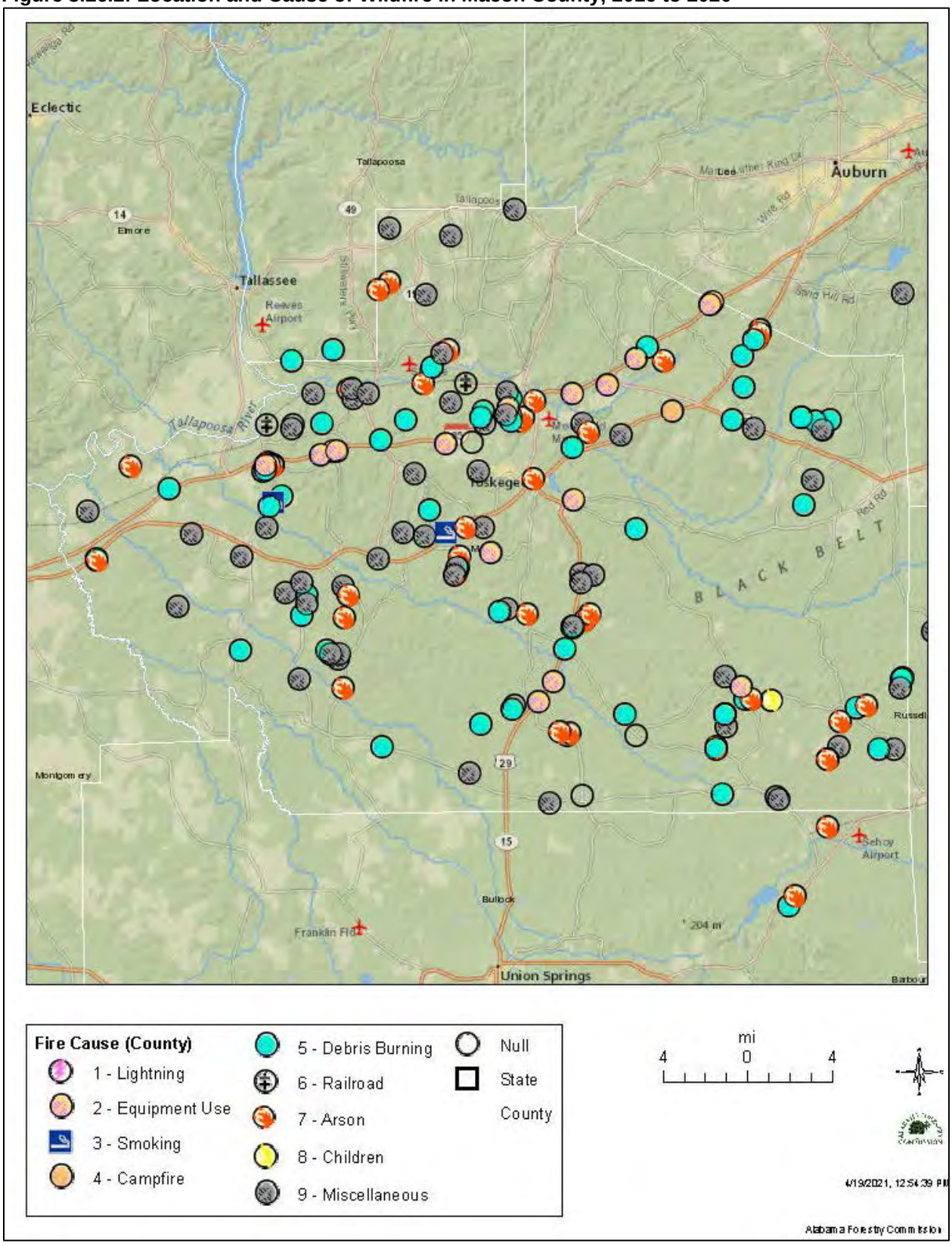
Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

Figure 3.26.1: Location and Cause of Wildfire in Lowndes County, 2016 to 2020



Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

Figure 3.26.2: Location and Cause of Wildfire in Macon County, 2016 to 2020



Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

In the same time period, Macon County experienced 185 wildfires that were located throughout the county with concentrations along major thoroughfares. See Figure 3.26.2. Of the 185 wildfires, nine were in Franklin, two were in Notasulga, 18 were in Tuskegee, two were in Shorter, and the remaining 154 wildfires were in the unincorporated part of Macon County. During the 5-year period, there were nine causes of wildfire, with miscellaneous causes having with the highest number of events, at 65 wildfires, and debris burning resulting in the largest amount of land burned, at 1,192.15 acres. There does not appear to be any correlation between location and cause of wildfire.

Table 3.31: Cause of Wildfire in Macon County, 2016 to 2020

Wildfire Cause	Number of Events	Acres Burned
2 - Equipment Use	17	169.6
3 - Smoking	2	16.0
4 - Campfire	1	9.5
5 - Debris Burning	54	1,192.2
6 - Railroad	2	88.5
7 - Arson	40	855.5
8 - Children	1	7.0
9 - Miscellaneous	65	1,006.1
Unknown	3	26.3
Total Lowndes County	**185**	**3,370.6**

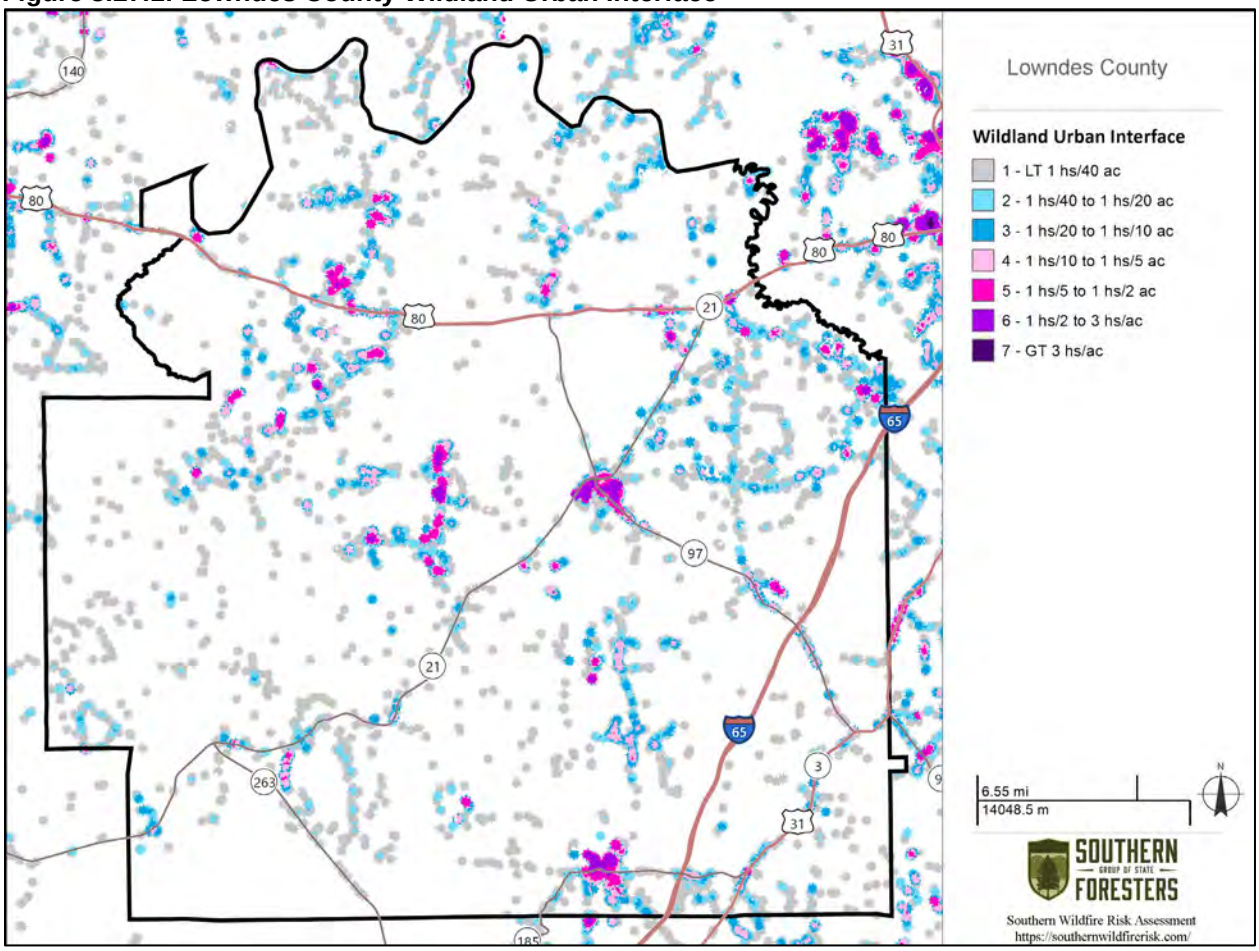
Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

A review of maps available from the Southern Group of State Foresters Wildfire Risk Assessment Portal (SWRAP) provides data on potential wildfire locations based on parameters including housing, surface fuels and burn probability, and probable fire characteristics. Of these maps, one is the wildland urban interface (WUI), which is the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. The WUI data combined with the WUI Risk Assessment provides a strong indicator of locational potential for wildfire in Lowndes and Macon Counties. See Figures 3.27.1 and 3.27.2. The Wildland Urban Interface Risk Assessment provides a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register national standards. The location of people living in the Wildland Urban Interface and rural areas is key information for defining potential wildfire impacts to people and homes. According to the Lowndes County Fire Risk Assessment report, the county is estimated to have a population of 11,227 people. Because of the rural nature of Lowndes County with population concentrations in one of the seven municipalities, approximately 46.0 percent of the population (5,168 persons) lives within two of the higher density WUI categories (5 and 6) that range from one house per five acres to greater than three houses per one acre. Only 4.9 percent of the land area, however, is located within the higher density categories. Another 15.6 percent of the population (1,907 persons) lives in Category 4 that ranges from one house per ten acres to one house per five acres. The majority of the land in Lowndes County, however, is in Category 1 with one house per 40 acres.

According to the Macon County Fire Risk Assessment report, the county is estimated to have a population of 21,309 people, with approximately 6.9 percent of the population (1,463 persons) living in the highest density WUI Category 7 with greater than three houses per one acre. Only 0.1

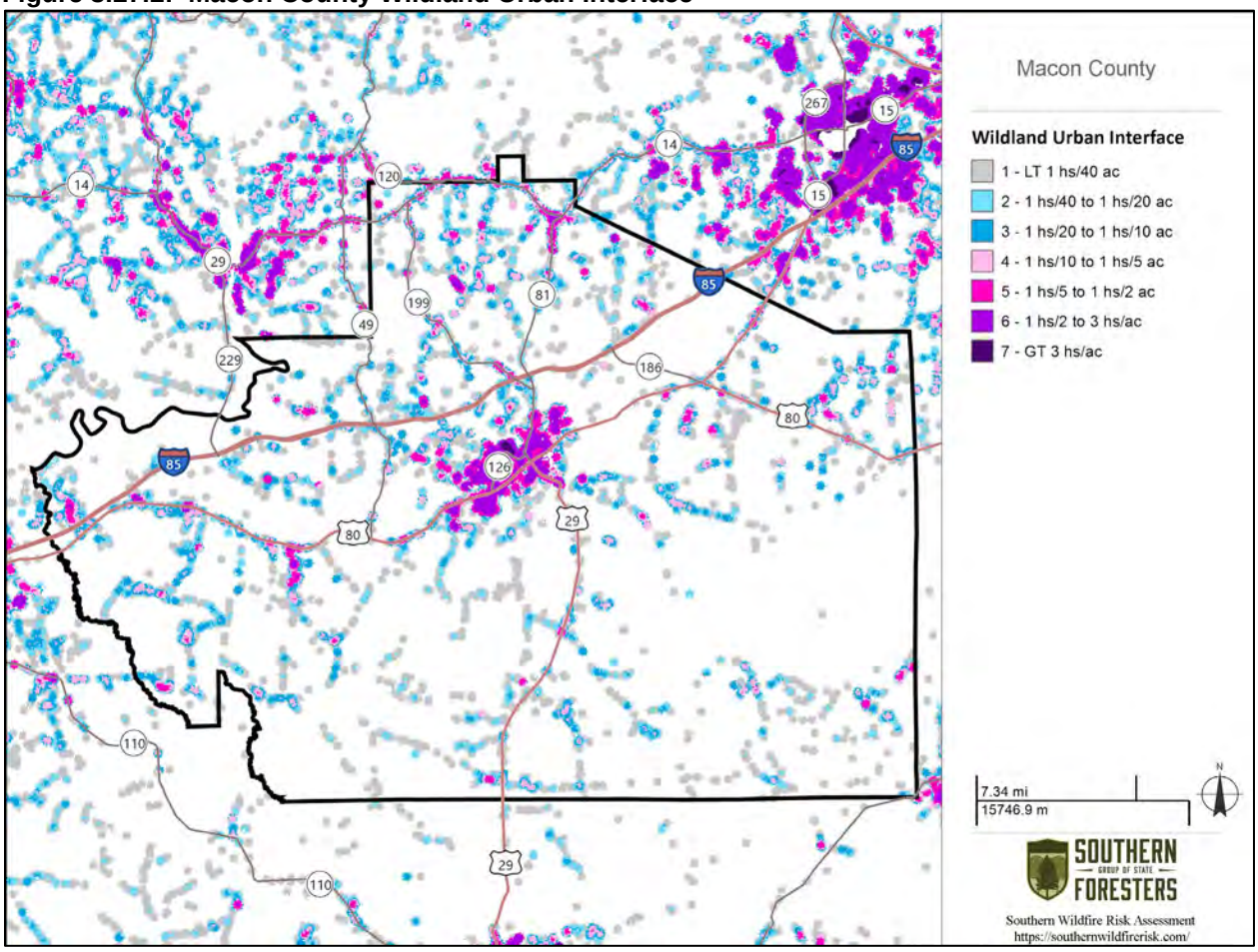
percent of land is located within Category 7. Another 57.9 percent of the population (12,530 persons) lives in Categories 5 and 6 which range from one house per five acres to 3 houses per one acre. Less than ten percent of the total land area of Macon County, at 9.8 percent) is located within these three higher density categories. Like Lowndes County, the greatest percentage of the land in Macon County, at 48.0 percent, is located in Category 1 with one house per 40 acres.

Figure 3.27.1: Lowndes County Wildland Urban Interface



Source: Southern Group of State Foresters Wildfire Risk Assessment, Lowndes County Fire Risk Assessment Report, 2020. https://www.southernwildfirerisk.com/

Figure 3.27.2: Macon County Wildland Urban Interface



Source: Southern Group of State Foresters Wildfire Risk Assessment, Macon County Fire Risk Assessment Report, 2020. https://www.southernwildfirerisk.com/

Extent.

The magnitude of wildfire events is often classified as total number of acres burned and destructive impacts to people and property, including house fires and casualties. These elements are greatly dependent on other factors, such as weather conditions, available fuel, topography, and existing wildfire mitigation capabilities. The USDA Forest Service utilizes a wildfire classification system that categorizes wildfire by the number of acres burned. In classifying Alabama Forestry Commission data into the USDA Forest Service wildfire classification system, it should be noted that acres burned in smaller wildfires was not recorded until about 2016. Therefore, the average acres burned per fire is not exact; and the fires with no acreage recorded are included the Class A Fire Classification.

With data available from the Alabama Forestry Commission, it is estimated that Lowndes County has suffered 280 wildfires between 2007 and 2020 with a total of 2,583.8 acres burned; and, Macon County has had 648 wildfires with 13,115.7 acres burned. Therefore, the average wildfire size in Lowndes County is 9.23 acres and in Macon County is 20.24 acres. The largest wildfire in Lowndes County occurred on April 27, 2013 with 350 acres burned. In the 14-year period, Lowndes County has had one Class E fire, three Class D fires, and 53 Class C fires. The remaining

223 fires were ten acres or less in size. The largest wildfire in Macon County occurred on March 4, 2011 with 616 acres burned. Macon County has had six Class E fire, 17 Class D fires, and 260 Class C fires. The remaining 365 fires were ten acres or less in size.

Table 3.32: Wildfire Classification System

Fire Class	USDA Forest Service Wildfire Classes *(class size in acres)*	Lowndes County		Macon County	
		# Fires	# Ac	# Fires	# Ac
Class A	One-fourth ac or less	46	0.9	48	1.9
Class B	More than one-fourth ac, but less than 10 ac	177	440.9	317	1,205.7
Class C	10 ac or more, but less than 100 ac	53	1,337.1	260	6,668.1
Class D	100 ac or more, but less than 300 ac	3	455.0	17	2,609.0
Class E	**300 ac or more, but less than 1,000 ac**	**1**	**350.0**	**6**	**2,631.0**
Class F	1,000 ac or more, but less than 5,000 ac	0	0.0	0	0.0
Class G	5,000 ac or more	0	0.0	0	0.0
Total		**280**	**2,583.8**	**648**	**13,115.7**

Source: Alabama Forestry Commission, 2020; *https://forestry.alabama.gov/Pages/Fire/Totals.aspx*

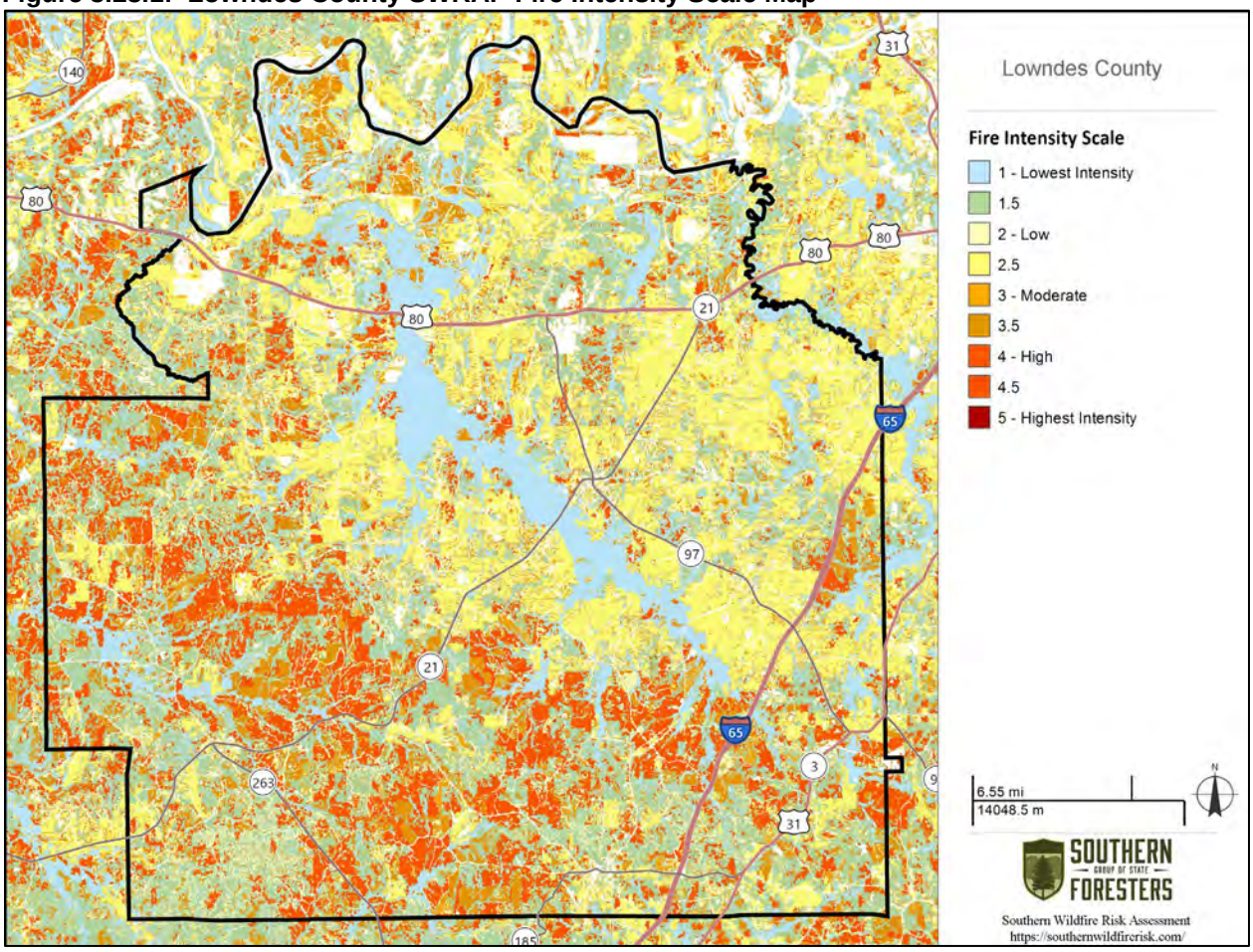
Another mechanism to measure wildfire extent is the Fire Intensity Scale (FIS), also available from the SWRAP County Fire Risk Assessment Report. FIS identifies areas where significant fuel hazards and associated fire behavior potential exist based on a weighted average of four percentile weather categories. FIS consists of five classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities. The FIS categories, shown in Table 3.33, provide a standard scale to measure potential wildfire intensity. A Fire Intensity Scale map for Lowndes County is provided in Figure 3.28.1 and for Macon County in Figure 3.28.2.

Table 3.33: SWRAP Fire Intensity Scale Classifications

FIS Class	FIS Class Description
Class 1: Very Low	Very small, discontinuous flames, usually less than 1 foot in length; verylow rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
Class 2: Low	Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighterswith protective equipment and specialized tools.
Class 3: Moderate	Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasingpotential for harm or damage to life and property
Class 4: High	Large Flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.
Class 5: Very High	Very large flames up to 150 feet in length; profuse short-range spotting,frequent long-range spotting; strong fire-induced winds. Indirect attack marginally effective at the head of the fire. Great potential for harm ordamage to life and property.

Source: Southern Group of State Foresters Wildfire Risk Assessment, Pike County Fire Risk Assessment Report, 2020. https://www.southernwildfirerisk.com/

Figure 3.28.1: Lowndes County SWRAP Fire Intensity Scale Map

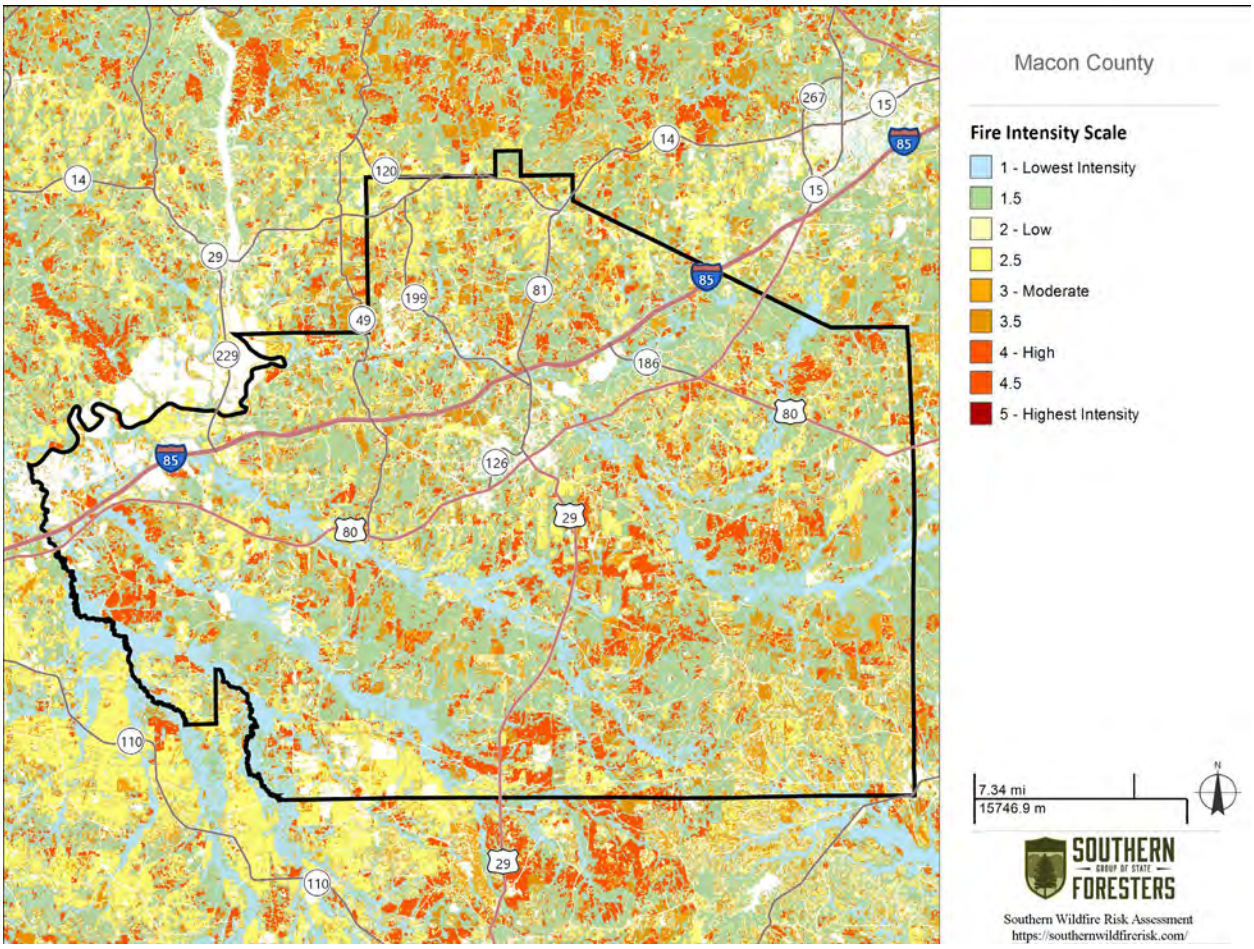


Source: Southern Group of State Foresters Wildfire Risk Assessment, Lowndes County Fire Risk Assessment Report, 2020. https://www.southernwildfirerisk.com/

According to the SWRAP Lowndes County Fire Risk Assessment Report, 12.6 percent of the land is in Category 4: High Intensity, which is the highest wildfire extent for Lowndes County. The report indicates that 25.9 percent of the total land area of the county would be considered moderate to high fire intensity, being located in Categories 3 through 4. The remaining 4.1 percent of the county land area is categorized as non-burnable to Category 2.5: Low Intensity. Those land areas categorized as moderate to high intensity are generally located in the south and southwest part of Lowndes County.

According to the SWRAP Macon County Fire Risk Assessment Report, 8.1 percent of the county's land area is in Category 4 and 4.5: High Intensity, which is the second highest wildfire extent for Macon County. (Five acres are located in Category 4.5) The report indicates that 22.4 percent of the total land area of the county would be considered moderate to high fire intensity, being located in Categories 3 through 4.5. The remaining 77.6 percent of the county land area is categorized as non-burnable to Category 2.5: Low Intensity. Those land areas categorized as moderate to high intensity are generally located in the eastern and southeastern part of Macon County.

Figure 3.28.2: Macon County SWRAP Fire Intensity Scale Map



Source: Southern Group of State Foresters Wildfire Risk Assessment, Macon County Fire Risk Assessment Report, 2020. https://www.southernwildfirerisk.com/

Historical Occurrences.

The Alabama Forestry Commission has records of wildfires dating back to 2007. Between January 2007 and December 2020, Lowndes County experienced 280 wildfires with 2,583.8 acres burned, which equates to 9.28 acres per fire; and Macon County experienced 648 wildfires with 13,115.7 acres burned. Of the total wildfires, 79.6 percent in Lowndes County and 56.3 percent in Macon County were under 10 acres in size. These smaller fires burned a combined total of 441.7 acres in Lowndes County and accounted for 17.1 percent of the total acres burned. The remaining 57 wildfires in Lowndes County ranged from 10 acres to 350 acres in size and burned a combined total of 2,142.1 acres. Therefore, 20.4 percent of the Lowndes County wildfires accounted for 82.9 percent of the total acres burned.

In Macon County, wildfires less than 10 acres in size burned a combined total of 1,207.6 acres, accounting for 9.2 percent of the total acres burned. Class C Fires between ten and 100 acres burned the largest percentage, at 50.8 percent, of the total acres burned in Macon County. Macon County had 23 wildfires (3.5 percent of the total wildfires) that were 100 acres or larger. These larger wildfires burned 5,240 acres, or 40.0 percent of the total acres burned in Macon County.

To determine historical occurrences by jurisdiction, information from the Location and Cause of Wildfire maps and data, in Figure 3.26.1 and Figure 3.26.2, was used, which includes data from

the 5-year time period from 2016 through 2020. For Lowndes County, this data includes 65 wildfires that burned a total of 492.51 acres. And, for Macon County, this data includes 185 wildfires that burned a total of 3,370.6 acres. Because the 2016 to 2020 data is the only wildfire data available with locational values, it is used to determine wildfire history, vulnerability, and probability by jurisdiction. None of the wildfire data provides information on deaths, injuries, or monetary values on property or crop damage. The wildfire data from 2016 through 2020 is provided in Table 3.34.1 for Lowndes County and Table 3.34.2 for Macon County.

Table 3.34.1: Profile of Wildfire Events in Lowndes County, 2016 to 2020

Fire Number	Location	Date	Cause	Acres
20161007-40	Unincorporated	7-Oct-16	9 - Miscellaneous	0.5
20161009-49	Unincorporated	9-Oct-16	5 - Debris Burning	5
20161011-15	Unincorporated	11-Oct-16	2 - Equipment Use	10
20161011-21	Unincorporated	11-Oct-16	9 - Miscellaneous	7
20161013-16	Unincorporated	13-Oct-16	5 - Debris Burning	3.6
20161014-42	Unincorporated	14-Oct-16	5 - Debris Burning	0.5
20161022-30	Gordonville	22-Oct-16	5 - Debris Burning	1
20161025-9	Unincorporated	25-Oct-16	9 - Miscellaneous	1.5
20161025-20	Hayneville	25-Oct-16	2 - Equipment Use	0.6
20161026-35	Unincorporated	26-Oct-16	2 - Equipment Use	1.5
20161027-2	Unincorporated	26-Oct-16	2 - Equipment Use	1.5
20161028-17	Unincorporated	28-Oct-16	6 - Railroad	1
20161029-23	Unincorporated	29-Oct-16	5 - Debris Burning	1.5
20161029-41	Unincorporated	29-Oct-16	9 - Miscellaneous	0.5
20161031-33	Unincorporated	31-Oct-16	2 - Equipment Use	1
20161109-34	Unincorporated	9-Nov-16	9 - Miscellaneous	0.25
20161110-48	Unincorporated	10-Nov-16	5 - Debris Burning	1
20161117-21	White Hall	17-Nov-16	8 - Children	1.5
20161118-16	Unincorporated	18-Nov-16	5 - Debris Burning	3
20161119-44	Hayneville	19-Nov-16	5 - Debris Burning	15
20161121-12	Unincorporated	21-Nov-16	9 - Miscellaneous	2
20161125-1	Unincorporated	25-Nov-16	7 - Arson	24
20161127-14	Unincorporated	27-Nov-16	5 - Debris Burning	19.3
20161229-8	White Hall	29-Dec-16	5 - Debris Burning	30.7
20170210-5	Unincorporated	10-Feb-17	9 - Miscellaneous	25
20170213-8	Unincorporated	13-Feb-17	2 - Equipment Use	1
20170308-3	Unincorporated	8-Mar-17	5 - Debris Burning	3
20170320-22	Lowndesboro	20-Mar-17	5 - Debris Burning	3
20170409-9	Unincorporated	9-Apr-17	7 - Arson	5
20170425-6	Unincorporated	25-Apr-17	5 - Debris Burning	1
20171004-10	Unincorporated	4-Oct-17	5 - Debris Burning	4
20171214-1	Unincorporated	14-Dec-17	9 - Miscellaneous	1
20180328-7	Unincorporated	28-Mar-18	5 - Debris Burning	12.6
20180509-3	Unincorporated	9-May-18	2 - Equipment Use	2
20180510-8	Unincorporated	10-May-18	2 - Equipment Use	0.1
20180511-1	Unincorporated	11-May-18	2 - Equipment Use	0.2
20180512-1	Unincorporated	12-May-18	9 - Miscellaneous	2
20190207-4	Unincorporated	7-Feb-19	9 - Miscellaneous	2
20190410-1	Unincorporated	10-Apr-19	2 - Equipment Use	2.5
20190529-2	Unincorporated	29-May-19	9 - Miscellaneous	13.2
20190601-1	Mosses	1-Jun-19	9 - Miscellaneous	1
20190904-2	Unincorporated	4-Sep-19	9 - Miscellaneous	1
20190907-2	Unincorporated	7-Sep-19	5 - Debris Burning	20
20190920-23	Unincorporated	20-Sep-19	2 - Equipment Use	3.2
20190922-6	Unincorporated	22-Sep-19	5 - Debris Burning	8.3
20190924-3	Unincorporated	24-Sep-19	9 - Miscellaneous	20.1
20190924-19	White Hall	24-Sep-19	5 - Debris Burning	2.3

20190926-9	Unincorporated	26-Sep-19	9 - Miscellaneous	6
20190930-14	Unincorporated	30-Sep-19	9 - Miscellaneous	1.1
20190930-18	Unincorporated	30-Sep-19	2 - Equipment Use	1
20191001-5	Unincorporated	1-Oct-19	9 - Miscellaneous	28.2
20191001-19	Unincorporated	1-Oct-19	9 - Miscellaneous	0.1
20191012-3	Unincorporated	12-Oct-19	2 - Equipment Use	5
20191014-3	White Hall	14-Oct-19	8 - Children	1.1
20191101-2	Unincorporated	1-Nov-19	4 - Campfire	0.5
20200110-1	Fort Deposit	10-Jan-20	2 - Equipment Use	0.2
20200229-9	Unincorporated	29-Feb-20	5 - Debris Burning	5.4
20200506-27	Unincorporated	6-May-20	9 - Miscellaneous	3.5
20200509-6	Unincorporated	9-May-20	9 - Miscellaneous	9.5
20201117-10	Unincorporated	17-Nov-20	5 - Debris Burning	2
20201124-7	Unincorporated	24-Nov-20	5 - Debris Burning	3.1
20201223-3	Unincorporated	23-Dec-20	5 - Debris Burning	0.5
20201227-5	Unincorporated	27-Dec-20	5 - Debris Burning	155
20201228-1	Unincorporated	28-Dec-20	2 - Equipment Use	0.26
20201230-2	Mosses	30-Dec-20	5 - Debris Burning	3.1

Jurisdictional Summary: Lowndes County Wildfires

Location	Wildfire Events		Acres Burned	
	Number	% of Total	Number	% of Total
Lowndes County Total	65 Events	100.0%	492.51 ac	100.0%
Benton	0 Events	0.0%	0.00 ac	0.0%
Fort Deposit	1 Event	1.5%	0.20 ac	0.0%
Gordonville	1 Event	1.5%	1.00 ac	0.2%
Hayneville	2 Events	3.1%	15.60 ac	3.2%
Lowndesboro	1 Event	1.5%	3.00 ac	0.6%
Mosses	2 Events	3.1%	4.10 ac	0.2%
White Hall	4 Events	6.2%	35.60 ac	7.2%
Unincorp. Lowndes County	54 Events	83.1%	433.01 ac	87.9%

Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

Table 3.34.2: Profile of Wildfire Events in Macon County, 2016 to 2020

Fire Number	Location	Date	Cause	Acres
20161003-11	Unincorporated	3-Oct-16	5 - Debris Burning	6
20161004-15	Unincorporated	4-Oct-16	5 - Debris Burning	8
20161007-41	Unincorporated	7-Oct-16	9 - Miscellaneous	6
20161007-62	Unincorporated	7-Oct-16	7 - Arson	8
20161008-15	Unincorporated	8-Oct-16	9 - Miscellaneous	30
20161008-30	Unincorporated	8-Oct-16	9 - Miscellaneous	10
20161009-63	Unincorporated	9-Oct-16	5 - Debris Burning	10
20161010-35	Unincorporated	10-Oct-16	9 - Miscellaneous	10
20161011-62	Unincorporated	11-Oct-16	5 - Debris Burning	1
20161012-18	Unincorporated	12-Oct-16	9 - Miscellaneous	204
20161014-13	Unincorporated	14-Oct-16	5 - Debris Burning	34
20161014-19	Unincorporated	14-Oct-16	5 - Debris Burning	20
20161014-37	Unincorporated	14-Oct-16	9 - Miscellaneous	11
20161022-36	Unincorporated	22-Oct-16	9 - Miscellaneous	3
20161023-30	Unincorporated	23-Oct-16	5 - Debris Burning	53
20161024-13	Tuskegee	24-Oct-16	7 - Arson	5
20161026-16	Unincorporated	26-Oct-16	7 - Arson	186
20161030-34	Unincorporated	30-Oct-16	5 - Debris Burning	15
20161031-20	Unincorporated	31-Oct-16	7 - Arson	12
20161101-3	Unincorporated	31-Oct-16	7 - Arson	1
20161102-1	Unincorporated	1-Nov-16	9 - Miscellaneous	1
20161104-34	Unincorporated	4-Nov-16	2 - Equipment Use	0.5
20161105-15	Tuskegee	5-Nov-16	3 - Smoking	6

20161105-24	Unincorporated	5-Nov-16	9 - Miscellaneous	4
20161105-3	Tuskegee	5-Nov-16	7 - Arson	12
20161106-25	Unincorporated	6-Nov-16	7 - Arson	2
20161107-47	Unincorporated	7-Nov-16	5 - Debris Burning	1
20161110-16	Unincorporated	10-Nov-16	7 - Arson	1
20161112-11	Tuskegee	12-Nov-16	7 - Arson	53
20161113-11	Unincorporated	13-Nov-16	7 - Arson	93
20161113-25	Unincorporated	13-Nov-16	5 - Debris Burning	2
20161114-1	Unincorporated	13-Nov-16	7 - Arson	5
20161115-33	Unincorporated	15-Nov-16	7 - Arson	7
20161117-14	Unincorporated	17-Nov-16	9 - Miscellaneous	14
20161124-11	Unincorporated	24-Nov-16	7 - Arson	5
20161124-27	Unincorporated	24-Nov-16	5 - Debris Burning	0.5
20161124-5	Unincorporated	24-Nov-16	5 - Debris Burning	83
20161127-1	Unincorporated	26-Nov-16	9 - Miscellaneous	5
20161127-23	Tuskegee	27-Nov-16	7 - Arson	20
20161127-26	Unincorporated	27-Nov-16	7 - Arson	7
20161128-1	Unincorporated	27-Nov-16	9 - Miscellaneous	5
20161128-49	Unincorporated	28-Nov-16	7 - Arson	5
20161128-91	Unincorporated	28-Nov-16	2 - Equipment Use	5
20161203-1	Unincorporated	2-Dec-16	9 - Miscellaneous	0.5
20161229-3	Unincorporated	29-Dec-16	9 - Miscellaneous	5
20170112-1	Unincorporated	12-Jan-17	7 - Arson	3
20170116-6	Notasulga	16-Jan-17	9 - Miscellaneous	30
20170118-2	Unincorporated	18-Jan-17	7 - Arson	13
20170131-27	Unincorporated	31-Jan-17	5 - Debris Burning	14
20170214-17	Franklin	14-Feb-17	9 - Miscellaneous	10
20170216-7	Unincorporated	16-Feb-17	5 - Debris Burning	1
20170225-20	Unincorporated	25-Feb-17	9 - Miscellaneous	27
20170225-8	Unincorporated	25-Feb-17	5 - Debris Burning	387
20170226-12	Unincorporated	26-Feb-17	7 - Arson	112
20170226-28	Unincorporated	26-Feb-17	7 - Arson	10
20170226-29	Unincorporated	26-Feb-17	9 - Miscellaneous	3
20170304-15	Unincorporated	4-Mar-17	9 - Miscellaneous	40
20170305-6	Tuskegee	5-Mar-17	7 - Arson	25
20170305-9	Tuskegee	5-Mar-17	7 - Arson	40
20170316-3	Unincorporated	16-Mar-17	5 - Debris Burning	15
20170319-25	Unincorporated	19-Mar-17	5 - Debris Burning	92
20170320-11	Tuskegee	20-Mar-17	6 - Railroad	84
20170321-16	Unincorporated	21-Mar-17	9 - Miscellaneous	12
20170321-30	Unincorporated	21-Mar-17	7 - Arson	53
20170321-40	Unincorporated	21-Mar-17	7 - Arson	5
20170322-16	Tuskegee	22-Mar-17	9 - Miscellaneous	11
20170323-2	Unincorporated	22-Mar-17	9 - Miscellaneous	12
20170323-28	Unincorporated	23-Mar-17	7 - Arson	20
20170323-37	Unincorporated	23-Mar-17	5 - Debris Burning	2
20170324-26	Unincorporated	24-Mar-17	7 - Arson	45
20170325-11	Tuskegee	25-Mar-17	5 - Debris Burning	25
20170325-5	Unincorporated	25-Mar-17	5 - Debris Burning	20
20170325-9	Unincorporated	25-Mar-17	5 - Debris Burning	10
20170329-3	Unincorporated	29-Mar-17	5 - Debris Burning	7
20170421-14	Unincorporated	21-Apr-17	2 - Equipment Use	30
20170422-5	Unincorporated	22-Apr-17	2 - Equipment Use	1
20170908-1	Unincorporated	8-Sep-17	5 - Debris Burning	35
20170909-2	Unincorporated	9-Sep-17	9 - Miscellaneous	4
20170909-3	Unincorporated	9-Sep-17	9 - Miscellaneous	2
20170910-3	Unincorporated	10-Sep-17	7 - Arson	1
20171013-1	Unincorporated	13-Oct-17	9 - Miscellaneous	10
20171021-1	Unincorporated	21-Oct-17	4 - Campfire	9.5

20171212-3	Unincorporated	12-Dec-17	5 - Debris Burning	15
20171215-3	Unincorporated	15-Dec-17	5 - Debris Burning	7
20171215-4	Unincorporated	15-Dec-17	5 - Debris Burning	9
20180106-12	Unincorporated	6-Jan-18	5 - Debris Burning	3
20180131-9	Unincorporated	31-Jan-18	9 - Miscellaneous	2
20180203-13	Unincorporated	3-Feb-18	9 - Miscellaneous	7.5
20180221-6	Unincorporated	21-Feb-18	9 - Miscellaneous	20
20180222-9	Unincorporated	22-Feb-18	9 - Miscellaneous	20
20180303-6	Unincorporated	3-Mar-18	9 - Miscellaneous	25
20180305-5	Unincorporated	5-Mar-18	9 - Miscellaneous	1
20180310-3	Unincorporated	10-Mar-18	9 - Miscellaneous	1
20180315-2	Unincorporated	15-Mar-18	5 - Debris Burning	2
20180324-16	Franklin	24-Mar-18	9 - Miscellaneous	3
20180324-7	Unincorporated	24-Mar-18	5 - Debris Burning	30
20180325-9	Unincorporated	25-Mar-18	7 - Arson	0.5
20180329-5	Unincorporated	29-Mar-18	9 - Miscellaneous	5
20180331-7	Unincorporated	31-Mar-18	5 - Debris Burning	5
20180402-6	Unincorporated	2-Apr-18	9 - Miscellaneous	10
20180403-3	Unincorporated	3-Apr-18	3 - Smoking	10
20180411-1	Unincorporated	11-Apr-18	5 - Debris Burning	0.5
20180411-3	Unincorporated	11-Apr-18	9 - Miscellaneous	0.5
20180418-8	Unincorporated	18-Apr-18	9 - Miscellaneous	30
20180420-1	Unincorporated	19-Apr-18	9 - Miscellaneous	30
20180420-4	Unincorporated	20-Apr-18	9 - Miscellaneous	30
20180428-1	Unincorporated	28-Apr-18	9 - Miscellaneous	10
20180917-8	Unincorporated	17-Sep-18	8 - Children	7
20181127-2	Unincorporated	27-Nov-18	5 - Debris Burning	25
20181202-2	Tuskegee	2-Dec-18	5 - Debris Burning	1
20190106-1	Unincorporated	6-Jan-19	2 - Equipment Use	0.1
20190106-2	Unincorporated	6-Jan-19	2 - Equipment Use	0.25
20190130-2	Unincorporated	30-Jan-19	2 - Equipment Use	0.5
20190202-1	Unincorporated	1-Feb-19	5 - Debris Burning	2
20190202-3	Unincorporated	2-Feb-19	5 - Debris Burning	2
20190203-3	Unincorporated	3-Feb-19	9 - Miscellaneous	0.25
20190213-2	Tuskegee	13-Feb-19	2 - Equipment Use	0.1
20190226-4	Unincorporated	26-Feb-19	7 - Arson	20
20190319-1	Unincorporated	19-Mar-19	9 - Miscellaneous	1
20190322-26	Unincorporated	22-Mar-19	5 - Debris Burning	30
20190324-3	Unincorporated	24-Mar-19	5 - Debris Burning	45
20190328-21	Unincorporated	28-Mar-19	5 - Debris Burning	1.5
20190330-12	Unincorporated	30-Mar-19	7 - Arson	8
20190330-22	Unincorporated	30-Mar-19	7 - Arson	19
20190411-2	Unincorporated	11-Apr-19	5 - Debris Burning	0.1
20190603-3	Unincorporated	3-Jun-19	5 - Debris Burning	8
20190604-2	Unincorporated	4-Jun-19	5 - Debris Burning	0.25
20190604-3	Shorter	4-Jun-19	5 - Debris Burning	0.5
20190613-4	Franklin	13-Jun-19	7 - Arson	5
20190809-1	Unincorporated	9-Aug-19	5 - Debris Burning	0.5
20190816-11	Unincorporated	16-Aug-19	5 - Debris Burning	4
20190819-10	Franklin	19-Aug-19	9 - Miscellaneous	1
20190820-6	Tuskegee	20-Aug-19	9 - Miscellaneous	5
20190913-4	Shorter	13-Sep-19	9 - Miscellaneous	2.5
20190919-18	Tuskegee	19-Sep-19	5 - Debris Burning	0.25
20190923-20	Unincorporated	23-Sep-19	5 - Debris Burning	6.3
20190927-3	Unincorporated	27-Sep-19	7 - Arson	1
20190928-11	Unincorporated	28-Sep-19	7 - Arson	2
20190929-16	Unincorporated	29-Sep-19	7 - Arson	7
20190929-3	Unincorporated	29-Sep-19	2 - Equipment Use	0.5
20190930-1	Unincorporated	29-Sep-19	7 - Arson	2

20190930-22	Franklin	30-Sep-19	2 - Equipment Use	2
20191001-22	Unincorporated	1-Oct-19	5 - Debris Burning	5
20191001-30	Franklin	1-Oct-19	5 - Debris Burning	1.5
20191004-19	Unincorporated	4-Oct-19	2 - Equipment Use	2
20191004-23	Unincorporated	4-Oct-19	2 - Equipment Use	20.4
20191004-34	Unincorporated	4-Oct-19	2 - Equipment Use	6.2
20191005-10	Unincorporated	5-Oct-19	2 - Equipment Use	43.7
20191005-13	Franklin	5-Oct-19	2 - Equipment Use	57
20191005-35	Tuskegee	5-Oct-19	9 - Miscellaneous	1.5
20191011-13	Unincorporated	11-Oct-19	9 - Miscellaneous	6.5
20191011-18	Unincorporated	11-Oct-19	5 - Debris Burning	40
20191011-28	Tuskegee	11-Oct-19	5 - Debris Burning	5
20191012-4	Franklin	12-Oct-19	9 - Miscellaneous	9.2
20191012-7	Notasulga	12-Oct-19	2 - Equipment Use	0.25
20191014-6	Unincorporated	14-Oct-19	9 - Miscellaneous	1
20200110-2	Unincorporated	10-Jan-20	9 - Miscellaneous	2.5
20200110-5	Unincorporated	10-Jan-20	6 - Railroad	4.5
20200315-11	Unincorporated	15-Mar-20	9 - Miscellaneous	10
20200319-3	Unincorporated	19-Mar-20	5 - Debris Burning	0.25
20200320-5	Unincorporated	20-Mar-20	9 - Miscellaneous	10
20200320-7	Unincorporated	20-Mar-20	9 - Miscellaneous	7.5
20200321-1	Franklin	21-Mar-20	9 - Miscellaneous	3
20200330-7	Unincorporated	30-Mar-20	7 - Arson	3
20200406-3	Unincorporated	6-Apr-20	7 - Arson	3
20200506-51	Unincorporated	6-May-20	9 - Miscellaneous	3
20200509-2	Unincorporated	9-May-20	9 - Miscellaneous	25
20200514-8	Unincorporated	14-May-20	2 - Equipment Use	0.1
20200620-1	Tuskegee	19-Jun-20	7 - Arson	1
20210120-4	Unincorporated	20-Jan-21	9 - Miscellaneous	12.25
20210203-6	Unincorporated	3-Feb-21	9 - Miscellaneous	3
20210204-1	Unincorporated	3-Feb-21	9 - Miscellaneous	2
20210204-6	Unincorporated	4-Feb-21	9 - Miscellaneous	40
20210224-14	Unincorporated	24-Feb-21	5 - Debris Burning	0.75
20210228-12	Unincorporated	28-Feb-21	7 - Arson	35
20210307-32	Unincorporated	7-Mar-21	9 - Miscellaneous	5
20210308-59	Unincorporated	8-Mar-21	9 - Miscellaneous	5
20210310-18	Unincorporated	10-Mar-21	5 - Debris Burning	100
20210311-7	Unincorporated	11-Mar-21	9 - Miscellaneous	26
20210312-7	Unincorporated	12-Mar-21	9 - Miscellaneous	4.4
20210315-11	Unincorporated	15-Mar-21	9 - Miscellaneous	155
20210316-3	Unincorporated	16-Mar-21	5 - Debris Burning	0.25
20210330-1	Unincorporated	29-Mar-21	Unknown	0.25
20210407-2	Unincorporated	7-Apr-21	Unknown	25
20210412-1	Unincorporated	12-Apr-21	Unknown	1

Jurisdictional Summary: Macon County Wildfires

Location	Wildfire Events		Acres Burned	
	Number	% of Total	Number	% of Total
Macon County Total	185 Events	100.0%	3,370.60 ac	100.0%
Franklin	9 Events	4.9%	91.70 ac	2.7%
Notasulga	2 Events	1.1%	30.25 ac	0.9%
Shorter	2 Events	1.1%	3.00 ac	1.1%
Tuskegee	17 Events	9.2%	294.85 ac	8.7%
Unincorp. Macon County	155 Events	83.8%	2,950.80 ac	87.5%

Source: Alabama Forestry Commission, 2020
https://gis.forestry.alabama.gov/portal/apps/webappviewer/index.html?id=e11e120b51984c928af6e6d27d261dcf

Probability of Future Events.

The Lowndes County Fire Risk Assessment Report and the Macon County Fire Risk Assessment Report include data for Burn Probability which depicts the probability of an area burning given current landscape conditions, percentile weather, historical ignition patterns and historical fire prevention and suppression efforts, with a rating from 1 (least burn probability) to 10 (highest burn probability). Of the total area in Lowndes County, 97.4 percent is in the Burn Probability Class 1 through 5, and the remaining 2.6 percent is in Class 6. Of the total area in Macon County, 100.0 percent is in the Burn Probability Class 1 through 5.

Given the relatively low burn probability but the high percentage of the population living in the WUI, the probability for future wildfire occurrences for all jurisdictions in all of the planning area would be regarded as **Medium**. Lowndes County has experienced 65 wildfire events in five years from 2016 to 2020, which equates to more than **100 percent** probability of an annual event. The combined acreage burned from the 65 events was 492.51 acres, or **7.58 acres per event**. Likewise, Macon County has experienced 185 wildfire events in five years, which equates to more than **100 percent** probability of an annual event. The combined acreage burned from the 185 events was 3,370.6 acres, or **18.22 acres per event**. As shown in Table 3.35, the impact of future wildfire events for all jurisdictions in Lowndes and Macon Counties is considered to be **Medium** with probable major damage within a 10 to 50-year period throughout the county.

Table 3.35: Wildfire Probability by Jurisdiction Based on Data from 2016 to 2020

Jurisdiction	Historical Events	Extent *(Fire Intensity Scale)*	Probability of Future Events	Damage Per Event *(ac burned)*	Impact of Future Events
Lowndes County	**65 Events**	**FIS Cat 4 High**	**>100.0%**	7.58	**Medium**
Countywide	0 Events	FIS Cat 4 High	0.0%	8.02	Medium
Unincorp. Lowndes Co.	54 Events	FIS Cat 4 High	>100.0%	0.00	Medium
Town of Benton	0 Events	FIS Cat 4 High	0.0%	0.00	Medium
Town of Fort Deposit	1 Event	FIS Cat 4 High	20.0%	1.00	Medium
Town of Gordonville	1 Event	FIS Cat 4 High	20.0%	7.80	Medium
Town of Hayneville	2 Events	FIS Cat 4 High	40.0%	3.00	Medium
Town of Lowndesboro	1 Event	FIS Cat 4 High	20.0%	2.05	Medium
Town of Mosses	2 Events	FIS Cat 4 High	40.0%	8.90	Medium
Town of White Hall	4 Events	FIS Cat 4 High	80.0%	7.58	Medium
Macon County	**185 Events**	**FIS Cat 4 High**	**>100.0%**	**18.22**	**Medium**
Countywide	0 Events	FIS Cat 4 High	0.0%	0.00	Medium
Unincorp. Macon County	155 Events	FIS Cat 4 High	>100.0%	19.04	Medium
Town of Franklin	9 Events	FIS Cat 4 High	>100.0%	10.19	Medium
Town of Notasulga	2 Events	FIS Cat 4 High	40.0%	15.13	Medium
Town of Shorter	2 Events	FIS Cat 4 High	40.0%	1.50	Medium
City of Tuskegee	17 Events	FIS Cat 4 High	>100.0%	17.34	Medium

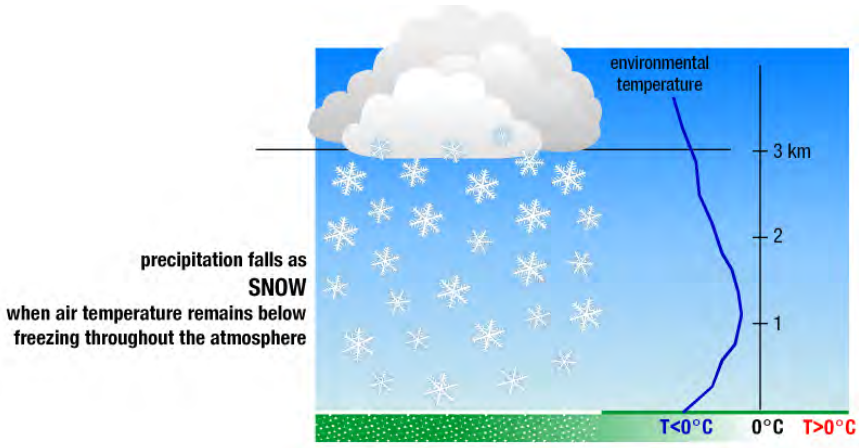
3.16 Winter/Ice Storms, Extreme Cold

Description.
A winter storm is an event in which the main types of precipitation are snow, sleet or freezing rain. Winter storms vary in size and strength and include heavy snowstorms, blizzards, freezing rain, sleet, ice storms and blowing and drifting snow conditions. As explained by the National Severe Storm Laboratory, the right combination of the following ingredients is necessary for a winter storm to develop that results in one of three primary forms of winter precipitation (Figure 3.29):

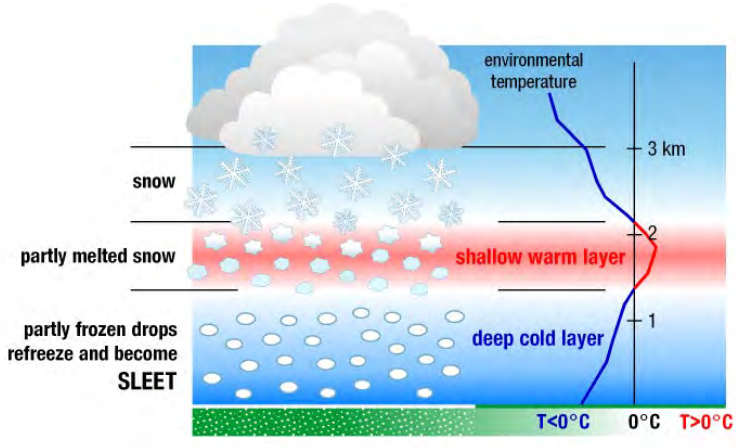
- Cold air. Below freezing temperatures in the clouds and near the ground are necessary to make snow and/or ice.
- Lift. Something to raise the moist air to form the clouds and cause precipitation. An example of lift is warm air colliding with cold air and being forced to rise over the cold dome. The boundary between the warm and cold air masses is called a front. Another example of lift is air flowing up a mountainside.
- Moisture. To form clouds and precipitation. Air blowing across a body of water, such as a large lake or the ocean, is an excellent source of moisture.

Figure 3.29: Types of Winter Precipitation

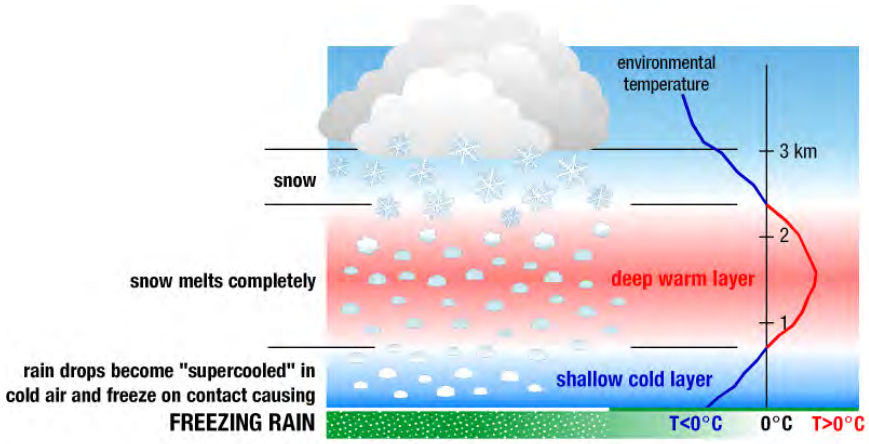
SNOW:
Most precipitation that forms in wintertime clouds starts out as snow because the top layer of the storm is usually cold enough to create snowflakes. Snowflakes are just collections of ice crystals that cling to each other as they fall toward the ground. Precipitation continues to fall as snow when the temperature remains at or below 0°C from the cloud base to the ground.



SLEET:
Sleet occurs when snowflakes only partially melt when they fall through a shallow layer of warm air. These slushy drops refreeze as they next fall through a deep layer of freezing air above the surface, and eventually reach the ground as frozen rain drops that bounce on impact



FREEZING RAIN:
Freezing rain occurs when snowflakes descend into a warmer layer of air and melt completely. When these liquid water drops fall through another thin layer of freezing air just above the surface, they don't have enough time to refreeze before reaching the ground. Because they are "supercooled," they instantly refreeze upon contact with anything that that is at or below 0°C, creating a glaze of ice on the ground, trees, power lines, or other objects.



A significant accumulation of freezing rain lasting several hours or more is called an ice storm.

Source: National Severe Weather Laboratory. https://www.nssl.noaa.gov/education/svrwx101/winter/types/

Extremely cold temperatures accompanied by strong winds can result in wind chills that cause bodily injury such as frostbite and death. Winter storm occurrences also tend to be very disruptive to transportation and commerce. Trees, cars, roads, and other surfaces develop a coating or glaze of ice, making even small accumulations of ice extremely hazardous to motorists and pedestrians. The most prevalent impacts of heavy accumulations of ice are slippery roads and walkways that lead to vehicle and pedestrian accidents; collapsed roofs from fallen trees and limbs and heavy ice and snow loads; and fallen trees, telephone poles and lines, electrical wires, and communication towers. As a result of severe ice storms, telecommunications and power can be disrupted for days. Such storms can also cause exceptionally high rainfall that persists for days, resulting in heavy flooding.

Location.
Winter storms in Alabama, including Lowndes and Macon Counties, are not as severe or common as winter storms in the northern states. Typically, a winter storm in these counties consists of freezing rain or a few inches of snow that may or may not be accompanied by frozen roadways. Because neither Lowndes County nor Macon County keeps much equipment to react to winter weather events, however, the infrequent, and even minor, winter storm and ice events can have a great impact on the counties and their residents.

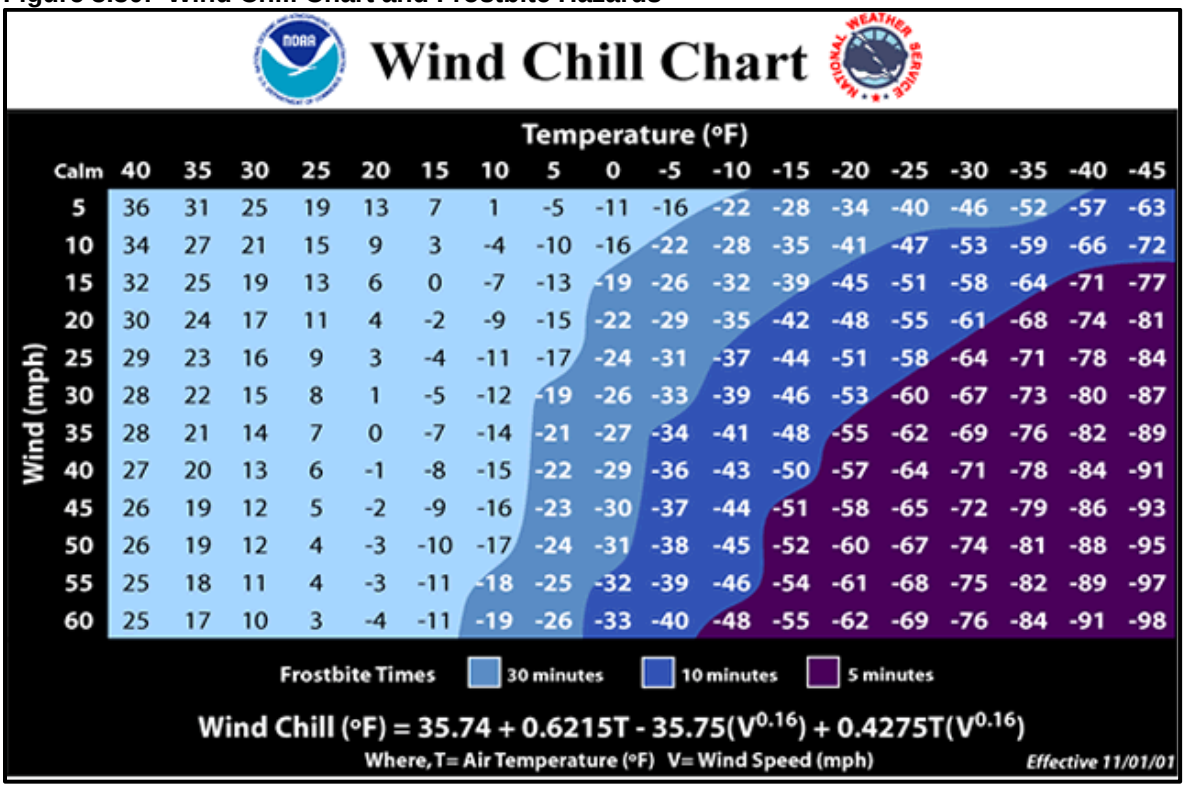
The primary impact of past winter storms in Lowndes County and Macon County has been road closures for extended periods of time. When they do occur, winter storms are not isolated to small areas of the counties. Instead, all of the county and the surrounding region has been affected by winter storms in the past. Of the eight winter/ice storms that occurred in Lowndes County and seven winter/ice storms that occurred in Macon County between 2000 and 2020, all events were countywide events and not isolated to any one part of the county.

Extent.
The extent of a winter storm varies greatly by location, making it impossible to develop standard extent or magnitude guidelines that can be applied across the nation, as with tornadoes or hurricanes. Therefore, the best measure of the extent of a winter/ice storm is at which point the local weather triggers the regional weather office of the National Weather Service to issue winter

storm or ice storm watches, advisories, and warnings. ***The Birmingham Office of the National Weather Service that covers Central Alabama issues winter storm warnings when two or more inches of snow, one-half inch or more of sleet, or one-quarter inch or more of freezing rain (or any combination thereof) is anticipated and is expected to be a dangerous threat to life and property.*** A winter storm warning can also be issued at forecaster discretion when significant impacts are expected, but official warning criteria are not met. A winter storm warning can be issued at any time, typically up to 36 hours in advance, when there is an 80 percent chance or greater that a significant winter-weather event will occur. ***An ice storm warning is issued up to 36 hours before an event if there is an 80 percent chance or greater that freezing rain will accumulate to ¼ inch or more.*** Large amounts of freezing rain can cause tree limbs and power lines to snap, as well as significant travel disruptions. It doesn't take a lot of freezing rain or freezing drizzle to create hazardous driving conditions, even if an ice storm warning is not issued.

In addition to winter/ice storms, extreme cold temperatures can have an impact due to wind chill that can result in frostbite. Wind Chill is the temperature it "feels like" outside and is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the wind increases, the body is cooled at a faster rate causing the skin temperature to drop. Wind Chill does not impact inanimate objects like car radiators and exposed water pipes, because these objects cannot cool below the actual air temperature. A wind chill advisory is issued when wind chill temperatures are potentially hazardous; and a wind chill warning is issued when wind chill temperatures are life threatening. Wind chill advisories and warnings are based on National Weather Service Wind Chill Chart (Figure 4.64) that provides a matrix of both temperatures and wind speeds and indicates at which point hazardous conditions, such as frostbite and hypothermia, might begin.

Figure 3.30: Wind Chill Chart and Frostbite Hazards



Source: NOAA National Weather Service. https://www.weather.gov/safety/cold-wind-chill-chart

In Lowndes County, the maximum extent reported for extreme cold is 2°F and wind chill below 0°F. For winter or ice storms, the maximum extents reported are 4-inches of snow, ½-inch of ice, and 3-inches of sleet. In Macon County, the maximum extent reported for extreme cold was also 2°F and wind chill below 0°F. For winter or ice storms, the maximum extents reported are 4-inches of snow, 1/4-inch of ice, and 3-inches of sleet. Although a winter or ice storm is not a frequent occurrence in the planning area, the impact of even a small winter storm can be hugely significant due to the lack of equipment and other resources to handle those conditions. On January 9, 2011, a car accident due to the weather caused one indirect fatality near Lowndesboro in Lowndes County. Winter storms can also cause power and communication outages, resulting in loss of heat and closing of businesses. Further, the agricultural economy of the county cannot withstand the extreme temperatures and freezing conditions without financial loss. So, while Lowndes County and Macon County are not highly susceptible to frequent winter or ice storms, the county and its residents are very vulnerable when these events occur.

Historical Occurrences.

Between January 1, 2000 and December 31, 2020, Lowndes County experienced eight winter storm of ice storm events, all of which were countywide events affecting all jurisdictions. There were no direct deaths or injuries reported because of the events, although the 2011 winter storm contributed indirectly to the death of one woman in a vehicle accident near Lowndesboro. There was no property or crop damage reported due to the five winter storms. Macon County experienced seven winter storm of ice storm events, all of which were countywide events affecting all jurisdictions. There were no direct deaths or injuries reported because of the events. There was no property or crop damage reported due to the five winter storms. A profile of winter storm and ice events for Lowndes and Macon Counties is provided in Table 3.36.1 and 3.36.2.

Table 3.36.1: Profile of Winter / Ice Storm Events in Lowndes County

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Countywide	1/6/2014	Cold/Wind Chill	below 0°F	0	0	$0	$0
Countywide	1/24/2003	Extreme Cold/Wind Chill	2°F Temp Below 0°F wind chill	0	0	$0	$0
Countywide	1/2/2002	Heavy Snow	2" to 4" snow	0	0	$0	$0
Countywide	2/12/2010	Heavy Snow	2" to 3" snow	0	0	$0	$0
Countywide	1/9/2011	Ice Storm	1/2" ice, 3" sleet	0	0	$0	$0
Countywide	1/16/2018	Winter Storm	2" to 3" snow	0	0	$0	$0
Countywide	1/19/2008	Winter Weather	< 1" snow	0	0	$0	$0
Countywide	1/28/2014	Winter Weather	1" snow	0	0	$0	$0
Jurisdictional Summary: Lowndes County Winter / Ice Storms							
Countywide		8 Events	4" Snow 1/2" Ice 3" Sleet	0	0	$0	$0
Unincorp Lowndes County		8 Events		0	0	$0	$0
Benton		8 Events		0	0	$0	$0
Fort Deposit		8 Events		0	0	$0	$0
Gordonville		8 Events		0	0	$0	$0
Hayneville		8 Events		0	0	$0	$0
Lowndesboro		8 Events		0	0	$0	$0

Mosses	8 Events		0	0	$0	$0
White Hall	8 Events		0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Table 3.36.2: Profile of Winter / Ice Storm Events in Macon County

Location	Date	Type	Mag	Death	Injuries	Property Damage	Crop Damage
Countywide	1/6/2014	Cold/Wind Chill	single digits	0	0	$0	$0
Countywide	1/24/2003	Extreme Cold/Wind Chill	2°F Temp Below 0°F wind chill	0	0	$0	$0
Countywide	1/2/2002	Heavy Snow	2” to 4" snow	0	0	$0	$0
Countywide	2/12/2010	Heavy Snow	3” to 4" snow	0	0	$0	$0
Countywide	1/9/2011	Ice Storm	1/4" ice	0	0	$0	$0
Countywide	1/16/2018	Winter Storm	2” to 3" snow	0	0	$0	$0
Countywide	1/28/2014	Winter Weather	2" snow	0	0	$0	$0
Jurisdictional Summary: Lowndes County Winter / Ice Storms							
Countywide	7 Events	4" Snow 1/4" Ice 3" Sleet		0	0	$0	$0
Unincorp Macon County	7 Events			0	0	$0	$0
Franklin	7 Events			0	0	$0	$0
Notasulga	7 Events			0	0	$0	$0
Shorter	7 Events			0	0	$0	$0
Tuskegee	7 Events			0	0	$0	$0

Source: NOAA, National Centers for Environmental Information, Storm Events Database. https://www.ncdc.noaa.gov/stormevents

Probability of Future Events.

Lowndes County experienced eight countywide winter/ice storm events in 21 years, which equates to a **38.1 percent** probability of an annual event. Macon County experienced eight countywide winter/ice storm events in 21 years, which equates to a **33.3 percent** probability of an annual event. There were no reported deaths, injuries, property damage or crop damage that were directly attributable to the events; however, there was one death from an auto accident that was an indirect result of icy roads in Lowndes County. With no additional data on local damages, the damage per event is $0.00 per event. As shown in Table 3.37, the impact of future winter storm and ice storm events for all jurisdictions in Lowndes County and Macon County is considered to be **Low** with probable major damage within a 100-year period throughout the county.

Table 3.37: Winter/Ice Storm Probability by Jurisdiction

Jurisdiction	Historical Events	Extent	Probability of Future Events	Damage Per Event	Impact of Future Events
Lowndes County	**8 Events**	**2°F, 4” snow**	**38.1%**	**$0**	**Low**
Countywide	8 Events	2°F, 4” snow	38.1%	$0	Low
Unincorp. Lowndes Co.	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of Benton	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of Fort Deposit	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of Gordonville	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of Hayneville	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of Lowndesboro	8 Events	2°F, 4” snow	38.1%	$0	Low

Town of Mosses	8 Events	2°F, 4” snow	38.1%	$0	Low
Town of White Hall	8 Events	2°F, 4” snow	38.1%	$0	Low
Macon County	**7 Events**	**2°F, 4” snow**	**33.3%**	**$0**	**Low**
Countywide	7 Events	2°F, 4” snow	33.3%	$0	Low
Unincorp. Macon County	7 Events	2°F, 4” snow	33.3%	$0	Low
Town of Franklin	7 Events	2°F, 4” snow	33.3%	$0	Low
Town of Notasulga	7 Events	2°F, 4” snow	33.3%	$0	Low
Town of Shorter	7 Events	2°F, 4” snow	33.3%	$0	Low
City of Tuskegee	7 Events	2°F, 4” snow	33.3%	$0	Low

SECTION 4: VULNERABILITY

Section Contents

4.1 Overview
4.2 Jurisdictional Vulnerability by Hazard
4.3 Probability of Future Occurrence and Loss Estimation
4.4 Total Population and Property Valuation Summary by Jurisdiction
4.5 Critical Facilities/Infrastructure by Jurisdiction
4.6 Vulnerable Populations and Hazard Impact
4.7 Risk Index and Hazard Priorities

4.1 Overview

In the context of hazard mitigation planning, ***Risk*** is defined as the expected future losses to a community, business, or county from the effects of natural events. The concept has several other concepts embedded in it. ***Vulnerability*** is the extent to which something is damaged by a hazard. Vulnerability is very often measured using "damage functions." These are based on studies of how buildings perform when they are exposed to hazards. Similar functions are available for infrastructure and other physical assets. Injury and mortality functions (how many people are injured or die during events) are also sometimes used as indicators of vulnerability, but these are generally not as reliable as functions for physical assets because there are many more variables. The Vulnerability and Risk Assessment examines the vulnerability of each jurisdiction in Lowndes County and Macon County to the 14 identified hazards, based on the hazard profiles, then uses quantitative analysis to determine the probability of future occurrences and loss estimates. The risk assessment also reviews population and property values, critical facilities and infrastructure, and potential hazard impacts by jurisdiction. The final part of the assessment is a risk index that assigns a weighted value to probability, impact, location extent, warning time, and duration for each hazard to identify which hazards each jurisdiction is most vulnerable to and to rank, or prioritize, the hazards according to their weighted score.

The stakeholders for both Lowndes and Macon Counties considered all the natural hazards that could affect the citizens and property in both counties. The stakeholders used personal and professional experience, internet information, and risk assessment reports, past occurrences, public input, and other resources to identify hazards that are most likely to affect each jurisdiction in Lowndes and Macon Counties.

4.2 Vulnerability

A community's vulnerability to a natural hazard is based largely on the hazard characteristics, location, and previous occurrences. Hazard information provided in the hazard profiles, along with stakeholder personal and professional experiences, internet information, hazard reports, and past occurrences were used to determine the vulnerability of each jurisdiction to a specific hazard. In some instances, such as with drought or winter storms, vulnerability is the same for all jurisdictions across the county. For other hazards, such as flooding or landslides, location is the primary factor in determining the vulnerability of each jurisdiction. The vulnerability assessment that follows outlines each jurisdiction's vulnerability to each hazard.

4.2.1 Dam Failure

A community's vulnerability to dam failure is a function of the probability of failure, the exposure of people and property to the uncontrolled release of water, and the susceptibility of people and property to the hazard. While federally-regulated dams are required to have an Emergency Action Plan to help minimize the impact of dam failure, the only federally-regulated dam in the planning area is the Robert F. Henry Lock and Dam on the Alabama River in Lowndes County. The remainder of the dams do not have an Emergency Action Plan in place. There are 34 dams in Lowndes County, of which 17 have a significant risk rating and the remaining half dams are rated as having a low hazard potential. Most of the dams in Lowndes County are located in agricultural, forested, or open space areas with a very low population density. The most vulnerable municipalities are the Town of Benton and the Town of White Hall. The risk of losses from dam failure in the unincorporated part of Lowndes County cannot be calculated based on historic

records due to lack of data. It can be safely assumed, however, given the smaller dam sizes, their location in mostly unpopulated areas, and the low hazard ratings, that the vulnerability to dam failure in the unincorporated part of Lowndes County is very low.

There are 26 dams in Macon County, of which two dams are rated as having a high hazard potential and one dam is rated as having a significant hazard potential. The remaining 23 dams in Macon County are rated as having a low hazard potential. Most of the dams in Macon County are located in agricultural, forested, or open space areas with a very low population density. There are, however, two dams located within more densely developed municipalities. These are the Notasulga City Lake Dam in the Town of Notasulga, which has a low hazard rating, and the Tuskegee City Lake Dam in the City of Tuskegee, which has a high hazard rating. Additionally, Herring Lake Dam in the Little Texas community also has a high hazard rating. In the event of dam failure of any of these dams, the northern part of Notasulga, the eastern part of Tuskegee, and the Little Texas community would be impact. Losses in Notasulga would be minimal due to the city lake's isolated location. Losses in Tuskegee could be critical since the Tuskegee City Lake is surrounded by residential and commercial properties. The risk of losses from dam failure in the unincorporated part of Macon County cannot be calculated based on historic records due to lack of data. It can be safely assumed, however, given the smaller dam sizes, their location in mostly unpopulated areas, and the low hazard ratings, that the vulnerability to dam failure in the unincorporated part of Macon County is very low.

4.2.2 Drought / Extreme Heat

Vulnerability to loss from drought is based on the probability of drought, the exposure of water supplies and economic activities to the hazard, and the susceptibility of water supplies and economic activities to the hazard. Extreme heat, which tends to occur in conjunction with drought, can exacerbate the drought conditions. Those county residents who do not, or cannot, take necessary precautions can be extremely vulnerable to extreme heat that can result sin unburn, heat cramps, heat exhaustion, heat syncope, and even heat stroke. Agriculture is a primary economic industry in Lowndes and Macon Counties where the predominant land uses are deciduous and evergreen forest, crop production, and pasture.

Although the risk of losses from drought and extreme heat cannot be calculated based on historic records due to the lack of data available, it is clear that all residents in both Lowndes County and Macon County are vulnerable to both drought and extreme heat. The impacts felt by communities could include diminished ground and surface water; loss of crops; decrease in drinking water supply; and water shortages as private and public wells dry up. Drought can lead to stressed public utility systems and major agriculture losses. Even with the available qualitative documentation that shows evidence of drought and extreme heat conditions causing agricultural losses and water quantity issues, it is difficult to define the exact impact from the hazard. Although the probability of drought is high throughout the planning area, the impact of drought is generally low as residents have learned to accommodate. Therefore, the risk of drought for all jurisdictions in Lowndes County and Macon County is medium.

4.2.3 Earthquake

The vulnerability and risk of loss due to seismic movement and earthquakes is minimal in Lowndes and Macon Counties due to their location outside of any seismic zones and lack of any previous occurrences in the counties or any surrounding county. With no historical event or damage data, it is

impossible to calculate potential risk should an earthquake occur in the area. Should an event happen to occur, however, both Lowndes County and Macon County are ill-prepared due to building construction methods and the presence of steep slopes and karst terrains that are susceptible to sinkholes. While the earthquake risk is very low in Lowndes County and Macon County, it is important that the mitigation practices for earthquakes compliment other mitigation strategies and should be reviewed and incorporated into the mitigation plan.

4.2.4 Extreme Heat

Extreme temperatures in Lowndes and Macon Counties can impact all jurisdictions and all residents. Prolonged periods of high temperatures are not likely to impact the structures and facilities, however, these events often occur in tandem with droughts. Population groups and facilities that are vulnerable to extreme heat include the elderly population, children, persons living in poverty, public and private water resources, livestock/animals, and agricultural products. It necessitates a review of mitigation planning techniques to avoid injury to vulnerable populations, in particular the elderly population. Although the probability of future events of extreme heat in Lowndes and Macon Counties is relatively high, most jurisdictions can manage mild cases of heat waves, rendering minor impacts most of the time. Therefore, the likelihood of probability for impactful extreme heat events for the counties and all jurisdictions is medium, with probable major damage in a 10 to 50-year period.

4.2.5 Flooding

Historical data indicates that Lowndes County has experienced 14 flooding events in 21 years, with a total of $70,000 in property damages. Of the 14 events, four were countywide events, five were in the unincorporated part of the county, two were in Hayneville, and one flood each occurred in Fort Deposit, Lowndesboro, and White Hall. Flooding in Lowndes County is generally associated with the Alabama River and its tributaries including, Big Swamp Creek, Dry Cedar Creek, Pintlala Creek, and Tallawassee Creek. Residents located in Benton, White Hall and the unincorporated area in northern part of Lowndes County are most vulnerable to flooding due to their proximity to the Alabama River. The Towns of Gordonville and Mosses are most vulnerable to flooding of Ash Creek on the west and Big Swamp Creek on the east. A building footprint overlay on the FIRM map shows numerous structures in the floodplains of the Alabama River. The remaining floodplain areas in Lowndes County appear to be mostly free of structural development. It is estimated that there are 83 National Flood Insurance Policies in effect in Lowndes County, of which 74 policies are for properties in the unincorporated area, six are in White Hall and three are in Benton. The number of flood insurance policies, however, does not account for those parcels and persons that are vulnerable to flooding but are not a part of the NFIP. According to the Alabama Emergency Management Agency, ***there are no repetitive flood losses*** in Lowndes County or in any of its seven municipalities. The Town of Gordonville has not participated in the NFIP program in recent years because of a lack of staff to administer the program. The Town of Lowndesboro does not participate in the NFIP program because there are no floodplain areas within the Town's corporate borders and the minimal administrative staff cannot support the program.

Macon County has experienced eight flooding events in 21 years, with a total of $156,000 in property damages. Of the eight events, five were countywide events, and one flood each occurred in Notasulga, Shorter and Tuskegee. Flooding in Macon County is generally associated with the Tallapoosa River and its tributaries including Calebee Creek, Cubahatchee Creek, Line Creek, and

Uphapee Creek. Floodplain areas in Macon County appear to be mostly free of structural development. However, residents located in the unincorporated area in the northwest part of Macon County and the west part of the Town of Shorter are most vulnerable to flooding from the Tallapoosa River River. Parts of the Town of Notasulga are vulnerable to flooding of the Uphapee Creek as it flows through the northern part of the town. The northeast part of the City of Tuskegee is also vulnerable to flooding of the Uphapee Creek as it flows east of the city's industrial park and Moton Field and also forms Lake Tuskegee. It is estimated that there are 30 National Flood Insurance Policies in effect in Macon County, of which 24 policies are for properties in the unincorporated area, and six are in the City of Tuskegee. The number flood insurance policies, however, does not account for those parcels and persons that are vulnerable to flooding but are not a part of the NFIP. According to the Alabama Emergency Management Agency, ***there are no repetitive flood losses*** in Macon County or in any of its four municipalities. The Town of Franklin does not participate in the NFIP program because there is one small floodplain areas within the Town's corporate borders and the minimal administrative staff cannot support the program.

The probability of future flooding in Lowndes County is 66.7 percent annually and in Macon County, the probability is 38.1 percent annually. The damages per event, however, were relatively low, at $5,00 per event in Lowndes County, and $19,500 per event in Macon County. The risk for both counties overall is, therefore, assessed as medium, with probable major damage in a 10 to 50-year period. Some communities, however, have a higher risk than others. In Lowndes County, the risk levels of the Town of Benton, the Town of White Hall and the unincorporated part of Lowndes County, are also assessed as medium; while Fort Deposit, Gordonville, Hayneville, and Mosses are assessed as having a low risk level, with probable major damage in a 100-year period; and the Town of Lowndesboro is assessed as having a very low risk level, with no probable major damage in a 100-year period.

In Macon County, only the Town of Shorter is assessed as having a medium risk level, with probable major damage in a 10 to 50-year period. Notasulga, Tuskegee and the unincorporated part of Macon County are assessed as having a low risk level, with probable major damage in a 100-year period; and the Town of Franklin is assessed as having a very low risk level, with no probable major damage in a 100-year period.

4.2.6 Hail

Hail has the potential to impact all residents of Lowndes and Macon Counties, as well as all structures and crops. There is no one part of the planning area that will less affected than another depending on a storm location. Between 2000 and 2020, both Lowndes County and Macon County experienced 37 hail events each, none of which were countywide events. In Lowndes County, the unincorporated area has had seven hail events; Hayneville had ten events; Fort Deposit had nine events, Lowndesboro had six events, and, White Hall had five events. Reported damages from hail events totaled $83,000 over the 21-year time span. In Macon County, the City of Tuskegee had 11 hail events; and Notasulga and Shorter each had eight events. Reported damages from hail events in Macon County totaled $181,000.

The vulnerability to hail is primarily related to personal injury; damaged vehicles and building roofs; crop, livestock and timber damage; and power lines. The overall risk from hail in both Lowndes County and Macon County is medium. Hail is generally sporadic and associated with severe storms or tornadoes. Therefore, protection from hail is interconnected with precautions used

in the severe storm or tornado events Due to this relationship between the hazards, it is recommended that mitigation strategies for hail be combined with thunderstorm, severe storm and tornado hazards.

4.2.7 High Winds, Thunderstorms, Severe Storms

As with hail, all of Lowndes and Macon Counties are susceptible to high winds, thunderstorms, and severe storms. High wind events are a frequent natural disaster in the planning area, with thunderstorms being the most common. Lowndes County has suffered 55 high wind events during the last 21 years that resulted in four injuries and incurred almost $3.8 million in property and crop damages. Of the 55 events, six were countywide events; 21 events were in the unincorporated area; and 11 events occurred in Hayneville. Macon County experienced 52 high wind, severe storm and thunderstorm events, incurring $751,500 in property and crop damages. Of the 52 events, nine were countywide events; 16 events occurred in the unincorporated area; nine events each occurred in Notasulga and Tuskegee; and seven events occurred in Shorter. Due to the frequency of high wind events and the resulting damages, the vulnerability assessment for both Lowndes and Macon Counties is high, with probable major damage in a 1 to 10-year period.

4.2.8 Landslides

The risk of losses from landslides cannot be calculated based on historic records due to lack of data. Any landslide occurrence in the region would most likely be minor in impact due to the localized nature of these events. Based on historical information and susceptibility data from the USGS and the GSA, the vulnerability to landslide events in Lowndes County is low to medium. The unincorporated area and the Town of White Hall are assessed as having medium risk, with probable major damage in a 10 to 50-year period. Benton, Fort Deposit, Gordonville, Hayneville, Lowndesboro and Mosses are assessed as having low risk, with probable major damage in a 100-year period. The vulnerability to landslide events for all jurisdictions in Macon County is very low, with no probable major damage in a 100-year period. It is anticipated that most future incidents of landslides will be due to human activity and not due to natural events.

4.2.9 Lightning

There were are no reported lightning events in Lowndes County and only three lightning events in Macon County, although both counties were heavily impacted by thunderstorms. Since thunder does not occur without lightning, it is reasonable to assume that both counties experienced much more than the reported events. Further, it stands to reason that lightning strikes can also impact all jurisdictions in both Lowndes and Macon Counties. Vulnerability to lightning is limited to scattered injury or death to persons, and damages to properties such as homes, electronics, structures, and data losses. The following persons, industry, and assets are vulnerable to lightning: elderly persons, children, persons outside during lightning events, power lines, timber/trees, manufactured homes, crops, homes, structures, data not backed up, livestock/animals, electronics plugged into an outlet (computers, household appliances, or data servers), and any person in or on water (pool or boat). Although the likelihood of future lightning events is very high in Lowndes and Macon Counties, the risk is considered to be low, with probable major damage in a 100-year period.

4.2.10 Sinkholes and Land Subsidence

The risk of losses from land subsidence events, such as sinkholes, cannot be calculated based on historic records due to lack of data. There is one topographic depression in the unincorporated part

of Lowndes County and eight topographic depressions in Macon County (seven in the unincorporated area and one is Tuskegee). Since sinkhole events are sporadic and rare, these events can potentially cause damage to life or property on a small scale. Homes, manufactured homes, structures, roads, utilities, persons, livestock /animals, and vehicles in all jurisdictions could be vulnerable to a manmade sinkhole. Due to the lack of data on sinkholes, it is not possible to know how many persons, structures, buildings, and infrastructure are vulnerable to sinkholes in each jurisdiction. Any land subsidence occurrence in Lowndes County or Macon County would most likely be minor in impact due to the localized nature of these events. Therefore, vulnerability is based on the presence of topographic depressions. Risk to sinkholes in Lowndes County is very low, with no probable major damage in a 100-year period; and in Macon County, the risk is low, with probably major damage within a 100-year period.

4.2.11 Tornadoes

As with high winds, thunderstorms and lightning, all of Lowndes and Macon Counties is vulnerable to tornadoes. Lowndes County has suffered 12 tornado events in 21 years resulting in 14 injuries and $541,000 in property damages. Of the 12 events, seven events occurred in the unincorporated part of the county; two events each occurred in Hayneville and Lowndesboro; and one event occurred in White Hall. Macon County experienced 15 events, resulting in one injury and $836,000 in property damages. Of the 15 Macon County events, eight occurred in the unincorporated part of the county; three events occurred in Tuskegee; and two events each occurred in Notasulga and Shorter. Although the location of where tornadoes take place is sporadic, losses from these tornado events can impact a wide variety of persons, assets, and infrastructure in each jurisdiction. Vulnerable population groups include those who are dependent on others for assistance, such as children or elderly persons; large concentrations of persons in one place, such large industries, schools, hospitals, or nursing homes; those living in manufactured housing or apartment complexes; as well as persons in vehicles and others without adequate protection. Tornado damage is associated with the high winds that damage power lines, down trees, destroy roofs and can lift unanchored persons, animals/livestock, vehicles, equipment, etc., from the ground. The local economy can also be vulnerable to tornadoes if a jurisdiction is hit hard enough to destroy major retail stores, residential areas, schools, major employers, or utilities. Losing these assets will take a community a year or more to recover and be very costly, which puts a strain on the economy and causes the local jurisdiction to lose tax revenue. Due to the impact of tornadoes and their potential for death, injuries and damage, the risk associated with these events is assessed at high for both Lowndes County and Macon County, with probably major damage in a 1 to 10-year period.

4.2.12 Tropical Depressions, Tropical Storms and Hurricanes

Because of their interior location, Lowndes and Macon Counties and their jurisdictions are not especially susceptible to direct tropical or coastal storm events; however, history documents the fact that the planning area has experienced tropical cyclones, high winds, tornadoes, and related flooding associated with tropical systems. Lowndes and Macon Counties each experienced five countywide tropical cyclone events in 21 years, resulting in $367,000 in property damages in Lowndes County and $92,000 in property damages in Macon County. Losses from high winds, heavy rains, and tornadoes from a tropical depression, tropical storm, or hurricane can impact homes, crops, timber, and infrastructure in all jurisdictions in Lowndes and Macon Counties. The potential areas of vulnerability during a tropical depression or tropical storm would be similar to those felt during a severe thunderstorm, flash flooding, or a tornado. Each jurisdiction can have issues due to the damages that high winds and thunderstorms can cause such as roads may be

closed due to debris blocking the roads, downed "live" power lines can cause injury or death to persons, loss of power, loss of working traffic signals, disrupted utilities from uprooted trees, and communication issues due to loss of power. Although the tropical cyclone events are not frequent hazards in the planning area, all jurisdictions are impacted when an event does occur. Therefore, the vulnerability assessment for both Lowndes County and Macon County is medium, with probable major damage within a 10 to 50-year period.

4.2.13 Wildfires

Wildfires are the most frequent hazard occurrence in both Lowndes County and Macon County. Lowndes County has an average of 21.54 wildfires per year, with an average fire size of 119.96 acres per fire. Macon County has an average of 49.85 fires per year, with an average fire size of 20.24 acres per fire. The impact of most of these wildfires is assumed to have been minor and localized in mostly undeveloped areas. There is no financial loss data available to gauge the true impact of wildfires within the planning area. While all jurisdictions in Lowndes and Macon Counties are vulnerable to wildfires, the unincorporated areas are significantly more vulnerable due to the amount of vegetation and timber property. Historically, wildfires have primarily affected timber resources and the length of emergency response times. Future development, however, in wildland urban interface areas should be mindful of this potential hazard. The risk of wildfire events for all jurisdictions in Lowndes and Macon Counties is considered to be medium with probable major damage within a 10 to 50-year period.

4.2.14 Winter Storms

There is a 38.1 percent chance of a winter storm in Lowndes County each year, and a 33.3 percent chance of an annual winter storm in Macon County, based on past events of the last 21 years. Winter storms include sleet, snow and ice. There have been no cost estimates reported of damages from winter storms. These events normally have a short duration and have minor impacts. The most vulnerable population group includes those persons without adequate heat resources. Unfortunately, both Lowndes and Macon Counties are ill-equipped to maintain roads and bridges in the event of a winter storm; and it is impractical for the counties or jurisdictions to purchase the necessary equipment for such a limited use. Instead, road and bridges are treated to minimize icing, warming stations are opened, and residents are advised to stay home as much as possible during these events, which are typically short-lived. Therefore, the vulnerability assessment for both Lowndes County and Macon County and all jurisdictions therein is medium with probable major damage within a 10 to 50-year period.

4.3 Probability of Future Occurrence and Loss Estimation

Two formulas were used to determine (1) probability of future occurrences and (2) risk or estimated damages, as shown in Table 4.1. The probability (%) that an identified hazard will occur on an annual basis was determined by dividing the number of reported events by the number of years in the reporting period. Risk, or estimated damages per event were calculated by dividing the total dollar damage past events have caused by the number of events in the reporting period. It should be noted that most of the reporting time periods are 21 years from January 2000 to December 2020. Data was not available for all hazard types, however, for that same time period. Therefore, the reporting time period for each of the 14 types of hazards included in the future probability and risk calculations is provided in Table 4.2.

Table 4.1: Hazard Probability and Risk Formulas

Result	Formula
Probability of Future Occurrences	Number of reported events / Number of years in time frame = Probability of A Future Annual Event
Estimated Damages	Total damages for each reported event / Number of events = Damage Expectations Per Damaging Event

Table 4.2: Reporting Time Period Per Hazard

Hazard	Number of Years in Reporting Period
Dam Failure	Not Available
Drought	21 years
Earthquake	21 years
Extreme Heat	21 years
Flooding	21 years
Hail	21 years
High Winds, Thunderstorms, Severe Storms	21 years
Landslides	Not Available
Lightning	21 years
Sinkholes	Not Available
Tornadoes	21 years
Tropical Depressions, Tropical Storms, Hurricanes	21 years
Wildfire	14 years and 5 years*
Winter Storm, Ice Storm, Extreme Cold	21 years

Two wildfire estimates are provided. The first one (a) is based on the total number of wildfires over a 14-year time span; however, there is no locational data. The second estimate (b) is for a shorter time span of five years but does include locational data.

All events combined, there have been 465 hazard occurrences in 21 years in Lowndes County with total property and crop damages of $4,250,483. There was one death from a heat-related event, 39 injuries from tornadoes, and four injuries from thunderstorm events. Therefore, the probability of future occurrence of a hazard event at some location in the county is greater than 100.0 percent and is estimated at 22.1 hazard events per year. The risk, or estimated damages, is $9,140.82 per event. The frequency of future events and estimated damages for each hazard in Lowndes County is calculated in Table 4.3.

In Macon County, there has been a total of 843 hazard occurrences in 21 years with total property and crop damages of $1,162,633. There were no reported deaths, but there were 13 injuries: 11 injuries from tornadoes, one injury from a thunderstorm event, and one injury from a heat event. Therefore, the probability of future occurrence of a hazard event at some location in the county is greater than 100.0 percent and is estimated at 40.1 hazard events per year. The risk, or estimated damages, is $1,379.16 per event. The frequency of future events and estimated damages for each hazard in Macon County is calculated in Table 4.4. The frequency of future events and estimated damages were calculated from events recorded at different time periods, based on source data. While the probability and risk tables provide a sound estimate, there is no guarantee the recorded level of hazard events will continue at the same rate.

Table 4.3: Lowndes County Hazard Probability and Estimated Losses

Type of Event		Previous Events	Probability of Annual Event	Total Past Damages	Est. Risk or Loss Per Event
1	Dam Failure	0	0.00%	$0.00	$0.00
2	Drought and Extreme Heat	41	>100.0% 1.95 events/year	$0.00	$0.00
3	Earthquake	0	0.00%	$0.00	$0.00
4	Extreme Heat	4	19.05%	$0.00	$0.00
5	Flooding	14	66.67%	$70,000.00	$5,000.00
6	Hail	37	>100.0% 1.76 events/year	$83,000.00	$2,243.24
7	High Winds, Thunderstorms, Severe Storms	55	>100.0% 2.62 events/year	$3,979,000.00	$72,345.45
8	Landslides	8	38.10%	$0.00	$0.00
9	Lightning	0	0.00%	$0.00	$0.00
10	Sinkholes and Land Subsidence	1	4.76%	$0.00	$0.00
11	Tornadoes	12	57.14%	$45,083.00	$3,756.92
12	Tropical Cyclones, Hurricanes	5	23.81%	$73,400.00	$14,680.00
13a	Wildfire, 2007 to 2020	280	>100.0% 20 events/year	2,583.80 acres burned	9.23 acres burned
13b	Wildfire, 2016 to 2020	65	>100.0% 13 events/year	492.51 acres burned	7.58 acres burned
14	Winter Storm	8	38.10%	$0.00	$0.00
All Lowndes County Hazard Events		465	>100.0% 22.1 events/year	$4,250,483.00	$9,140.82

Table 4.4: Macon County Hazard Probability and Estimated Losses

Type of Event		Previous Events	Probability of Annual Event	Total Past Damages	Est. Risk or Loss Per Event
1	Dam Failure	1	4.76%	$0.00	$0.00
2	Drought and Extreme Heat	65	>100.0% 3.1 events/year	$0.00	$0.00
3	Earthquake	0	0.00%	$0.00	$0.00
4	Extreme Heat	4	19.05%	$0.00	$0.00
5	Flooding	8	38.10%	$156,000.00	$19,500.00
6	Hail	28	>100.0% 1.33 events/year	$181,000.00	$6,464.29
7	High Winds, Thunderstorms, Severe Storms	52	>100.0% 2.48 events/year	$751,500.00	$14,451.92
8	Landslides	0	0.00%	$0.00	$0.00
9	Lightning	2	9.52%	$0.00	$0.00
10	Sinkholes and Land Subsidence	8	38.10%	$0.00	$0.00
11	Tornadoes	15	71.43%	$55,733.00	$3,715.53
12	Tropical Cyclones, Hurricanes	5	23.81%	$18,400.00	$3,680.00
13a	Wildfire, 2007 to 2020	648	>100.0% 46.3 events/year	13,115.70 acres burned	20.24 acres burned
13b	Wildfire, 2016 to 2020	185	>100.0% 37 events/year	3,370.6 acres burned	18.22 acres burned
14	Winter Storm	7	33.33%	$0.00	$0.00
All Macon County Hazard Events		843	>100.0% 40.1 events/year	$1,162,633.00	$1,379.16

4.3.1 Dam Failure

The risk of losses from dam failure cannot be calculated based on historic records due to lack of data. Even though dam failure is a rare occurrence and is unprecedented to date in Lowndes County, an occurrence could cause significant damages downstream. There has been one dam failure in Macon County that occurred at the Notasulga City Lake Dam when heavy rains and flash flooding caused boulders and small rocks to wash into the lake and wash the spillway away. The dam has since been repaired with the assistance of FEMA and is rated as having a low hazard potential. The risk remains in Macon County, as in Lowndes County, that a dam failure event could cause significant damages downstream.

4.3.2 Drought

The risk of losses from drought cannot be calculated based on historic records due to lack of data. Qualitative documentation shows evidence that drought and extreme heat conditions cause agricultural losses and water quantity issues, but it is difficult to define the exact impact from this hazard. In 1977, a federal disaster was declared due to drought that included both Lowndes and Macon Counties, with both counties received public assistance.

4.3.3 Earthquake

The risk of losses from earthquakes cannot be calculated based on historic records due to a lack of data/occurrence.

4.3.4 Extreme Heat

Both Lowndes County and Macon County have experienced four extreme heat events, with temperatures reaching above 105.0°F up to 109.0°F. As a result of the extreme heat events, one person died in Lowndes County and one person sustained injuries in Macon County (both in an August 2007 event). There are no reported records of property or crop damage/loss. All four events were countywide in nature, impacting all jurisdictions.

4.3.5 Flooding

Lowndes County has recorded 14 flooding events in the last 21 years causing an estimated $70,000 in damages. Macon County has recorded eight flooding events with estimated damages of $156,000. In terms of total damages from past events, flooding ranks fourth in Lowndes County and third in Macon County as being the costliest hazards. In terms of damages per event, flooding is the costliest hazard in Macon County and third costliest in Lowndes County.

In Lowndes County, countywide flash flood events present the most risk, at $10,750 per event, followed by flooding in the unincorporated area, at $5,000 per event. The only municipality with reported flood damages is the Town of Hayneville with $2,000 in property damage from one flash flood event. It is estimated that there are 83 National Flood Insurance Policies in effect in Lowndes County, of which 74 policies are for properties in the unincorporated area, six are in White Hall and three are in Benton. The number flood insurance policies, however, does not account for those parcels and persons that are vulnerable to flooding but are not a part of the NFIP. According to the Alabama Emergency Management Agency, ***there are no repetitive flood losses*** in Lowndes County or in any of its seven municipalities. The Town of Lowndesboro does not participate in the NFIP program because there are no floodplain areas within the Town's corporate borders.

In Macon County, the costliest flood event occurred in the Town of Shorter when a flash flood in May 2009 caused $100,000 in property damages. Following that isolated event, countywide flash flood events are the costliest, at $10,000 per event, followed by one flash flood event in the City of Tuskegee, with damages of $6,000. It is estimated that there are 30 National Flood Insurance Policies in effect in Macon County, of which 24 policies are for properties in the unincorporated area, and six are in the City of Tuskegee. The number flood insurance policies, however, does not account for those parcels and persons that are vulnerable to flooding but are not a part of the NFIP. According to the Alabama Emergency Management Agency, ***there are no repetitive flood losses*** in Macon County or in any of its four municipalities.

4.3.6 Hail

There have been 37 hail events in Lowndes County, with an estimated $2,243 in damages per event. The Town of Hayneville experienced the most events, at ten, but has had the least damage per event, at $200 per event. In the remainder of the county, Lowndesboro has suffered the costliest hail events, at six events with $3,333 in damages per event, followed by Fort Deposit, with nine events at $3,111 per event; the unincorporated part of Lowndes County, with seven events at $2,857 per event; and White Hall, with five events at $2,600 per event. There have been no reported hail events in Benton, Gordonville, or Mosses.

In Macon County, there have been 28 hail events with total damages of $181,000, or $6,464 per event. Hail events are most costly in Notasulga with eight events at $$10,750 per event, followed by Shorter with eight events at $10,625 per event; and the unincorporated part of Macon County, with 11 events at $909 per event. There was one reported hail event in Tuskegee, but no damages were reported; and there were no hail events in the Town of Franklin.

4.3.7 High Winds, Thunderstorms, Severe Storms

High winds, thunderstorms and severe storm events are the costliest hazards in both Lowndes and Macon Counties, and one of the most frequent. During past 21 years, Lowndes County has suffered a total of 55 high wind events, resulting in four injuries and a total of $3,979,000 in property and crop damage, which equates to an estimated $72,345 loss per future event. The unincorporated part of Lowndes County has the highest probability for future events, with more than a 100.0 percent chance of an event each year and an estimated loss of $1,905 per event. Hayneville, which has the second highest probability of an annual event, a 52.4 percent, with estimated damages of $11,500 per event. Countywide high wind events are the costliest, with an estimated loss of $620,667 per event, as opposed to $2,583 per event in Fort Deposit; $2,000 per event in Gordonville; $8,750 per event in Lowndesboro; and $6,000 per event in White Hall. There were no reported high wind events or damages in Benton or Mosses.

In the same time frame, Macon County has experienced 52 high wind events with a total of $751,500 in property and crop damages., or $14,452 per event. The nine countywide events were the most costly, at $61,222 per event, as compared to $6,156 per event in the unincorporated area; $2,500 per event in Franklin; $4,444 per event in Notasulga; $2,000 per event in Shorter; and $4,778 per event in Tuskegee.

4.3.8 Landslides

The risk of losses from landslides in Lowndes County or Macon County cannot be calculated based on historic records due to lack of data. There exist eight potential landslide sites in Lowndes

County and none in Macon County but there have been no reported landslide events or damages. Any future landslide occurrence in the planning area would most likely be minor in impact due to the localized nature of these events.

4.3.9 Lightning

Lowndes County has no reported lightning event in the last 21 years, while Macon County has had three reported events. There is no record of damages due to lightning events in either county. Therefore, it is impossible to calculate the risk of losses from lightning without additional information.

4.3.10 Sinkholes and Land Subsidence

The risk of losses from land subsidence events, such as sinkholes, cannot be calculated based on historic records due to lack of data. Though much of the planning area has depressions noted on topographic maps or has karst terrain (one site in Lowndes County and eight sites in Macon County), information about previous incidents are limited at best with no damage estimates. Any land subsidence occurrence in the planning area would most likely be minor in impact due to the localized nature of these events.

4.3.11 Tornadoes

Lowndes County has experienced 12 recorded tornado events since 2000; and Macon County has experienced 15 tornado events. In Lowndes County, tornadoes caused 15 injuries and resulted in $541,000 in property damages, or $45,083 per event. Damages were highest in White Hall at $110,000 for one event, followed by the unincorporated part of the county, at $49,429 per event over nine events; and Lowndesboro, at $42,500 per event over two events. Benton, Fort Deposit, Gordonville, and Mosses had no reported events or damages. Hayneville had two tornado events but no reported damages.

Macon County suffered 15 tornado events in the 21-year time period, resulting in one injury and $836,000 in property damages, or $55,733 per event. Risk for tornado damage in Macon County is highest in Notasulga, at $350,000 per event, as compared to the unincorporated area, at $2,875 per event; Shorter, at $26,667 per event; and Tuskegee, at $55,733 per event. There were no reported tornado events or damages in Franklin.

4.3.12 Tropical Depressions, Tropical Storms, and Hurricanes

Lowndes County has experienced five tropical cyclone events, resulting in $367,000 in property and crop damages, or $73,400 per hurricane event. Likewise, Macon County has also suffered five tropical cyclone events with a total of $92,000 in damages, or $18,400 per event. All events in both counties were countywide events, impacting all jurisdictions.

4.3.13 Wildfires

Wildfires are the most frequent hazard in both Lowndes County and Macon County. According to data from the Alabama Forestry Commission, Lowndes County has had 280 wildfires in the 14 year time period from 2007 through 2020, with a total of 2,583.81 acres burned. This equates to an average of 20 wildfires per year with 9.23 acres burned per fire. Macon County has had 648 wildfires in the same time period with a total of 13,115.7 acres burned, equating to 46.29 wildfires per year and 20.24 acres burned per wildfire. The impact of most wildfires is assumed to have been minor and localized in mostly undeveloped areas. There is no financial loss data available to gauge

the true impact of wildfires within the region. Losses can be calculated, however, based on the number of acres burned. Historically, wildfires have primarily affected vegetation and timber resources in unincorporated parts of Lowndes and Macon Counties; however, future development in wildland urban interface areas should be mindful of this potential hazard.

4.3.14 Winter Storms

There is a 38.1 percent chance of a winter storm in Lowndes County each year, and a 33.3 percent chance in Macon County each year, based on past events of the last 21 years (eight winter storm events in Lowndes County, and seven events in Macon County). Winter storms include sleet, snow, ice, and extreme cold temperatures. There have been no cost estimates reported of damages from winter storms in either county, therefore, an estimated loss per event cannot be calculated. These events normally have a short, albeit countywide, duration and have minor impacts. Should a long duration or heavy precipitation occur, neither county is prepared with the necessary equipment or facilities to handle such an event.

4.4 Total Population and Property Valuation Summary by Jurisdiction

The data in Table 4.5 is derived from local government and tax valuation from the Lowndes County Tax Assessor's Office, the Macon County Revenue Office, and the U.S. Census, 2019 American Community Survey 5-Year Estimates. Property value data for both counties is from Tax Year 2020. It is important to note that actual values may be somewhat higher than those values assigned for tax purposes. Also, these values do not always include tax-exempt properties and structures such as government buildings and churches.

Table 4.5: Population and Property Information by Jurisdiction

Jurisdiction	2019 Population	Number of Parcels	Number of Structures	Total Appraised Value of Improvements
Lowndes County	**10,079**	**12,121**	**4,885**	**$446,294,392**
Unincorporated Lowndes County	5,512	9,209	3,287	$304,057,157
Town of Benton	29	58	26	$2,825,270
Town of Fort Deposit	1,835	735	448	$50,135,680
Town of Gordonville	182	301	123	$7,224,640
Town of Hayneville	872	568	352	$34,378,965
Town of Lowndesboro	92	115	73	$7,471,810
Town of Mosses	846	541	290	$15,667,790
Town of White Hall	711	594	286	$24,533,080
Jurisdiction	**2019 Population**	**Number of Parcels**	**Number of Structures**	**Total Appraised Value of Improvements**
Macon County	**18,708**	**18,116**	**8,140**	**$701,420,835**
Unincorporated Macon County	8,225	10,403	3,983	$392,843,119
Town of Franklin	630	787	287	$18,943,880
Town of Notasulga	1,011	703	426	$34,617,223
Town of Shorter	356	292	170	$35,989,820
City of Tuskegee	8,486	5,931	3,274	$219,026,793

Source: U.S. Bureau of Census, American Community Survey, 2015-2019 5-Year Estimates, Table DP03: Demographic and Housing Estimates; Lowndes County Tax Assessor, 2020 Tax Year; and Macon County Revenue Commissioner, 2020 Tax Year.

4.5 Critical Facilities and Infrastructure by Jurisdiction

Critical facilities are defined as facilities that are essential to the community or may be crucial to the delivery of vital services, such as utilities and public safety. Critical facilities may also house or serve an at-risk population such as schools, hospitals, or nursing homes. Critical facilities would likely result in catastrophic financial loss if severely damaged or destroyed, such as major industrial buildings, courthouses, and other government facilities. Critical facilities may vary from a transmission line that provides vital electricity to the community, to a hospital that provides medical care, or to the local public safety facilities that serve a community.

Table 4.6 lists a summary of critical facilities found in Lowndes and Macon Counties categorized by type. This list is not all-inclusive and includes facilities prioritized by specific jurisdictions. An inventory of critical facilities will be reviewed periodically and continually updated to reflect any changes in each of the jurisdictions.

Critical facilities were identified using information from the public, EMA, local government officials and industry stakeholders. Such facilities were considered vital to transportation, energy, communication, health care, utility systems, food services, and the delivery of public safety. Structures that are occupied by at-risk populations, such as schools, are also included. They are listed with the most current assessed value in Tables 4.7 and 4.8. The 'Other Concentrations of Population" includes public housing authorities and companies with more than 100 employees. Other critical facilities locations are the facilities that store Extremely Hazardous Substances (EPCRA Section 302-Extremely Hazardous Substances, CERCLA Hazardous Substances, EPCRA, Section 313 Toxic Chemicals, CAA 122®) Regulated Chemicals for Accidental Release Prevention and other facilities that are covered. Local EMA offices maintain these lists.

Table 4.6: Summary of Critical Facilities

Jurisdiction	Type of Facility						
	Continuity of Government	Fire and Rescue	Law Enforcement	Health	Education	Infrastructure, Transportation, Communication	*Other Concentrations of Population
Lowndes County Total	**11**	**8**	**3**	**2**	**11**	**26**	**11**
Unincorporated Lowndes County	4	4	1	1	1	11	1
Benton	0	0	0	0	0	1	0
Fort Deposit	2	1	1	0	3	3	4
Gordonville	1	0	0	0	2	1	0
Hayneville	1	1	1	1	3	2	5
Lowndesboro	1	1	0	0	1	5	0
Mosses	1	1	0	0	0	3	1
White Hall	1	0	0	0	1	0	0

Macon County Total	6	8	5	7	9	21	9
Unincorporated Macon County	2	4	1	4	2	6	0
Franklin	1	1	1	0	0	0	0
Notasulga	1	1	1	2	1	7	0
Shorter	1	1	1	0	1	1	5
Tuskegee	1	1	1	1	5	7	4

*Other Concentrations of Populations for each county includes the following public housing facilities and large employers:

Lowndes County Housing Concentrations:

- Edgewood Manor (Southern Development Co.)
- Fort Deposit Housing
- Hulett Townhouse Apartments, Ltd.
- The Meadows (Hayneville Housing Ltd.)
- Pecan Lane (Lowndes County Housing Ltd.)
- South Central Alabama Regional Housing (Mosses)

Lowndes County Business and Industry:

- American Colloid
- Koch Farms
- Priester's Pecans
- SABIC Innovative Plastics
- Sejong

Macon County Housing Concentrations Tuskegee Housing Authority Complexes:

- Elmwood Apartments
- Fieldcrest Apartments
- Hightower Apartments
- Maple Gardens Apartments
- Hillwood Apartments
- Ridgewood Apartments
- Westbrook Turnkey III Apartments

Macon County Business and Industry:

- Beck's Turf
- Hanon Systems Alabama
- Logisall
- Loves Travel Center
- VictoryLand

Table 4.7: Lowndes County Critical Facility Asset Inventory and Estimated Values

LOWNDES COUNTY			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Lowndes County Courthouse	Hayneville	$5,320
	Lowndes County Courhouse Annex	Hayneville	$19,000
	Lowndes County Facilities	Lowndes County	$122,930
Fire and Rescue	Burkeville Volunteer Fire Departent	Burkeville	$24,520.00
	Sandy Ridge Volunteer Fire Department	Letohatchee	$10,400.00
	Calhoun Volunteer Fire Department	Calhoun	$24,770
	Letohatchee Volunteer Fire Department	Letohatchee	$33,510
Law Enforcement	Lowndes County Sheriff's Department and Jail	Hayneville	24840
Health	Lowndes County Health Department	Hayneville	$11,880
Education	Calhoun High School	Letohatchee	Unknown
Infrastructure	Alabama Power	Lowndes County	$59,530
	Lowndes County Water Authority	Lowndes County	$485,820
	Southeast Alabama Gas District	Lowndes County	$650
	Central Alabama Electric Cooperative	Lowndes County	$6,990

	Dixie Electric Cooperative	Lowndes County	$14,070
	Suburban Gas Propane	Lowndes County	$10,590
	Sexton Propane Gas Co.	Lowndes County	$9,770
Transportation	Pintlala Water System	Lowndes County	$1,080
	Flying J Travel Center (PDG Inc)	Tyson	$3,275,660
	Loves Travel Stop	Tyson	$5,306,240
	Speedway	Tyson	$2,363,860
Industry	American Colloid	Lowndes County	$2,338,920
	SABIC Innovative Plastics	Burkeville	$3,567,920
TOWN OF BENTON			
Type of Facility	Name	Location	Estimated Value
Infrastructure	R.F. Henry Lock and Dam (USA)	Benton	$319,800
TOWN OF FORT DEPOSIT			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall / Police	Fort Deposit	$16,190
	Municipal Properties	Fort Deposit	$472,030
Fire and Rescue	Fort Deposit Volunteer Fire Department	Fort Deposit	$5,280.00
Law Enforcement	Fort Deposit Police Department	Fort Deposit	See Town Hall
Education	Fort Deposit Elementary School	Fort Deposit	Unknown
	Lowndes Middle School	Fort Deposit	Unknown
	Fort Deposit Public Library	Fort Deposit	923480
Infrastructure	Southeast Alabama Gas District	Fort Deposit	$53,210
	Fort Deposit Water and Sewer Board	Fort Deposit	$109,290
Transportation	Fort Deposit Airport	Fort Deposit	Unknown
Housing	Fort Deposit Housing	Fort Deposit	$33,000
	Edgewood Manor (Southern Development)	Fort Deposit	$858,830
Business and Industry	Priester's Pecans	Fort Deposit	$201,130
	Sejong	Fort Deposit	$9,583,380
TOWN OF GORDONVILLE			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall	Gordonville	$10,400
Education	Central Elementary School	Hayneville	Unknown
	Central High School	Gordonville	Unknown
Infrastructure	Mosses Water Sewer and Fire Authority	Gordonville	$2,510
TOWN OF HAYNEVILLE			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall/Police/Fire	Hayneville	$768,050
Fire and Rescue	Hayneville Volunteer Fire Department	Hayneville	See Town Hall
Law Enforcement	Hayneville Police Department	Hayneville	See Town Hall
Health	Orchard Health Care	Hayneville	$1,846,170
Education	Hayneville Middle School	Hayneville	Unknown
	Lowndes County Head Start	Hayneville	Unknown
	Lowndes County Board of Education	Hayneville	$459,470
Infrastructure	Hayneville Water and Sewer	Hayneville	$75,830
Housing	Hulett Townhouse Apartments, Ltd.	Hayneville	$11,129,460
	The Meadows (Hayneville Housing Ltd.)	Hayneville	$709,780
	Pecan Lane (Lowndes County Housing Ltd.)	Hayneville	$914,400
Industry	Daehan Solution Alabama, LLC	Hayneville	$20,040,010
	Koch Farms	Hayneville	$7,932,930
Communications	Hayneville Telephone Co.	Hayneville	$163,810
TOWN OF LOWNDESBORO			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Marengo/Town Hall/Water Department	Lowndesboro	$314,990
Fire and Rescue	Lowndesboro Volunteer Fire Department	Lowndesboro	Unknown

Education	Lowndes Academy	Lowndesboro	$33,020
	Lowndes Academy	Lowndesboro	$25,500
	Lowndes Academy	Lowndesboro	$11,830
Infrastructure	Alabama Power	Lowndesboro	$3,590
	Pumping Station	Lowndes County	$870
	Pumping Station	Lowndesboro	$270
	Water Tower	Lowndesboro	$2,160
Communications	Hayneville Telephone Co.	Lowndesboro	$260
TOWN OF MOSSES			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall	Mosses	$10,960
Fire and Rescue	Mosses Volunteer Fire Department	Mosses	Unknown
Infrastructure	Mosses Water and Sewer Authority	Mosses	$94,600
	Mosses Sewage Lagoon	Mosses	$23,510
Housing	South Central Alabama Regional Housing	Mosses	$1,820,450
Communications	Hayneville Telephone Co.	Lowndesboro	$5,350
TOWN OF WHITE HALL			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall	White Hall	$79,540
Education	Jackson Steele Elementary School	White Hall	Unknown

Table 4.8: Macon County Critical Facility Asset Inventory and Estimated Values

MACON COUNTY			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Macon County Courthouse	Tuskegee	$4,573,320
	Macon County Courthouse Annex	Tuskegee	$1,012,228
Fire and Rescue	Brownville VFD	Macon County	$7,500
	Little Texas VFD	Macon County	$7,500
	Reeltown VFD	Macon County	$7,500
	Warrior Stand VFD	Macon County	$4,280
Law Enforcement	Macon County Jail	Macon County	$4,090,246
Health	Macon Coiunty Health Care Authority	Tuskegee	$135,180
	CAVHCS	Tuskegee	Unknown
	East Central Mental Health	Tuskegee	$234,940
	Prarie Farms Senior Center	Shorter	$225,460
Education	Macon County Board of Education Office	Macon County	$119,320
	Booker T. Washington High School	Macon County	Unknown
Infrastructure	Engineer's Office	Macon County	$312,591
	Alabama Electric Cooperative	Macon County	$22,260
	Macon County Water Authority	Macon County	$54,940
Transportation	Asphalt Plant	Macon County	$109,273
	New Central County Shop	Macon County	$530,450
	CSX Railway	Macon County	$20,200
TOWN OF FRANKLIN			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Town Hall	Franklin	$468,000
Fire and Rescue	Franklin Volunteer Fire Department	Franklin	$474,152.00
TOWN OF NOTASULGA			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Notasulga Town Hall	Notasulga	$651,043
Fire and Rescue	Notasulga Volunteer Fire Department	Notasulga	$375,283.00
Law Enforcement	Notasulga Police Department (with Town Hall)	Notasulga	

Health	Notasulga Clinic	Notasulga	$228,185
	Senior Center / Nutrition	Notasulga	$98,310
Education	Notasulga High School	Notasulga	Unknown
Infrastructure	Notasulga Water Works	Notasulga	$91,420
	Warehouse/City Shop	Notasulga	$352,767
	Water Pump Station #1	Notasulga	$58,474
	Water Pump Station #2	Notasulga	$58,474
	Water Pump Station #3	Notasulga	$56,771
	Water Tank #1	Notasulga	$713,089
	Superior Gas Company	Notasulga	$22,780
Communication	Radio Building	Notasulga	$16,213
	Radio Tower	Notasulga	$1,386
TOWN OF SHORTER			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Shorter Municipal Center	Shorter	$983,638
Fire and Rescue / Law Enforcement	Emergency Operations Center	Shorter	$1,518,955
Education	DC Wolfe School	Shorter	Unknown
Transportation	Fuel Island/Tanks	Shorter	$89,554
Business and Industry	Hanon Systems Alabama	Shorter	Unknown
	Love's Truck Stop	Shorter	$4,476,840
	VictoryLand	Shorter	$3,595,440
Communication	Post Office	Shorter	$736,450
	Radio Tower	Shorter	$11,941
CITY OF TUSKEGEE			
Type of Facility	Name	Location	Estimated Value
Continuity of Government	Tuskegee City Hall	Tuskegee	$309,000
Fire and Rescue	Tuskegee Fire Department	Tuskegee	$1,143,782
	Haynes Ambulance	Tuskegee	$158,961
Law Enforcement	Police Department	Tuskegee	$780,599
Health	Salem Nursing Home	Tuskegee	$500,000
	Magnolia Haven Nursing Home	Tuskegee	$2,114,200
	Senior Center / Nutrition	Tuskegee	$872,316
	Tuskegee Rehab Clinic	Tuskegee	$99,260
Education	Tuskegee University	Tuskegee	$13,397,980
	George Washington Carver Elementary School	Tuskegee	Unknown
	George Washington Carver Elementary School	Tuskegee	Unknown
	Tuskegee Institute Middle School	Tuskegee	Unknown
	Tuskegee Public School	Tuskegee	Unknown
Infrastructure	City Shop	Tuskegee	$619,857
	Sanitation Department	Tuskegee	$200,000
	Alabama Power	Tuskegee	$103,320
	Utilities Board of Tuskegee	Tuskegee	$748,480
Transportation	Tuskegee Municipal Airport	Tuskegee	$1,133,000
	Hangar/Mechanic Shop - fuel	Tuskegee	$368,962
Housing	Tuskegee Housing Authority	Tuskegee	$187,520
	Tuskegee Housing Development Corporation	Tuskegee	$548,460
Communication	Rockefeller Communications	Tuskegee	$50,000
	Post Office	Tuskegee	$1,166,508

4.6 Vulnerable Populations and Hazard Impact

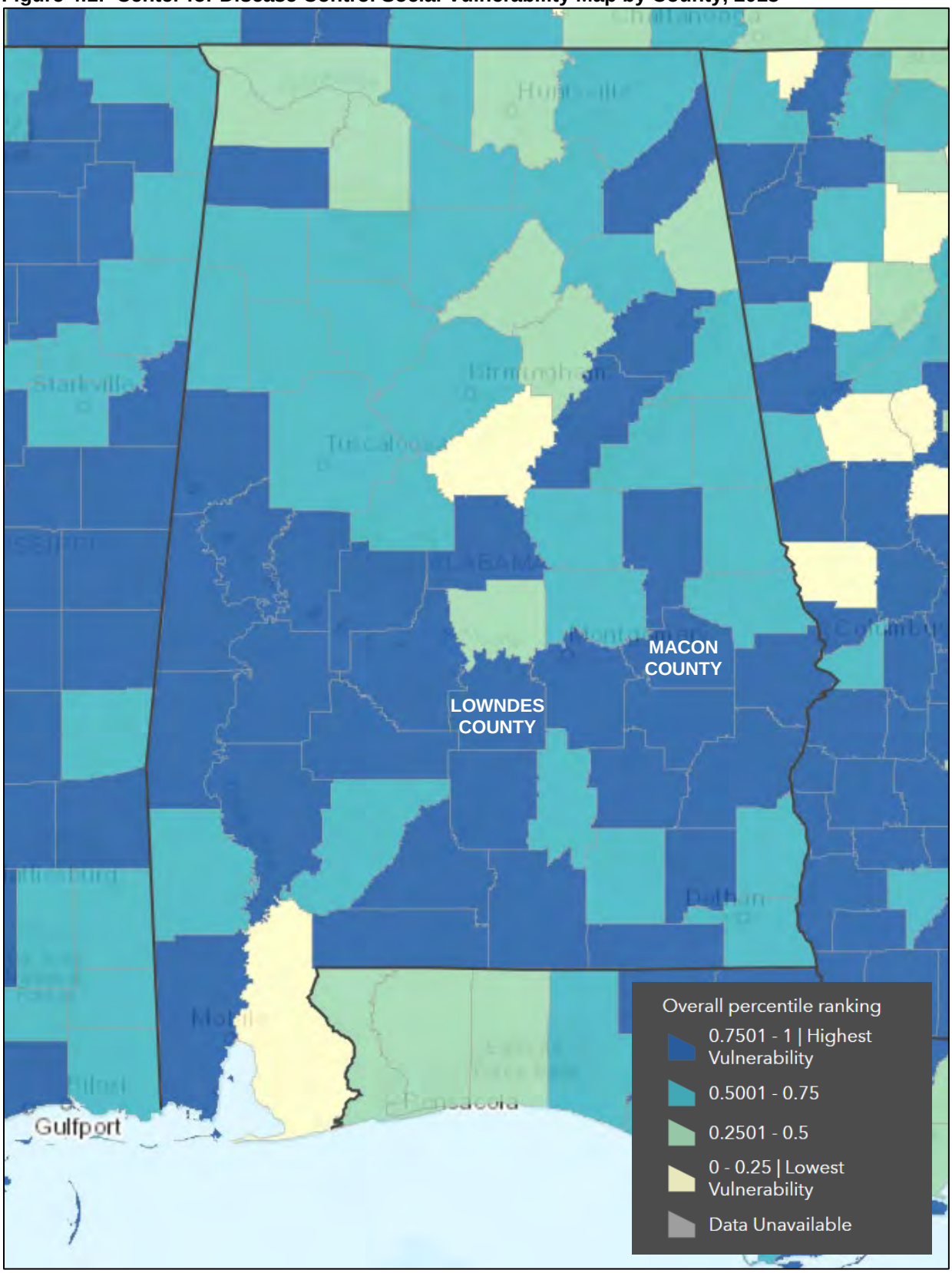
In conjunction with the Center for Disease Control and Prevention (CDC), the Agency for Toxic Substances and Disease Registry (ATSDR) have developed a way to quantify social vulnerability in the face of a hazardous event. Although they are independent on one another, the ATSDR and CDC are both agencies of the U.S. Department of Health and Human Services and often work closely together. ASTDR, however, is more focused on minimizing human health risks associated with exposure to hazardous substances. ATSDR protects communities from harmful health effects related to exposure to natural and man-made hazardous substances. ATSDR responds to environmental health emergencies; investigates emerging environmental health threats; conducts research on the health impacts of hazardous waste sites; and builds capabilities of and providing actionable guidance to state and local health partners. As a part of their program, ATSDR created GIS databases to help emergency response planners and public health officials identify and map communities that will most likely need support before, during and after a hazardous event – those that are socially vulnerable. *(Source: CDC/ATSDR SVI Fact Sheet | Place and Health | ATSDR)*

According to the CDC and ATSDR, social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The CDC/ATSDR Social Vulnerability Index (SVI) County Map depicts the social vulnerability of communities, at the census tract level by grouping 15 census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. The social vulnerability themes are socioeconomic status, household composition/disability, race/ethnicity/language, and housing type/transportation. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment. These graphics help to identify which areas of a county may be impacted more by a natural disaster due to an inability to respond, such as a high concentration of disabled or elderly persons that cannot move quickly to a shelter.

The overall social vulnerability rankings in Lowndes and Macon Counties are among the highest in the state, as shown in Figure 4.1. The social vulnerability rankings are from 0 (lowest vulnerability) to 1 (highest vulnerability). Lowndes County has an overall social vulnerability score of 0.9188, which is the ninth highest in the state, while Macon County has an overall social vulnerability score of 0.8971, which is the 12th highest in the state. Figure 4.1 provides a map that compares the overall social vulnerability of each county in Alabama.

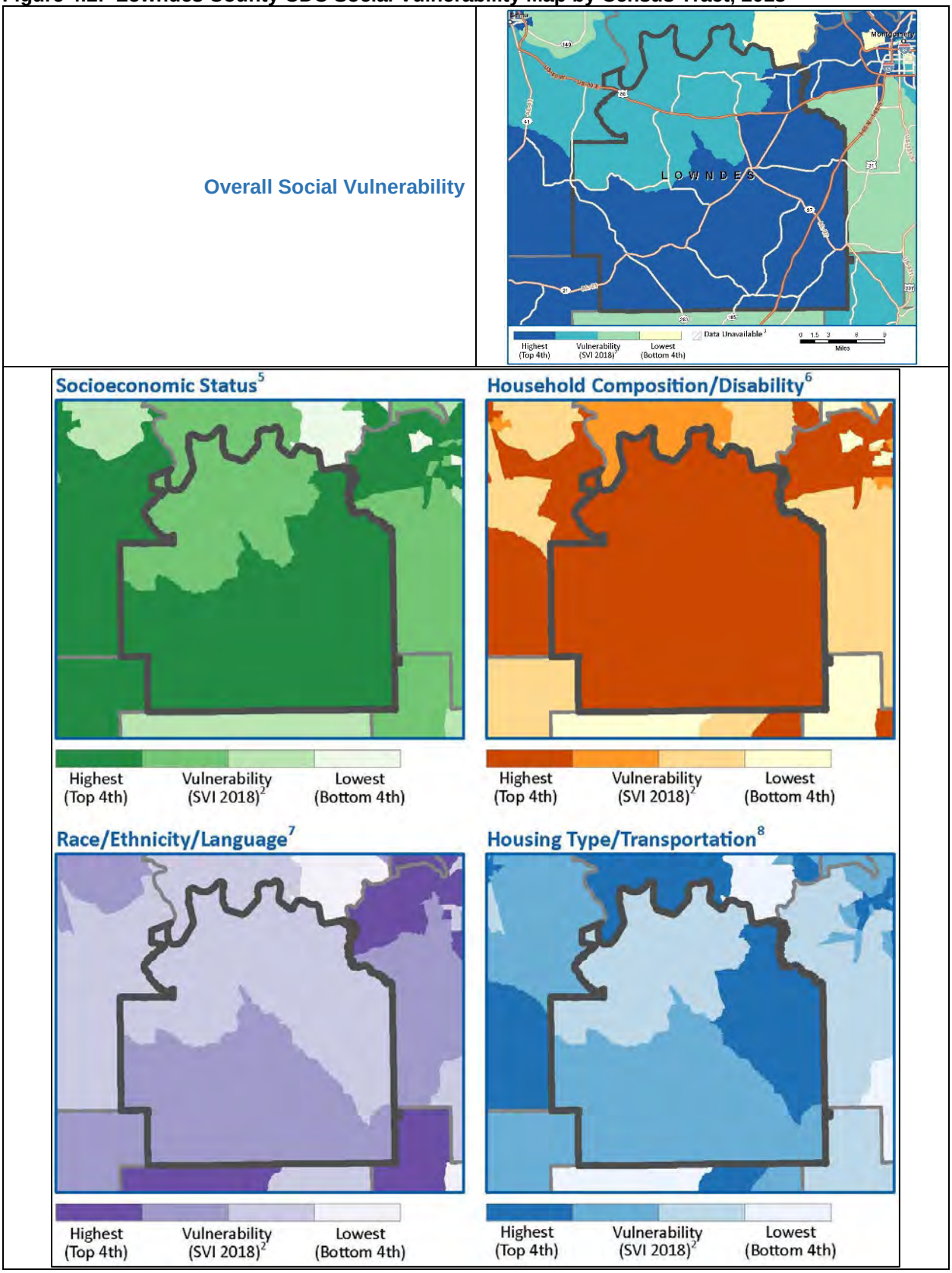
Figure 4.2 provides the social vulnerability by census tract for Lowndes County, including the overall social vulnerability for each census tract, and the vulnerability by theme for each census tract. The southern and eastern parts of Lowndes County, which includes two census tracts, are the most vulnerable parts of the county according to all four themes, as well as the overall social vulnerability. Household Composition/Disability is the highest across the entire county. Figure 4.3 provides the social vulnerability by census tract for Macon County. In terms of overall vulnerability, the southwestern part of Macon County is most vulnerable. Socioeconomic Status impacts the highest number of census tracts in Macon County across the entire southern part of the county. Vulnerability due to Household Composition/Disability is highest in the eastern part of Macon County and Housing Type/Transportation is highest is the southwestern part of the county.

Figure 4.1: Center for Disease Control Social Vulnerability Map by County, 2018



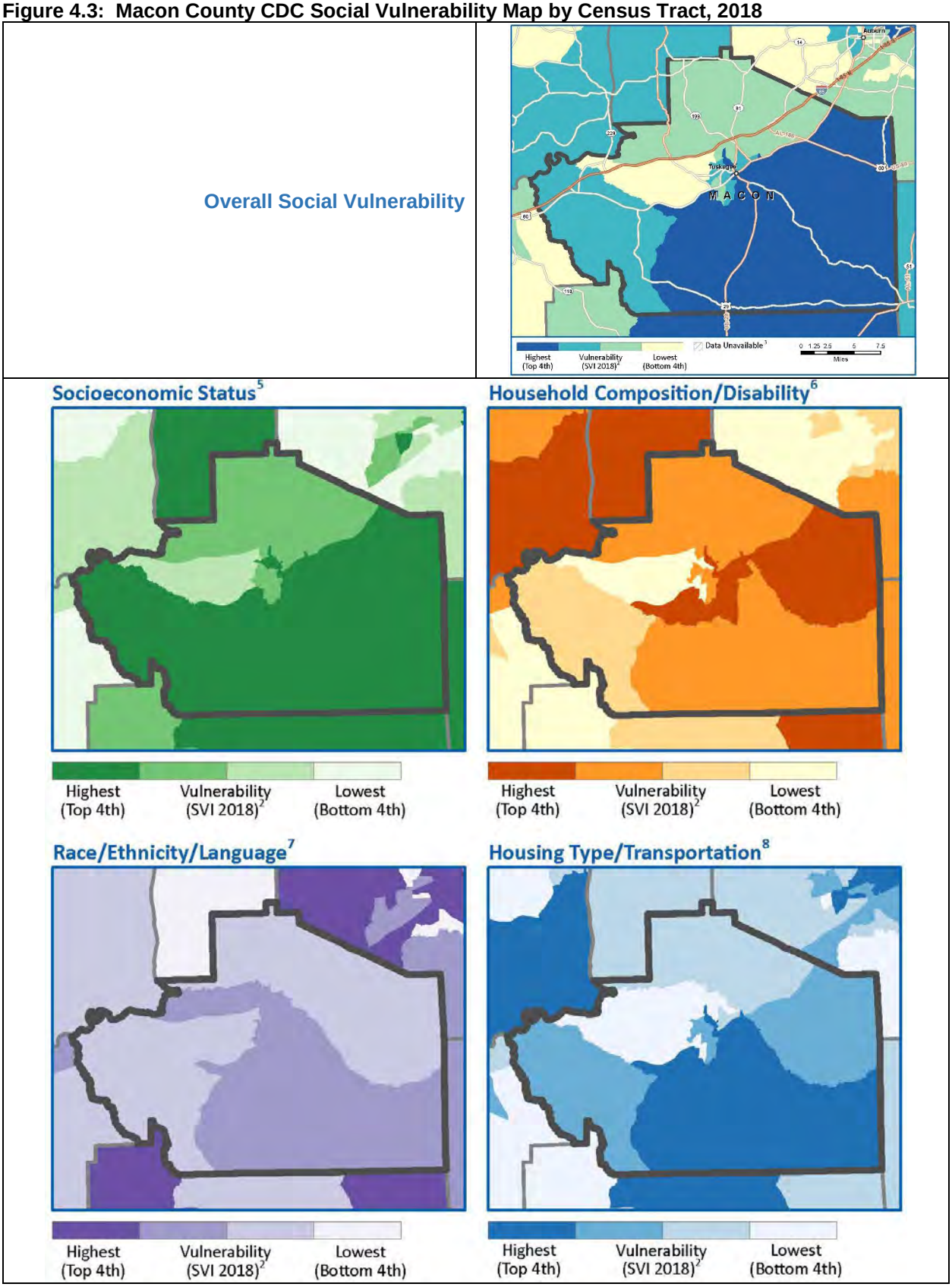
Source: Agency for Toxic Substances and Disease Registry. October 2018. https://svi.cdc.gov/map.html

Figure 4.2: Lowndes County CDC Social Vulnerability Map by Census Tract, 2018



Source: Agency for Toxic Substances and Disease Registry. October 2018. https://svi.cdc.gov/map.html

Figure 4.3: Macon County CDC Social Vulnerability Map by Census Tract, 2018



Source: Agency for Toxic Substances and Disease Registry. October 2018. https://svi.cdc.gov/map.html

Hazard Impact is a discussion of what the probable effect a natural hazard will have on a location. A narrative overview is provided of each hazard's probable impact on the jurisdictions in Lowndes and Macon Counties. The hazard impact is rated as Minor, Limited, Critical or Catastrophic based on the following definitions below:

Minor: Very few injuries, if any, occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities

Limited: Minor injuries only. More than 10 percent of property in the affected area is damaged or destroyed. Complete shutdown of critical facilities for more than one day.

Critical: Multiple deaths/injuries possible. More than 25 percent of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.

Catastrophic: High number of deaths/injuries possible. More than 50 percent of property in affected area damaged or destroyed. Complete shutdown of critical facilities for one month or more.

4.6.1 Dam Failure

Dam regulation and research is an ongoing hazard mitigation issue in the State of Alabama. Currently, there are no state laws to regulate existing private dams or the construction of new private dams that do not require federal licenses or inspections. There have been four attempts to pass legislation requiring inspection of dams on bodies of water over 50 acre-feet or dams higher than 25 feet. Opposition of agricultural interest groups and insurance companies has hampered enactment. As a result, information pertaining to potential damages from dam failure is limited at the current time. Should the ADECA Office of Water Resources conduct a dam study, information regarding high hazard dams would allow for additional studies pertaining to potential vulnerability of this hazard.

There are no records of dam failure in Lowndes County and only one dam failure in Macon County in Notasulga due to extreme flooding conditions. Given the rural location of most of the dams in the counties and the lack of historical loss data, it is assumed that a dam failure event could potentially result in minor to moderate losses. Estimating damage losses over a long period of time yields a very low loss estimate overall.

Hazard Impact Rating for Dam Failure

Lowndes County	Minor	Macon County	Minor
Unincorporated Area	Minor	Unincorporated Area	Minor
Benton	Minor	Franklin	Minor
Fort Deposit	Minor	Notatulga	Minor
Gordonville	Minor	Shorter	Minor
Hayneville	Minor	Tuskegee	Minor
Lowndesboro	Minor	Macon County Schools	Minor
White Hall	Minor	Tuskegee University	Minor
Lowndes County Schools	Minor		

4.6.2 Drought

Because it cannot be predicted where drought may occur, all existing and future buildings, facilities, agricultural production, depletion of groundwater resources, susceptibility to wildfire occurrences, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. However, due to ongoing planning and the relative common occurrence of drought, anticipated future damages or losses are expected to be minimal.

All existing and future buildings in Lowndes and Macon Counties are vulnerable to the effects of drought. More importantly, all agricultural products and other natural resources are at risk. It is difficult, however, to estimate values for damages, including crop failure, that are primarily due to drought issues. While there is little methodology for calculating loss estimates due to drought, the potential exists for severe impacts to crops and water supplies, as well as to residents particularly those suffering from other health issues.

Hazard Impact Rating for Drought

Lowndes County	Minor	Macon County	Minor
Unincorporated Area	Minor	Unincorporated Area	Minor
Benton	Minor	Franklin	Minor
Fort Deposit	Minor	Notatulga	Minor
Gordonville	Minor	Shorter	Minor
Hayneville	Minor	Tuskegee	Minor
Lowndesboro	Minor	Macon County Schools	Minor
White Hall	Minor	Tuskegee University	Minor
Lowndes County Schools	Minor		

4.6.3 Earthquake

Information from the U.S. Geological Survey shows that historical earthquake events have been non-existent in the planning area. Due to the lack of substantive documentation of previous events and being located in the 4% to 10% range of incidence on the U.S. Seismic Hazard Map, it is assumed that although earthquake events may occur at any location within Lowndes County or Macon County, the likelihood is extremely low. Still, all existing and future buildings, facilities, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts should an earthquake occur.

Hazard Impact Rating for Earthquake

Lowndes County	Minor	Macon County	Minor
Unincorporated Area	Minor	Unincorporated Area	Minor
Benton	Minor	Franklin	Minor
Fort Deposit	Minor	Notatulga	Minor
Gordonville	Minor	Shorter	Minor
Hayneville	Minor	Tuskegee	Minor
Lowndesboro	Minor	Macon County Schools	Minor
White Hall	Minor	Tuskegee University	Minor
Lowndes County Schools	Minor		

4.6.4 Extreme Heat

Because the exact location of where extreme heat may occur cannot be predicted and due to the widespread area covered in extreme heat occurrences, all existing and future buildings, facilities, agricultural production, depletion of groundwater resources, susceptibility to wildfire occurrences, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. Residents that are very young or advanced in age are more susceptible to health effects from extreme heat. Extreme heat may stress electrical utility providers, due to increased air conditioning requirements. Need for health services may also increase due to extreme heat. Due to ongoing planning and the relative common occurrence of extreme heat, however, anticipated future damages or losses are expected to be minimal.

All existing and future buildings, and more importantly residents, in Lowndes and Macon Counties are vulnerable to the effects of extreme heat. All agricultural products and other natural resources are also at risk. It is difficult, however, to estimate values for damages, including crop failure, that are primarily due to extreme heat issues, which are often associated with drought. While there is little methodology for calculating loss estimates due to extreme heat, the potential exists for severe impacts to crops and water supplies, as well as to residents particularly those suffering from other health issues. While Lowndes County stakeholders stated that the impacts were generally minor, Macon County stakeholders felt that the impact of extreme heat on residents and agricultural property was slightly more than in Lowndes County.

Hazard Impact Rating for Extreme Heat

Lowndes County	Minor	**Macon County**	Limited
Unincorporated Area	Minor	Unincorporated Area	Limited
Benton	Minor	Franklin	Limited
Fort Deposit	Minor	Notatulga	Limited
Gordonville	Minor	Shorter	Limited
Hayneville	Minor	Tuskegee	Limited
Lowndesboro	Minor	Macon County Schools	Limited
White Hall	Minor	Tuskegee University	Limited
Lowndes County Schools	Minor		

4.6.5 Flooding

Flash flooding is a more frequent threat than riverine flooding and may occur at any location where there are low-lying areas, particularly roads, that may hold water for a short period of time. Flash flooding may potentially affect all residents of Lowndes County and Macon County and cause runoff that becomes fast-rising waters that can cause property and street damage as well as casualties. Unlike riverine flooding, which can be forecasted over a few days, flash flooding is normally a quick onset hazard with little warning. Riverine and flash flooding may occur any time of year, though flooding associated with heavy rains during hurricanes will occur in summer and early autumn.

The largest waterbody in Lowndes County is the Alabama River which forms the northern border of the county. The Alabama River and its tributaries have the most significant impact on the Towns of Benton and White Hall and the northern unincorporated part of Lowndes County. In the last 21 years, an estimated $70,000 in property damages have occurred from flooding in Lowndes County during 14 flood events. All events were flash floods, except for two. Four of the flooding events

were countywide events and five events occurred in the unincorporated part of the county. Hayneville has experienced two flood events, and Fort Deposit, Lowndesboro, and White Hall have each had one reported flood event. With the extent of flooding ranging from zero to 16 feet, the impact of flooding events also ranges from minor to critical. In Lowndesboro and Lowndes County Schools, where the extent is zero, the impact of flooding is minor. In Fort Deposit, Gordonville, Hayneville, and Mosses, where the extent is up to three feet, the impact of flooding is limited. In Benton, White Hall, and the unincorporated part of Lowndes County, where the extent of flooding is up to 16 feet, the impact is critical.

The largest waterbody in Macon County is the Tallapoosa River which forms the northwestern border of the county. Additionally, Calebee Creek, Cubahatchee Creek, Line Creek and Uphapee Creek flow from the southeast to the northwest, having the most significant impact on the City of Tuskegee and various unincorporated parts of the county. In Macon County, there have been eight flood events resulting in $156,000 in property damage since 2000. All but one flood events were flash floods. There have been five countywide flood events and one event each in Notasulga, Shorter and Tuskegee. The extent of flooding in Macon County ranges from zero feet in Franklin to 15 feet in the unincorporated part of Macon County. The impact of flooding in Franklin and for Macon County Schools and Tuskegee University is minor because of the lack of floodplain areas. In Notasulga, Tuskegee, and the unincorporated part of Macon County, the impact of flooding is limited because of the lack of development in floodplain areas or historical damages incurred. With a flooding extent of six feet in Shorter, the impact of flooding is critical due to the presence of the Tallapoosa River, existing flood plains, and historical damages per event.

Historical Insured Flood Losses. According to FEMA flood insurance policy records, there have been no flood losses reported in Lowndes County or Macon County through the NFIP. It should be noted, however, that these loss numbers only include structures that were insured through NFIP and that were reported. It is likely that there are other flood losses not reported in uninsured structures, or that were denied payment.

Repetitive Loss Properties. A repetitive loss property is an insurable structure that has had two or more claims of more than $1,000 within any ten-year period since 1978. A repetitive loss property may or may not be currently insured by the National Flood Insurance Program (NFIP). According to the Alabama Emergency Management Agency, as of 2020, there are no repetitive loss properties in either Lowndes County or Macon County.

Hazard Impact Rating for Flooding

Lowndes County	Critical	**Macon County**	Critical
Unincorporated Area	Critical	Unincorporated Area	Limited
Benton	Critical	Franklin	Minor
Fort Deposit	Limited	Notatulga	Limited
Gordonville	Limited	Shorter	Critical
Hayneville	Limited	Tuskegee	Limited
Lowndesboro	Minor	Macon County Schools	Minor
White Hall	Critical	Tuskegee University	Minor
Lowndes County Schools	Minor		

4.6.6 Hail

Since hail will mostly occur with severe thunderstorms, high winds and tornadoes, hail may occur at any location within Lowndes County or Macon County. While hail is generally not catastrophic in nature, it can cause considerable property damage. In the last 20 years, hail has caused $83,000 in property damage in Lowndes County during 37 events and $181,000 in property damages during 28 events in Macon County. There were no deaths or injuries attributed to hail in either county. All jurisdictions, except Benton, Gordonville, and Mosses in Lowndes County, and Franklin in Macon County have experienced hail events. Due to widespread potential and lack of locational indicators for hail in both Lowndes and Macon Counties, the impact of hail is rated as limited for all jurisdictions. All existing and future buildings, facilities, and the general population in the county are vulnerable to this hazard and its impacts. Also, similar to thunderstorms, hail will be more localized than hurricane events but more widespread than tornadoes.

Hazard Impact Rating for Hail

Lowndes County	Limited	Macon County	Limited
Unincorporated Area	Limited	Unincorporated Area	Limited
Benton	Limited	Franklin	Limited
Fort Deposit	Limited	Notatulga	Limited
Gordonville	Limited	Shorter	Limited
Hayneville	Limited	Tuskegee	Limited
Lowndesboro	Limited	Macon County Schools	Limited
White Hall	Limited	Tuskegee University	Limited
Lowndes County Schools	Limited		

4.6.7 High Winds, Thunderstorms and Severe Storms

The impact of thunderstorms is generally in property damage because of falling debris, however, personal injuries and even death are not uncommon. Between 2000 and 2020, Lowndes County suffered $3.98 million in property and crop damages, while Macon County has suffered $751,500 in property and crop damages. Due to its location and prevailing weather patterns, Lowndes County is more susceptible to high winds, thunderstorms and severe storms than Macon County. Because severe thunderstorms with high winds may occur at any location within either Lowndes or Macon Counties, all existing and future buildings, facilities, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. Severe thunderstorms with high winds can also produce similar effects to tornadoes and hurricanes. These effects will be more localized than hurricane events but more widespread than tornadoes.

Hazard Impact Rating for High Winds, Thunderstorms, Severe Storms

Lowndes County	Critical	Macon County	Limited
Unincorporated Area	Critical	Unincorporated Area	Limited
Benton	Critical	Franklin	Limited
Fort Deposit	Critical	Notatulga	Limited
Gordonville	Critical	Shorter	Limited
Hayneville	Critical	Tuskegee	Limited
Lowndesboro	Critical	Macon County Schools	Limited
White Hall	Critical	Tuskegee University	Limited
Lowndes County Schools	Critical		

4.6.8 Landslides

Information from the GSA shows that historical landslide events have been very sparse across the planning area, with eight potential landslide sites in Lowndes County and none in Macon County. Due to the lack of documentation of previous events, it is assumed that landslides events may occur at any location within the county. All existing and future buildings, facilities, and the general population in Lowndes County and Macon County are considered to be vulnerable to this hazard and its impacts. With little recorded activity and documentation, however, it is believed that potential losses in the county would be minor in scope.

Hazard Impact Rating for Landslides

Lowndes County	Minor	Macon County	Minor
Unincorporated Area	Minor	Unincorporated Area	Minor
Benton	Minor	Franklin	Minor
Fort Deposit	Minor	Notatulga	Minor
Gordonville	Minor	Shorter	Minor
Hayneville	Minor	Tuskegee	Minor
Lowndesboro	Minor	Macon County Schools	Minor
White Hall	Minor	Tuskegee University	Minor
Lowndes County Schools	Minor		

4.6.9 Lightning

Because lightning most often occurs in conjunction with severe thunderstorms and high wind events, lightning may occur at any location within Lowndes County or Macon County. As with high winds, thunderstorms and severe storms Lowndes County is more susceptible to lightning than Macon County due to its location and prevailing weather patterns. All existing and future buildings, facilities, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. Also similar to thunderstorms, lightning will be more localized than hurricane events but more widespread than tornadoes.

Hazard Impact Rating for Lightning

Lowndes County	Limited	Macon County	Minor
Unincorporated Area	Limited	Unincorporated Area	Minor
Benton	Limited	Franklin	Minor
Fort Deposit	Limited	Notatulga	Minor
Gordonville	Limited	Shorter	Minor
Hayneville	Limited	Tuskegee	Minor
Lowndesboro	Limited	Macon County Schools	Minor
White Hall	Limited	Tuskegee University	Minor
Lowndes County Schools	Limited		

4.6.10 Sinkholes

Information from the GSA shows that geology that is conducive to sinkholes and other forms of land subsidence are located with a very small degree across Lowndes County and with a limited degree across Macon County. Due to the lack of documentation of previous events, it is assumed that land subsidence may occur at any location within either county. All existing and future buildings, facilities, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. With little recorded activity and documentation, however, it is believed that potential losses in the planning area would be minor in scope.

Hazard Impact Rating for Sinkholes

Lowndes County	Limited	Macon County	Minor
Unincorporated Area	Limited	Unincorporated Area	Minor
Benton	Limited	Franklin	Minor
Fort Deposit	Limited	Notatulga	Minor
Gordonville	Limited	Shorter	Minor
Hayneville	Limited	Tuskegee	Minor
Lowndesboro	Limited	Macon County Schools	Minor
White Hall	Limited	Tuskegee University	Minor
Lowndes County Schools	Limited		

4.6.11 Tropical Depressions, Tropical Storms, Hurricanes

Hurricanes and other tropical cyclone events commonly affect a large spatial area. Therefore, all existing and future buildings, facilities, and the general population in both Lowndes County and Macon County are considered to be vulnerable to this hazard and its impacts. Since both counties are inland locations, they will not receive some of the intensity and extent of hurricane storms. However, the magnitude of hurricanes affecting the central Gulf Coast can remain high as these storms travel inland into the region. The projected effects of hurricanes on Lowndes County and Macon County may include additional hazards, including flooding from torrential rains, debris creation, and a lesser threat of weak tornadoes spawned by the hurricane system. Hurricanes will provide those widespread effects during the summer and early autumn portions of the year. Normally there are several days of warning before a hurricane impacts the planning area allowing for preparations.

Hazard Impact Rating for Tropical Depressions, Tropical Storms, Hurricanes

Lowndes County	Critical	Macon County	Minor
Unincorporated Area	Critical	Unincorporated Area	Minor
Benton	Critical	Franklin	Minor
Fort Deposit	Critical	Notatulga	Minor
Gordonville	Critical	Shorter	Minor
Hayneville	Critical	Tuskegee	Minor
Lowndesboro	Critical	Macon County Schools	Minor
White Hall	Critical	Tuskegee University	Minor
Lowndes County Schools	Critical		

4.6.12 Tornadoes

All locations in the planning area are susceptible to tornadoes. The most likely time for tornadoes is during the spring months from March through May, with a secondary peak of tornado activity in November, but tornadoes can occur in every month of the year. Tornadoes are generally more destructive than hurricanes in both Lowndes County and Macon County, but impacts are more localized. Lowndes County has experienced 12 tornado events in the last 20 years, resulting in $541,000 in property damages and 15 injuries. Macon County has experienced 15 tornado events in the last 20 years, resulting in $836,000 in property damages and 1 injury. The unincorporated areas of Lowndes and Macon Counties appear to be the most vulnerable parts of both counties.

Tornadoes may touch down anywhere within the planning area, therefore, all existing and future buildings, facilities, and the general population in the planning area are considered to be vulnerable to this hazard and its impacts. Tornadoes can occur during hurricane events or other severe thunderstorm

events, which can create multiple impacts. Even though favorable conditions for tornadoes can be forecasted in advance, the location of a tornado is unknown until a few moments before the storm occurs.

Hazard Impact Rating for Tornadoes

Lowndes County	Catastrophic	Macon County	Critical
Unincorporated Area	Catastrophic	Unincorporated Area	Critical
Benton	Catastrophic	Franklin	Critical
Fort Deposit	Catastrophic	Notatulga	Critical
Gordonville	Catastrophic	Shorter	Critical
Hayneville	Catastrophic	Tuskegee	Critical
Lowndesboro	Catastrophic	Macon County Schools	Critical
White Hall	Catastrophic	Tuskegee University	Critical
Lowndes County Schools	Catastrophic		

4.6.13 Wildfire

Wildfires will primarily damage timber land in Lowndes County and Macon County. If factors such as winds and drought are present, wildfires may spread from forested areas to areas with residential structures. These fires may begin due to events such as burning debris or lightning and are often difficult to contain due to the lack of access to the fire, lack of readily available water to control the fires, and the rapid spread of these fires. Though all the planning area's residents are at least somewhat vulnerable to wildfires, areas in isolated unincorporated areas are at a higher vulnerability according to the Alabama Forestry Commission. Though several wildfires occur annually in Lowndes and Macon Counties, most are small and only affect small, forested areas. With data available from the Alabama Forestry Commission, it is estimated that Lowndes County has suffered 280 wildfires between 2007 and 2020 with a total of 2,583.8 acres burned; and, Macon County has had 648 wildfires with 13,115.7 acres burned. Therefore, the average wildfire size in Lowndes County is 9.23 acres and in Macon County is 20.24 acres. In the 14-year period, four of the 280 wildfires in Lowndes County and 23 of the 648 wildfires in Macon County burned 100 acres or more. The largest wildfire in Lowndes County occurred on April 27, 2013 with 350 acres burned and the largest wildfire in Macon County occurred on March 4, 2011 with 616 acres burned. Since most of the land in both counties is forested land, it can be assumed that the larger wildfires were in heavily forested areas that are prevalent with the timber industry of the county. Therefore, the timber industry will suffer the greatest loss in these types of events. Although wildfire is the most frequently occurring hazard in Lowndes and Macon Counties, the rural nature of the county and relatively small size of most wildfires makes the impact of wildfire limited in the long term.

Hazard Impact Rating for Wildfire

Lowndes County	Limited	Macon County	Limited
Unincorporated Area	Limited	Unincorporated Area	Limited
Benton	Limited	Franklin	Limited
Fort Deposit	Limited	Notatulga	Limited
Gordonville	Limited	Shorter	Limited
Hayneville	Limited	Tuskegee	Limited
Lowndesboro	Limited	Macon County Schools	Limited
White Hall	Limited	Tuskegee University	Limited
Lowndes County Schools	Limited		

4.6.14 Winter / Ice Storms

Historical records show that both Lowndes County and Macon County have occasional instances of winter weather, which is primarily through frozen precipitation (snow/ice), that only affects the area for a few days at the most. Even though winter and ice storms are infrequent and of short duration in the planning area, the inability to respond due to lack of equipment and preparation on the part of both the local governments and residents is a consideration throughout both counties. Lowndes County stakeholders rated the impact of winter storms as minor, even with limited response capacity, while Macon County stakeholders increased the impact of the hazard from minor to limited. Because winter weather events may occur at any location within the counties, all existing and future buildings, facilities, and the general population in Lowndes County and Macon County are considered to be vulnerable to this hazard and its impacts. Winter weather events will affect those in vulnerable housing more severely than other areas.

Hazard Impact Rating for Winter / Ice Storms

Lowndes County	Minor	Macon County	Limited
Unincorporated Area	Minor	Unincorporated Area	Limited
Benton	Minor	Franklin	Limited
Fort Deposit	Minor	Notatulga	Limited
Gordonville	Minor	Shorter	Limited
Hayneville	Minor	Tuskegee	Limited
Lowndesboro	Minor	Macon County Schools	Limited
White Hall	Minor	Tuskegee University	Limited
Lowndes County Schools	Minor		

4.7 Risk Index and Hazard Priorities

A rating scale was developed to assist in a qualitative assessment of the risk and potential impact of each identified hazard. Each risk category of probability, impact, location extent, warning time and duration, was assigned criteria that ranked the level of the hazard within the category from low to high, or other measurements as appropriate, as shown in Table 4.9. The level for each hazard for each category was determined based on the hazard profiles, the vulnerability and risk analysis, and discussions in the Local Emergency Planning Committee meetings. In order to quantify the risk classifications, the various levels within each category were assigned a value from 1 to 4. Each category was also assigned a weighted factor to create a total weighted value with a maximum score of 4.0. In some instances, the local reports and discussion made a difference in the score that was assigned to a hazard category.

The risk rating scale was applied to each hazard to develop a risk index for each jurisdiction. The result is a weighted score for each hazard. The weighted score was then used to give each hazard a priority rating from 1 to 14, with one being the highest priority hazard and 14 being the lowest priority hazard, to be addressed by each jurisdiction. A comparison of Lowndes County's 2021 hazard priorities and 2015 hazard priorities, along with a comparison of each jurisdiction's hazard priorities in 2021, is provided in Table 4.10. The same is provided in Macon County in Table 4.11. The comparison between 2015 and 2021 in Macon County is not as comparable because in 2015, the hazards were not assigned a numerical priority value. Instead, priority hazards were designated as high, medium or low. The Risk Index for Lowndes County and each jurisdiction in Lowndes County is shown in Tables 4.12.1 through 4.12.10. The Risk Index for Macon County and each jurisdiction in Macon County is shown in Tables 4.13.1 through 4.13.8.

Table 4.9: Risk Rating Scale

Category	Level	Criteria	Index Value	Weighted Factor
Probability	Very Low	Less than 1% annual probability	1	30%
	Low	Between 1% and 10% annual probability	2	
	Medium	Between 10% and 100% annual probability	3	
	High	100% annual probability	4	
Impact	Minor	Very few injuries, if any, occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.	1	30%
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.	3	
	Catastrophic	High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for one month or more.	4	
Location Extent	Negligible	Less than 1% of area affected.	1	20%
	Small	Between 1% and 10% of area affected.	2	
	Moderate	Between 10% and 50% of area affected.	3	
	Large	Between 50% and 100% of area affected.	4	
Warning Time	More than 24 hours	Self explanatory	1	10%
	12 to 24 hours	Self explanatory	2	
	6 to 12 hours	Self explanatory	3	
	Less than 6 hours	Self explanatory	4	
Duration	Less than 6 hours	Self explanatory	1	10%
	Less than 24 hours	Self explanatory	2	
	Less than one week	Self explanatory	3	
	More than one week	Self explanatory	4	

In Lowndes County, the top two priority hazards (#1tornadoes and #2 high winds, thunderstorms and severe storms) are the same for Lowndes County overall in both 2015 and 2021, as well as for all jurisdictions. At the county level in Lowndes County, the top five priority hazards are the same between 2015 and 2021, although flooding was prioritized higher in 2021 than in 2015. The same is true for the lowest priority hazards. At the local jurisdiction level, hazard priorities vary to some degree from the countywide hazard priorities due to differences in locational probability, impact and extent, as seen in the comparison provided in Table 4.10.

In Macon County, the top four priority hazards (drought, extreme heat, high winds, thunderstorms, and severe storms, and tornadoes) are the same for the county and all jurisdictions; however, the top priority hazards in 2021 are considerably different than in the previous plan. In 2015, the top priority hazards in Macon County were high winds, thunderstorms, and severe storms; tornadoes; flooding; wildfire; and lightning, as compared to the top four priority hazards previously listed. Flooding dropped to the number 5 priority for the county, a ranked between 5th and 11th for the local jurisdictions. Although there is some variation in order by jurisdiction, medium level priority hazards include hail; wildfire; winter storms; tropical systems and hurricanes; and lightning. Lower priority hazards also vary by jurisdiction, but generally include sinkholes and land subsidence; earthquakes; dam failure; and landslides. The variation in hazard priorities across the county is due to differences in locational probability, impact and extent, as seen in Table 4.11.

Table 4.10: Lowndes County Hazard Risk Comparison by Jurisdiction

Hazard	Lowndes County		Benton	Fort Deposit	Gordonville	Hayneville	Lowndesboro	Mosses	White Hall	Unincorporated Lowndes County	Lowndes County Schools
	2015	2021									
Tornadoes	1	**1**	1	1	1	1	1	1	1	1	1
High Winds, Thunderstorm, Severe Storms	2	**2**	2	2	2	2	2	2	2	2	2
Lightning	2	**3**	9	9	9	9	8	9	11	11	9
Flooding	4	**4**	4	7	7	7	11	7	4	3	7
Tropical Depression, Tropical Storm, Hurricane	3	**5**	5	4	4	4	4	4	5	5	4
Drought	7	**6**	7	6	5	6	6	5	7	7	5
Extreme Heat	9	**7**	3	3	3	3	3	3	3	4	3
Wildfires	5	**8**	13	13	13	12	13	12	9	9	13
Hail	6	**9**	6	5	6	5	5	6	6	6	6
Winter Storms	8	**10**	11	11	11	11	10	11	12	12	11
Sinkholes, Land Subsidence	11	**11**	10	10	10	10	9	10	8	8	10
Landslides	12	**12**	12	12	12	13	12	13	13	13	12
Dam Failure	10	**13**	8	8	8	8	7	8	10	10	8
Earthquakes	11	**14**	14	14	14	14	14	14	14	14	14

Table 4.11: Macon County Hazard Risk Comparison by Jurisdiction

Hazard	Macon County		Franklin	Notasulga	Shorter	Tuskegee	Unincorporate Macon County	Macon County Schools	Tuskegee University
	2015	2021							
Drought	(M) 5	**1**	1	1	1	1	1	1	1
Extreme Heat	(M) 5	**2**	2	2	2	2	2	2	2
High Winds, Thunderstorms, Severe Storms	(H) 1	**3**	3	3	3	3	3	3	3
Tornadoes	(H) 1	**4**	4	4	4	4	4	4	4
Flooding	(H) 1	**5**	11	11	8	11	5	11	11
Hail	(M) 5	**6**	5	5	5	5	6	5	5
Wildfire	(H) 1	**7**	6	7	7	6	7	7	7
Winter Storms	(L) 9	**8**	7	6	6	7	8	6	6
Tropical Depression, Tropical Storm, Hurricane	(M) 5	**9**	8	9	9	8	10	8	8
Lightning	(H) 1	**10**	9	10	10	9	11	9	9
Sinkholes, Land Subsidence	(L) 9	**11**	14	14	14	10	9	14	14
Earthquakes	(L) 9	**12**	10	12	11	12	12	10	10
Dam Failure	(L) 9	**13**	12	8	12	13	13	12	12
Landslides	(L) 9	**14**	13	13	13	14	14	13	13

Table 4.12.1: Lowndes County Hazard Risk Index

LOWNDES COUNTY RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	1	0.3	1	0.3	1	0.2	3	0.3	1	0.1	1.2	13
Drought	4	1.2	1	0.3	4	0.8	1	0.1	4	0.4	2.8	6
Earthquakes	0.5	0.2	1	0.3	1	0.2	4	0.4	1	0.1	1.2	14
Extreme Heat	4	1.2	1	0.3	4	0.8	1	0.1	4	0.4	2.8	7
Flooding	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	4
Hail	4	1.2	2	0.6	3	0.6	2	0.2	1	0.1	2.7	9
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	2
Landslides	1	0.3	1	0.3	3	0.6	4	0.4	1	0.1	1.7	12
Lightning	4	1.2	4	1.2	2	0.4	2	0.2	1	0.1	3.1	3
Sinkholes, Land Subsidence	2	0.6	2	0.6	2	0.4	4	0.4	3	0.3	2.3	11
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	1	0.1	3.3	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	4	0.8	1	0.1	2	0.2	2.9	5
Wildfire	4	1.2	2	0.6	2	0.4	4	0.4	2	0.2	2.8	8
Winter Storms	3	0.9	1	0.3	4	0.8	1	0.1	3	0.3	2.4	10

Table 4.12.2: Town of Benton Hazard Risk Index

BENTON RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	7
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	3	0.9	3	0.9	4	0.8	1	0.1	2	0.2	2.9	4
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	12
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	5
Wildfire	1	0.3	2	0.6	1	0.2	3	0.3	1	0.1	1.5	13
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.12.3: Town of Fort Deposit Hazard Risk Index

FORT DEPOSIT RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	6
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	2	0.6	2	0.6	4	0.8	1	0.1	2	0.2	2.3	7
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	12
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	1	0.3	2	0.6	1	0.2	3	0.3	1	0.1	1.5	13
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.12.4: Town of Gordonville Hazard Risk Index

GORDONVILLE RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	5
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	2	0.6	2	0.6	4	0.8	1	0.1	2	0.2	2.3	7
Hail	1	0.3	3	0.9	4	0.8	1	0.1	4	0.4	2.5	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	12
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	1	0.3	2	0.6	1	0.2	3	0.3	1	0.1	1.5	13
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.12.5: Town of Hayneville Hazard Risk Index

HAYNEVILLE RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	6
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	2	0.6	2	0.6	4	0.8	1	0.1	2	0.2	2.3	7
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	13
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	2	0.6	2	0.6	1	0.2	3	0.3	1	0.1	1.8	12
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.12.6: Town of Lowndesboro Hazard Risk Index

LOWNDESBORO RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	7
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	6
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	1	0.3	1	0.3	4	0.8	1	0.1	2	0.2	1.7	11
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	12
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	8
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	9
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	1	0.3	2	0.6	1	0.2	3	0.3	1	0.1	1.5	13
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	10

Table 4.12.7: Town of Mosses Hazard Risk Index

MOSSES RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	5
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	2	0.6	2	0.6	4	0.8	1	0.1	2	0.2	2.3	7
Hail	1	0.3	3	0.9	4	0.8	1	0.1	4	0.4	2.5	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	13
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	2	0.6	2	0.6	1	0.2	3	0.3	1	0.1	1.8	12
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.12.8: Town of White Hall Hazard Risk Index

WHITE HALL RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	10
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	7
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	3	0.9	3	0.9	4	0.8	1	0.1	2	0.2	2.9	4
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	2	0.6	1	0.3	2	0.4	4	0.4	2	0.2	1.9	13
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	11
Sinkholes, Land Subsidence	2	0.6	2	0.6	4	0.8	1	0.1	3	0.3	2.4	8
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	5
Wildfire	4	1.2	2	0.6	1	0.2	3	0.3	1	0.1	2.4	9
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	12

Table 4.12.9: Unincorporated Lowndes County Hazard Risk Index

UNINCORPORATED LOWNDES COUNTY RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	10
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	7
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	4
Flooding	4	1.2	3	0.9	4	0.8	1	0.1	2	0.2	3.2	3
Hail	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	2	0.6	1	0.3	2	0.4	4	0.4	2	0.2	1.9	13
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	11
Sinkholes, Land Subsidence	2	0.6	2	0.6	4	0.8	1	0.1	3	0.3	2.4	8
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	5
Wildfire	4	1.2	2	0.6	1	0.2	3	0.3	1	0.1	2.4	9
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	12

Table 4.12.10: Lowndes County Schools Hazard Risk Index

LOWNDES COUNTY SCHOOLS RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	8
Drought	4	1.2	1	0.3	4	0.8	2	0.2	1	0.1	2.6	5
Earthquake	0.5	0.2	1	0.3	2	0.4	2	0.2	1	0.1	1.2	14
Extreme Heat	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	3
Flooding	1	0.3	3	0.9	4	0.8	1	0.1	2	0.2	2.3	7
Hail	2	0.6	3	0.9	2	0.4	1	0.1	4	0.4	2.4	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Landslides	1	0.3	1	0.3	2	0.4	4	0.4	2	0.2	1.6	12
Lightning	2	0.6	2	0.6	3	0.6	2	0.2	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	2	0.6	4	0.8	1	0.1	3	0.3	2.1	10
Tornadoes	4	1.2	4	1.2	2	0.4	4	0.4	3	0.3	3.5	1
Tropical Depression, Tropical Storm, Hurricane	3	0.9	3	0.9	3	0.6	4	0.4	1	0.1	2.9	4
Wildfire	1	0.3	2	0.6	1	0.2	3	0.3	1	0.1	1.5	13
Winter Storms	3	0.9	1	0.3	1	0.2	4	0.4	1	0.1	1.9	11

Table 4.13.1: Macon County Hazard Risk Index

MACON COUNTY RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	13
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	12
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	5
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	10
Sinkholes, Land Subsidence	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	11
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	9
Wildfire	4	1.2	2	0.6	2	0.4	4	0.4	2	0.2	2.8	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	8

Table 4.13.2: Town of Franklin Hazard Risk Index

FRANKLIN RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	12
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	10
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	1	0.3	3	0.9	1	0.2	2	0.2	2	0.2	1.8	11
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	13
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	8
Wildfire	4	1.2	2	0.6	2	0.4	4	0.4	2	0.2	2.8	6
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	7

Table 4.13.3: Town of Notasulga Hazard Risk Index

NOTASULGA RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	3	0.9	2	0.6	1	0.2	3	0.3	2	0.2	2.2	8
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	12
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	2	0.6	2	0.6	2	0.4	2	0.2	2	0.2	2.0	11
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	13
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	10
Sinkholes, Land Subsidence	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	9
Wildfire	2	0.6	2	0.6	3	0.6	4	0.4	2	0.2	2.4	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	6

Table 4.13.4: Town of Shorter Hazard Risk Index

SHORTER RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	12
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	11
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	2	0.6	3	0.9	2	0.4	2	0.2	2	0.2	2.3	8
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	13
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	10
Sinkholes, Land Subsidence	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	9
Wildfire	2	0.6	2	0.6	3	0.6	4	0.4	2	0.2	2.4	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	6

Table 4.13.5: City of Tuskegee Hazard Risk Index

TUSKEGEE RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	13
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	12
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	2	0.6	2	0.6	2	0.4	2	0.2	2	0.2	2.0	11
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	9
Sinkholes, Land Subsidence	2	0.6	2	0.6	2	0.4	4	0.4	1	0.1	2.1	10
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	8
Wildfire	4	1.2	2	0.6	2	0.4	4	0.4	2	0.2	2.8	6
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	7

Table 4.13.6: Unincorporated Macon County Hazard Risk Index

UNINCORPORATED MACON COUNTY RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	13
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	12
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	4	1.2	3	0.9	2	0.4	2	0.2	2	0.2	2.9	5
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	6
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	11
Sinkholes, Land Subsidence	3	0.9	2	0.6	2	0.4	4	0.4	1	0.1	2.4	9
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	10
Wildfire	4	1.2	2	0.6	2	0.4	4	0.4	2	0.2	2.8	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	8

Table 4.13.7: Macon County Schools Hazard Risk Index

MACON COUNTY SCHOOLS RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	12
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	10
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	1	0.3	3	0.9	1	0.2	2	0.2	2	0.2	1.8	11
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	13
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	8
Wildfire	2	0.6	2	0.6	3	0.6	4	0.4	2	0.2	2.4	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	6

Table 4.13.8: Tuskegee University Hazard Risk Index

TUSKEGEE UNIVERSITY RISK AND VULNERABILITY ASSESSMENT	Probability		Impact		Location Extent		Warning Time		Duration		Weighted Score	Weighted Priority Ranking
	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 30%	Index Value 1 to 4	Weighted Factor 20%	Index Value 1 to 4	Weighted Factor 10%	Index Value 1 to 4	Weighted Factor 10%		
Dam Failure	2	0.6	2	0.6	1	0.2	2	0.2	1	0.1	1.7	12
Drought	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	1
Earthquakes	1	0.3	2	0.6	2	0.4	4	0.4	1	0.1	1.8	10
Extreme Heat	4	1.2	3	0.9	4	0.8	1	0.1	4	0.4	3.4	2
Flooding	1	0.3	3	0.9	1	0.2	2	0.2	2	0.2	1.8	11
Hail	4	1.2	2	0.6	4	0.8	2	0.2	1	0.1	2.9	5
High Winds, Thunderstorms, Severe Storms	4	1.2	3	0.9	4	0.8	2	0.2	1	0.1	3.2	3
Landslides	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	13
Lightning	4	1.2	1	0.3	2	0.4	1	0.1	1	0.1	2.1	9
Sinkholes, Land Subsidence	1	0.3	1	0.3	1	0.2	4	0.4	1	0.1	1.3	14
Tornadoes	4	1.2	3	0.9	3	0.6	4	0.4	1	0.1	3.2	4
Tropical Depression, Tropical Storm, Hurricane	2	0.6	2	0.6	4	0.8	1	0.1	1	0.1	2.2	8
Wildfire	2	0.6	2	0.6	3	0.6	4	0.4	2	0.2	2.4	7
Winter Storms	3	0.9	2	0.6	4	0.8	1	0.1	3	0.3	2.7	6

SECTION 5: MITIGATION STRATEGY

Section Contents

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5.1 Mitigation Goals

Mitigation goals are broad statements that focus on long-term visions to reduce or avoid vulnerabilities to identified hazards within the planning area. Through the planning process with the AEMA Division D Core Team, six primary goals were developed from corresponding goals in previous local mitigation plans. The mitigation goals expected to be achieved by development, adoption, and continuation of this plan include:

1. **PREVENTION**: Manage the development of land and buildings to minimize the risk of life and property loss due to hazard events.
2. **PROPERTY PROTECTION**: Protect structures and their occupants and contents from the damaging effects of hazard events.
3. **NATURAL RESOURCE PROTECTION**: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
4. **STRUCTURAL MITIGATION**: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
5. **EMERGENCY SERVICES**: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
6. **PUBLIC EDUCATION AND AWARENESS**: Educate and foster public awareness of hazards and techniques available for mitigation.

To convert the existing hazard mitigation plans from 2015 for both Lowndes County and Macon County, a review was made of the previous goals and how they aligned with the six regional goals. The 2015 Lowndes County Hazard Mitigation Plan and the 2015 Macon County Hazard Mitigation Plan each included three goals, as listed below.

2015 Hazard Mitigation Goals

Goal 1: Promote natural hazard mitigation as a means to decrease loss of life, property damage and economic loss during a disaster occurrence.

Goal 2: Provide on-going support of the Lowndes/Macon County Emergency Management efforts to make Lowndes/Macon County less vulnerable to natural disasters.

Goal 3: Educate general population about natural hazards and hazard mitigation options.

Hazard mitigation objectives were very similar in the two 2015 plans, as well. In Table 5.1, each county's 2015 hazard mitigation objectives were categorized with the 2021 AEMA Division D Goals to determine how the existing mitigation strategies would align with the six 2021 regional goals and to identify strategies that would not align with the regional goals. Although there were small variations between the two county's 2015 objectives, it was possible to relate each one to a 2021 goal. A multi-stage process was used to identify, evaluate, and prioritize the goals, objectives, and actions for Lowndes County and Macon County. The process is described in Section 5.5.

Table 5.1: Comparison of Hazard Mitigation Goals and Objectives from 2015 and 2021

2021 Division D Goals	Lowndes County 2015 Hazard Mitigation Objectives	Macon County 2015 Hazard Mitigation Objectives
1. PREVENTION	**1.3:** Develop and adopt, or amend, and enforce land use regulations and ordinances and modern building codes that support natural hazard mitigation efforts throughout Lowndes County. **2.1:** Ensure that the Lowndes County Hazard Mitigation Plan remains current and is implemented. **2.3:** Enhance the county's and municipalities' capability to conduct further hazard risk assessments, better demonstrate funding needs, and track mitigation activities throughout the county.	**1.3:** Develop and adopt, or amend, and enforce land use regulations and ordinances and modern building codes that support natural hazard mitigation efforts throughout Macon County. **2.1:** Ensure that the Macon County Hazard Mitigation Plan remains current and is implemented.
2. PROPERTY PROTECTION	**1.6:** Improve infrastructural facilities and remove at-risk commercial and residential buildings to limit the impact of natural hazard events.	
3. NATURAL RESOURCE PROTECTION	**1.4:** Implement fire protection measures to decrease potential for loss of life and property damage. **1.5:** Limit impact of heat and drought on human health, property damage, and agricultural losses.	**1.4:** Implement fire protection measures to decrease potential for loss of life and property damage. **1.5:** Limit impact of heat and drought on human health, property damage, and agricultural losses.
4. STRUCTURAL MITIGATION	**1.2:** Ensure that adequate protection shelters are available for use during disaster occurrences. **1.6:** Improve infrastructural facilities and remove at-risk commercial and residential buildings to limit the impact of natural hazard events.	**1.2:** Ensure that adequate protection shelters are available for use during disaster occurrences. **1.6:** Improve infrastructural facilities to limit the impact of natural hazard events. **1.7:** Improve infrastructural facilities to limit the impact of natural hazard events.
5. EMERGENCY SERVICES	**1.1:** Establish a full warning system for notification of impending disasters throughout Lowndes/Macon County. **1.7:** Investigate, prepare, and provide for mitigation and emergency services and activities before, during, and after a disaster event. **2.2:** Improve coordination and communication between emergency response organizations and highly vulnerable entities.	**1.1:** Establish a full warning system for notification of impending disasters throughout Lowndes/Macon County. **2.2:** Improve coordination and communication between emergency response organizations and highly vulnerable entities.
6. PUBLIC EDUCATION AND AWARENESS	**3.1:** Establish and implement hazard mitigation public awareness programs. **3.2:** Establish and promote disaster prevention education programs, utilizing all forms of media (e.g., print, TV, internet websites - government and related non-governmental) to help distribute information and materials.	**3.1:** Establish and implement hazard mitigation public awareness program. **3.2:** Establish and promote disaster prevention education programs, utilizing all forms of media (e.g., print, TV, internet websites – government and related non- governmental) to help distribute information and materials.

5.2 Mitigation Strategies

Mitigation strategies are broad, yet more defined actions that help to further clarify mitigation goals. A wide range of activities that are aligned with the six goals were considered to help achieve the established mitigation goals, in particular emphasizing mitigation concerning new and existing buildings and infrastructure. These strategies provide additional background to addressing any specific hazard concerns. Land use planning in much of the county is limited, due to the lack of land use planning and zoning authority in unincorporated areas, with the exception of floodplain management and subdivision regulations. Also, small municipalities have limited planning and building enforcement functions, due to fiscal constraints and lack of expertise, and may choose not to implement land use, zoning, or code enforcement mechanisms. The six goals are used to categorize mitigation strategies. These are discussed in further detail below, along with the identification of the related hazard(s) that are mitigated through these strategies.

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment or development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program (NFIP) (Flooding)
7. Capital improvements planning (All Hazards)

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of flood-prone properties (Flooding)
2. Relocation of flood-prone structures (Flooding)
3. Elevation of flood-prone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as floodplains, wetlands, and steep slopes. Examples of natural resource protection activities include:

1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Land Subsidence)

Goal #4: Structural Mitigation

Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing construction of an appropriate structure. Examples of structural mitigation protection activities include:

1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (High Winds, Extreme Temperatures)

Goal #5: Emergency Services

Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:

1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)
5. Provision of alternative power (e.g. generators) (All Hazards)
6. Debris removal (All Hazards)

Goal #6: Public Education and Awareness

Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:

1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)

5.3 Capability Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive hazard mitigation strategy by examining existing programs, regulations, resources, and practices. This examination allows a jurisdiction to assess whether mitigation actions are feasible, due to financial resources, political climate, administrative capacity, and other jurisdictional capabilities.

The Alabama Emergency Management Agency (AEMA) Division D is a twelve-county region composed of municipalities with a myriad of governmental powers. The specific planning area for this Phase IIIc Lowndes County and Macon County Hazard Mitigation Plan includes two counties with 11 municipalities, two public school systems and one private university. Both county governments are governed by an elected commission. The City of Tuskegee has a Council-City Manager form of government, and the remaining ten municipalities have a Mayor-Couoncil form of government. The two public school systems each have an elected administrative Board of Education, and Tuskegee University is governed by a 25-member Board of Trustees.

The mitigation strategies listed in Section 5.2 are framed by the capacity and capabilities of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources. Communities work together through the county Emergency Management Agency for assistance related to planning for mitigation and to implement specific strategies. Authority over spending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent component of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, two communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority.

Table 5.2 outlines nine mitigation resources that are frequently used to promote or accomplish hazard mitigation goals. The table describes powers or policies that are granted to different types of jurisdictions in general terms, describes the jurisdictions that currently apply those policies in their mitigation efforts, describes the jurisdictions that intend to apply, or have authority to apply, the referenced resource for future implementation, and describes how each jurisdiction will incorporate the mitigation action into its existing powers, authorities, policies, and capabilities. In every case, the primary means of incorporation involves review of proposed actions and implementation through the appropriate governmental authority such as the city council, county commission, school board, or trustees.

Table 5.2: Statutory Capability Assessment

Statutory Mitigation Resource	Authorized for…	Practiced by…	Proposed for…	Incorporated through…
Police power: ability to regulate activities of individuals in the jurisdiction for purposes of health, safety, and public welfare	Municipalities	All municipal jurisdictions	All municipal jurisdictions	Council action to enact and enforce regulations
Control of public expenditures: ability to acquire property and improve property owned by the jurisdiction; capacity to borrow and expend funds	Municipalities, Counties, School Boards, Utilities	All jurisdictions	All jurisdictions	Action to approve expenditures by local county commission, city council, school board, or utility board
Building code enforcement: ability to enforce codes related to building materials and construction standards outside of flood hazard areas	Municipalities, Counties	Benton, Fort Deposit, Gordonville, Notasulga, Shorter, Tuskegee	Lowndes County, Hayneville, Lowndesboro, Mosses, White Hall; Macon County, Franklin	Council and Commission action to enact and enforce regulations

Floodplain management authority: ability to regulate development in areas of special flood hazard in compliance with NFIP standards; includes authority to regulate land use and subdivisions inside of flood hazard areas	Municipalities, Counties	All participating NFIP jurisdictions	All participating NFIP jurisdictions	Council or Commission action to enact and enforce regulations
Purchase properties: subject to flooding and maintain as permanent open space.	Municipalities, Counties, School Boards, University Trustees, Utilities	All jurisdictions	All jurisdictions	Action to approve expenditures by local county commission, city council, school board, or utility board
Capital improvements: ability to plan and implement public infrastructure to mitigate hazards	Municipalities, Counties, School Boards, Utilities	All jurisdictions	All jurisdictions	Action to approve expenditures by local county commission, city council, school board, or utility board
Zoning authority: ability to divide political jurisdiction into districts for purposes of regulating buildings and their use, both inside and outside of flood hazard areas	Municipalities	Benton, Fort Deposit, Gordonville, Lowndesboro, Mosses, Notasulga, Shorter, Tuskegee	Hayneville, White Hall, Franklin (in progress)	Council action to enact and enforce regulations
Subdivision regulations: ability to regulate new developments involving new parcels and infrastructure, both inside and outside of flood hazard areas	Municipalities, Counties	Benton, Fort Deposit, Gordonville, Lowndesboro, Mosses, Notasulga, Shorter, Tuskegee	Lowndes County, Hayneville, White Hall, Macon County, Franklin (in progress)	County Commission or Council action to enact and enforce regulations
Storm water management program: ability to regulate retention, detention, and release of storm water runoff	Municipalities	Benton, Fort Deposit, Gordonville, Lowndesboro, Mosses, Notasulga, Shorter, Tuskegee	Hayneville, White Hall, Franklin (in progress)	Council action to enact and enforce regulations

The mitigation strategies listed in Section 5.5 are framed by the capacity and capability of local jurisdictions to implement those particular actions through existing authorities, policies, programs, and resources. For the jurisdictions in Lowndes and Macon Counties, these are limited. Authority to control development through land use planning and zoning, a critical tool in hazard mitigation, is vested in municipalities that choose to exercise this practice. Capacity for enforcement is limited due to local expertise, financial constraints, and public acceptance. The State of Alabama does not require a jurisdiction to implement land use planning and associated regulations, and many jurisdictions avoid the practice of land use planning and zoning for general purposes and for hazard mitigation. In unincorporated areas within the planning area, this authority is absent except as it applies to flood control and public streets since neither Lowndes County nor Macon County have adopted subdivision regulations.

Flood control, more broadly, is authorized for each local jurisdiction to practice through a local ordinance regulating the placement and construction of new structures. Most municipalities and each county participate in the National Flood Insurance Program (NFIP) and maintain compliance with the applicable regulations. Likewise, the enforcement of building codes is more common in a municipality than in a county. These practices are often limited due to capacity constraints in the form of personnel, financial ability, and public acceptance.

Financial and technical capacity are limiting factors for hazard mitigation implementation in many participating jurisdictions. The need for assistance in local planning and implementation is well established. Communities work together through the local EMA and their regional commissions (SCADC) to meet gaps in technical capacity related to planning for mitigation. Local jurisdictions work with county EMAs to implement specific strategies. Authority over spending is vested in local elected or appointed boards and commissions. Primarily, the county commissions and local municipal councils have been the leaders in deciding which mitigation strategies are worthy of investment. Other eligible jurisdictions have traditionally channeled mitigation projects through these local governmental bodies for sponsoring. The use of federal and state grants is a prevalent feature of the financial strategy for mitigation projects involving new construction and major rehabilitation of public facilities or expenditures.

The capabilities of each participating jurisdiction are defined by the authorities, policies, programs, and resources that each utilizes in pursuit of hazard mitigation. Each jurisdiction falls into one of several categories, which possesses distinct authorities and resources to establish hazard mitigation actions. For example, counties and municipalities differ in terms of statutory authority to pursue hazard mitigation. Meanwhile, two communities with the same authority may approach mitigation entirely differently in terms of the exercise of their authority. School and utility boards are subject to even greater restrictions on their authority. Table 5.3 provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in Lowndes and Macon Counties. A “Yes” (Y) indicates the item is currently in place and being implemented. A “No” (N) indicates the items is not in place or being implemented. An asterisk (*) indicates the item is currently being developed for future implementation.

Most jurisdictions in the planning area participate in the National Flood Insurance Program (NFIP). Only Gordonville, in Lowndes County, and Franklin, in Macon County, are currently not participating in the NFIP. Figure 5.4 summarizes participation in the NFIP and policy statistics for each jurisdiction in Lowndes County and Macon County. More site specific information on at-risk structures and repetitive loss properties is provided in Section 4: Vulnerability.

Table 5.3: Relevant Plans, Ordinances, and Programs by Jurisdiction

Jurisdiction	Zoning Ordinance	Subdivision Regulations	Code Enforcement	Recent Master Plan	Certified Floodplain Manager	NFIP Participation
Lowndes County	N	N	N	N	Y	Y
Benton	Y	Y	Y	N	N	Y
Fort Deposit	Y	Y	Y	N	N	Y
Gordonville	N	N	N	N	N	N
Hayneville	N	N	N	N	N	Y
Lowndesboro	Y	Y	N	Y	N	Y
Mosses	Y	N	N	Y	N	Y
White Hall	N	N	N	N	N	Y
Macon County	N	N	N	N	Y	Y
Franklin	*	*	N	*	N	N
Notasulga	Y	Y	Y	Y	N	Y
Shorter	Y	Y	Y	Y	N	Y
Tuskegee	Y	Y	Y	Y	N	Y

Table 5.4: National Flood Insurance Program (NFIP) Participation Status

CID	Jurisdiction	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Ref-Emer Date	Tribal
Lowndes County Participating Communities						
010272#	Lowndes County	11/29/1974	8/15/1984	9/3/2014	8/15/1984	No
015002#	Benton	4/6/1973	7/1/1974	9/3/2014	4/6/1973	No
010384#	Fort Deposit	9/29/1978	11/4/2009	11/04/2009(M)	6/13/2012	No
010341#	Hayneville		11/4/2009	11/04/2009(M)	4/14/2016	No
010509#	Mosses		11/4/2009	11/04/2009(M)	8/1/2013	
010507#	White Hall		11/4/2009	9/3/2014	9/9/2010	No
Lowndes County Non Participating Communities						
010506#	Gordonville		11/4/2009	11/4/2009	11/4/2010	No
n/a	Lowndesboro					
Macon County Participating Communities						
010148#	Macon County	1/6/1978	4/1/1982	11/18/2009	4/1/1982	No
010149#	Notasulga	10/25/1974	11/24/1978	11/18/09(M)	1/24/1978	No
010512#	Shorter		11/18/2009	11/18/09 (M)	3/2/2011	No
010150#	Tuskegee	8/16/1974	1/6/1982	1/18/2009	1/6/1982	No
Macon County Non Participating Communities						
010385#	Franklin	Macon	11/18/2009	11/18/2009	11/18/2010	No

5.4 Funding Capacity for Hazard Mitigation Plans

This section describes the Lowndes County's and Macon County's designated authority and enabling mechanisms for funding of hazard mitigation projects. In Lowndes County, the County Commission has designated the Director of the Lowndes County Emergency Management Agency (LCEMA) as the officer of the county authorized to accept federal funding for emergency management purposes. The same is true in Macon County with the Director of the Macon County Emergency Management Agency (MCEMA) as the officer of the county authorized to accept federal funding for emergency management purposes. Funds received are deposited by the County Administrator and disbursed by the County Administrator, subject to requisition by the EMA Director. State funding for local emergency management organizations is authorized by Code of Alabama, 1975, Section 31-9-10 and Section 31-9-24. Budgets are submitted as required by the political subdivision. Accounts to manage local funding are established within the local government's existing accounting system.

Under the Emergency Management Performance Grant (EMPG) Program, funds are provided by FEMA as authorized in Public Law 81-920 for the purpose of increasing operational capability at the local level. These funds can be expended for necessary and essential personnel and administrative expenses, including but not limited to salaries, benefits, travel, office supplies, equipment and administrative communications. The local governments must match, on a one-for-one basis, financial assistance provided for EMGP purposes. To be eligible to receive EMGP funds to support a local emergency management program, a local government must meet the state's criteria, as outlined by the Alabama Emergency Management Agency.

Local jurisdictions desiring project application funds and maintenance and services funds must follow the criteria as outlined by the Alabama Emergency Management Agency. County and local agencies will maintain such accounts, records, papers and other pertinent supporting materials, which will permit an accurate determination of the status of federal and other contributions as outlined by the Alabama Emergency Management Agency.

The local/regional multi-hazard mitigation plan documents a county's process for administering HMGP funds. While specifically intended as the primary guidance for county management of HMGP activities only, it represents the current administrative model for the county's acquisition and stewardship of funding mechanisms generally. The plan defines applicant eligibility criteria, the application process, and management procedures for distribution of funding under the program. These plans are used by the County EMA Staff and the county's Hazard Mitigation Committee.

A county's current strategy is to access federal funds for qualifying initiatives and facilitate development of local funding sources through municipal and county entities to fund local match requirements. To date, both Lowndes County and Macon County have continually met the local match requirements associated with funding of federally sponsored programs, due in part to the continual financial support of the hazard mitigation programs and initiatives by local city and county governments. The county mitigation plan is also an umbrella for the local plans required for future mitigation grant programs. Mitigation planning begins at the local level, in communities, towns, and cities where impacts of damaging events are first felt, and the current county plan addresses this issue. Local mitigation planning focuses community attention on development issues prior to a disaster, ensuring participation in a more proactive sense. Active hazard mitigation

in a community also contributes to public safety and welfare, economic development, and environmental protection.

Pre-Disaster Mitigation (PDM) – The Pre-Disaster Mitigation (PDM) Program was authorized by §203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC, as amended by §102 of the Disaster Mitigation Act of 2000. Funding for the program is provided through the National Pre-Disaster Mitigation Fund to assist local governments (to include Indian Tribal governments) in implementing cost-effective hazard mitigation activities that complement a comprehensive mitigation program.

The Public Assistance Program provides supplemental federal disaster grant assistance for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain Private Non-Profit (PNP) organizations. The federal share of assistance is at least 75 percent of the eligible cost for emergency measures and permanent restoration. The state determines how the non-federal share (up to 25 percent) is split with the applicants. Eligible applicants include the local governments, Indian tribes and certain PNP organizations. The state EMA is the grant administrator for all funds provided under the Public Assistance Program. As grantee, the AEMA is responsible for administering the programmatic and grants management requirements of the Public Assistance Program. Key among the programmatic requirements is informing the applicants of the assistance available to them: what is eligible and how to apply for it. Grant management includes applying for federal assistance, monitoring and closing out the grant. The local EMA, AEMA, and FEMA work in partnership to provide prompt and consistent service to all applicants. AEMA recognizes that counties have different capabilities to perform their assigned duties. AEMA intends to work in partnership with those counties requiring technical assistance to serve the needs of their applicants. Once insurance requirements are established, FEMA will reduce otherwise eligible costs by the actual or anticipated insurance recoveries the applicant receives. The county EMA must notify AEMA/FEMA of any entitlement to insurance settlement or recoveries for a facility and its contents. For insurable buildings located in a special flood hazard area and damaged by flood, the reduction is the maximum amount of insurance proceeds the applicant would have received had the building and its contents been fully covered by a standard flood insurance policy under the National Insurance Program. The applicant is required to buy insurance in the amount of the eligible damages for flood and general hazards. For small projects, a grant is based on an estimate of the cost of the work. For large projects, a final grant is based on actual eligible costs. In large projects, the state disburses progress payments, as required. The dollar amount of a small or large project changes each fiscal year and is based on the Consumer Price Index. *The Economic Adjustment (Title IX) Program* helps local areas design and implements strategies for adjustments due to changes in their economic situation that are causing, or are threatening to cause, serious structural damage to the underlying economic base. Such changes may occur suddenly or over time, and result from, for example, industrial or corporate restructuring, new local/state/federal laws or requirements, reductions in EMA expenditures, and the depletion of natural resources.

By law, PDM project grants are dependent upon the local governments' demonstration that a comprehensive management process is in place after designated calendar dates. After November 1, 2003, AEMA/FEMA-approved local mitigation plans have been required as a condition of receiving PDM grants for local mitigation projects. A local government that does not have a plan

in place is not eligible to receive project grants funded under the annual PDM appropriations. After November 1, 2004, the AEMA/FEMA-approved Standard County Mitigation Plan was required as a condition of receiving PDM project grants for local mitigation activities. The Standard County Mitigation Plan is also required for nonemergency assistance provided under the Stafford Act following a presidentially declared disaster, including Public Assistance restoration of damaged facilities (Categories C through G) and HMGP funding. Therefore, the development, maintenance, and updating of local multi-hazard mitigation plans is critical to maintaining eligibility for future FEMA funding.

5.5 Jurisdictional Mitigation Action Plans

A range of mitigation actions and projects are employed to achieve the Lowndes County and Macon County hazard mitigation goals for reducing the effects of hazard events for the counties at large, as well as each of the jurisdictions within the counties. Local planning stakeholders thoroughly reviewed and considered the Risk Assessment and their local capabilities to determine the most appropriate plan of action for their jurisdictions. Each action or project listed has accessory information, such as designation of a lead agency, hazard(s) addressed, and potential funding source(s). The table in Figure 5.5 describes the key elements of the Mitigation Action Plans.

Mitigation strategies that have been completed or that have been deemed by the mitigation planning committee to no longer be relevant are listed at the beginning of each jurisdiction's mitigation action plan, with an explanation as to why the action items are no longer included in the action plan. Additionally, new mitigation strategies, if any, are added to the end of each jurisdiction's action plan.. Most of the new action items are low cost best management practices, education and promotion, and investigation and inventory steps to provide a better foundation for the prevention and mitigation of all natural hazards in Lowndes and Macon Counties. The 2021 hazard mitigation action plan for each participating jurisdiction in Lowndes County and Macon County now includes at least two action items to address every hazard that is relevant to the jurisdiction. Updated Mitigation Action Plans are provided for the following participating jurisdictions:

5.5.1	Lowndes County Jurisdictions
5.5.1.1	Lowndes County
5.5.1.2	Town of Benton
5.5.1.3	Town of Fort Deposit
5.5.1.4	Town of Gordonville
5.5.1.5	Town of Hayneville
5.5.1.6	Town of Lowndesboro
5.5.1.7	Town of Mosses
5.5.1.8	Town of White Hall
5.5.1.9	Lowndes County Schools

5.5.2	Macon County Jurisdictions
5.5.2.1	Macon County
5.5.2.1	Town of Franklin
5.5.2.1	Town of Notasulga
5.5.2.1	Town of Shorter
5.5.2.1	City of Tuskegee
5.5.2.1	Macon County Schools
5.5.2.1	Tuskegee University

Table 5.5: Key Elements of Mitigation Action Plans

Goal	Category of goal that is met: #1: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events (PREVENTION) #2: Protect structures and their occupants and contents from the damaging effects of hazard events (PROPERTY PROTECTION) #3: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands (NATURAL RESOURCE PROTECTION) #4: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable (STRUCTURAL MITIGATION) #5: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events (EMERGENCY SERVICES) #6: Educate and foster public awareness of hazards and techniques
Action Description	Title and description of action to be undertaken
Hazards Addressed	Hazard which the action addresses (1)
Lead Agency	Entity responsible for undertaking the action (2)
Funding Source	Level of funding required for action, where applicable
Priority Status	Categorization based on the following projected criteria: **Completed:** Notable mitigation projects implemented in the past five years **Ongoing:** Action in progress / perennial occurrence **High:** Projected implementation within five years **Medium:** Projected implementation between five and ten years **Low:** Projected implementation beyond ten years
Benefit/Cost Score	The Benefit/Cost score included in the jurisdictional Mitigation Action Plans are considered at the planning level and does not include a full analysis of all costs and benefits associated with action implementation. For example, a mitigation action that scores “High” in benefits and “Low” in costs will be listed as “Moderate” in the plan due to providing a long-term solution, but with a high implementation cost. For some projects, such as routine or ongoing operations conducted with local operating funds and existing staff, this may be the only explicit comparison of costs and benefits. For projects of which grant funding or bond issues may be sought, more in-depth evaluations of costs and benefits may be required. As specific project scopes are detailed, the benefits and costs of an action can be identified with more precision and the benefit-cost ratio (BCR) that results from a full benefit-cost analysis may differ from the planning level Benefit/Cost score presented in the plan. It should be noted that higher scores do not necessarily correspond to high priorities, nor do low scores correspond to low priority projects. An important action with a high priority to a jurisdiction may have a lower Benefit/Cost score because of its complexity, assumed high expense, and other potential costs. Jurisdictions should not be discouraged or deterred from further consideration of actions which have low scores until additional, more specific, evaluations of the costs and benefits has been undertaken. **Low** Benefits: Projects that only benefit a limited population or provides short-term benefits

	Costs: projects likely to cost over $100,000 and requiring additional funding or staffing outside of normal operations and is complicated to implement. **Moderate** Benefits: Projects that would be felt by moderate amount of population in jurisdiction, or solves a problem for several years Costs: projects that may need additional funding or continued study or staffing outside of normal operations, with estimated costs between $10,000 and $100,000. **High** Benefits: Projects that benefit many in the jurisdiction that are long-term solutions Costs: projects that can be implemented by existing personnel with little additional burden on budget and uncomplicated to implement.
Notes	(1) For the sake of brevity, not all hazards in a group of hazards may be listed in the mitigation action plan; however, it can be assumed that if one hazard in a group of hazards is listed as being addressed, then all other hazards in the group are also addressed. Ex. If an action item addresses a hurricane, then the action item also addresses tropical storms and tropical depressions, even though they may not be listed. (2) In the Lead Agency column, many abbreviations, listed below, are used for the sake of saving space: ▪ LCEMA or EMA refers to the Lowndes County Emergency Management Agency ▪ MCEMA or EMA refers to the Macon County Emergency Management Agency ▪ Lowndes Co refers to the Lowndes County Commission ▪ Macon Co refers to the Macon County Commission ▪ Co Eng refers to the County Engineer ▪ Local Govt refers to all units of local government ▪ Town Name (ex. Lowndesboro or Shorter) refers to the local governing body, such as the Town Council

5.5.1 Lowndes County Jurisdictions

5.5.1.1 Lowndes County Hazard Mitigation Action Plan

Lowndes County Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Personnel not currently available.
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	County does not have planning and zoning authority.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	Duplicate strategy.

Lowndes County Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Develop long-range growth and development plan for Lowndes County to address permitting and construction process in unincorporated areas.	All Hazards	Co Eng	Federal, State, County	M	H
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Officials	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Officials	County, Municipal	H	H

1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Officials	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary, in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L
2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal Planning Officials	Federal, State, County, Municipal	H	H
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Maintain all county roads to allow constant access for emergency response, recovery and repair, and continuity of delivery services at eight roads per year. Also, the LEPC will continue to work with the county and other jurisdictions to improve drainage systems in the unincorporated and incorporated parts of the county.	All Hazards	ALDOT, Co Eng	Federal, State, County	H	M
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M

4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, City Bldg Officials	County, Municipal	M	M
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP,-BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA, Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M

5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Officials, Utilities	State, SCADC, County, Municipal	H	L
5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H

6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	Co Eng	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Lowndes County New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Officials	Local	H	H
1	Further investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Officials	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Officials	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Admin Staff	Local	M	H

6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Continue distribution of hazard-related coloring and activity books	All	LCEMA, Lowndes County Schools	Local	H	H
6	Continue LEPC meetings to provide regular updates to county, municipal, utility, and emergency personnel	All	LCEMA	Local	H	H
6	Continue utilization of information booth for display of informational materials at public events	All	LCEMA	Local Agencies, State Agencies	H	H
6	Continue utilization of website and social media with timely information for citizens	All	LCEMA	Local	H	H
6	Work with Farm Agency and County Extension Office to establish drought information center	Drought / EX. Heat	Lowndes County Officials	Local Agencies, Other, TBD	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Officials	Local	H	H
6	Include safety strategies for severe weather in driver education classes and materials.	Winter / Ice Storms	LCEMA, Lowndes County Schools	Local	H	H

6	Investigate natural hazard reporting methodology on national level to ensure that Pike County has an accurate record of past hazard events, including severity	All	LCEMA	Local	M	H
6	Continue communication with the general public annually to provide status update of hazard mitigation plan and ongoing implementation	All	LCEMA	Local	H	H
6	Continue incorporation of hazard mitigation awareness in local schools	All	Lowndes County Board of Education	Lowndes County Schools	H	H
1,6	Purchase and distribute weather alert radios to all major offices on all school campuses.		LCEMA	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Lowndes Co EMA, Fire Protection, Bldg Officials	Loca	M	H
4,5,6	Investigate potential to utilize school busses as mobile hot spots to provide communication and Internet availability during disaster and/or pandemic events.	All	LCEMA, Lowndes County Schools	Local	H	H
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.2 Town of Benton Hazard Mitigation Action Plan

Town of Benton Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	Duplicate strategy.

Town of Benton Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Officials	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Officials	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Officials	County, Municipal	H	H
2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal	Federal, State, County, Municipal	H	H

			Planning Officials			
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M

4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, City Bldg Officials	County, Municipal	M	M
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP, ~~PDM~~, BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Officials, Utilities	State, SCADC, County, Municipal	H	L
5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H

5	Maintain ~~Designate~~ a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	Co Eng	County, State	L	M
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H

6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	~~Investigate need for~~ Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Benton New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Officials	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LC EMA, Lowndes Co Eng	Local	M	H

2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Lowndes County EMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Lowndes County EMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Lowndes County EMA, Alabama Forestry Commission	Local	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Officials	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Officials	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H

6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Officials	Local	H	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Officials	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.3 Town of Fort Deposit Hazard Mitigation Action Plan

Town of Fort Deposit Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of Fort Deposit Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L

2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal Planning Officials	Federal, State, County, Municipal	H	H
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical	LCEMA, City Bldg Off	County, Municipal	M	M

		Storms, Severe Storms				
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP, BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L

5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M

6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Fort Deposit New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H

4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.4 Town of Gordonville Hazard Mitigation Action Plan

Town of Gordonville Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of Gordonville Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Council	Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L
2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All	Federal, State,	H	H

			Municipal Planning Officials	County, Municipal		
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical	LCEMA, City Bldg Off	County, Municipal	M	M

		Storms, Severe Storms				
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP, BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal	State, SCADC, County, Municipal	H	L

			Bldg Off, Utilities			
5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H

6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Gordonville New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama	Local	M	H

			Forestry Commission			
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.5 Town of Hayneville Hazard Mitigation Action Plan

Town of Hayneville Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of Hayneville Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L

2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal Planning Officials	Federal, State, County, Municipal	H	H
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical	LCEMA, City Bldg Off	County, Municipal	M	M

		Storms, Severe Storms				
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP,-BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L

5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H

6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Hayneville New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H

4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water	Local Water Systems, Health Dept.	M	H

			Systems, Health Dept.			
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.6 Town of Lowndesboro Hazard Mitigation Action Plan

Town of Lowndesboro Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of Lowndesboro Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L

2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal Planning Officials	Federal, State, County, Municipal	H	H
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical	LCEMA, City Bldg Off	County, Municipal	M	M

		Storms, Severe Storms				
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP,-BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L

5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H

6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Lowndesboro New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H

4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.7 Town of Mosses Hazard Mitigation Action Plan

Town of Mosses Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of Mosses Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L
2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All	Federal, State,	H	H

			Municipal Planning Officials	County, Municipal		
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, City Bldg Off	County, Municipal	M	M

5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP,-BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L

5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H

6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of Mosses New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H

4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.8 Town of White Hall Hazard Mitigation Action Plan

Town of White Hall Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
1	Ensure that the Lowndes County Emergency Management Agency is involved in the review of all local future growth and development plans.	Personnel not currently available within Lowndes County Emergency Management Agency.
3	Limit non-critical water consumption during severe drought conditions.	Adequate water is available. Remaining strategy was changed to ensure that adequate water is available during emergency events, making this strategy redundant.
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency. DUPLICATE	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.
6	Work with Lowndes County Farm Service Agency and County Extension Service to establish a drought information center.	Strategy is completed.

Town of White Hall Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Incorporate and enforce flood management provisions in all county and municipal land use regulations and zoning ordinances.	Flooding	Bldg Off	County, Municipal	H	H
1	Promote the best use of flood plain areas for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Bldg Off	County, Municipal	H	H
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
2	Utilize AEMA Flood Relocation Program and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	LCEMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H	L
2	Identify and obtain properties in floodplains to be used for greenways, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All	Federal, State,	H	H

			Municipal Planning Officials	County, Municipal		
3	Establish education program to provide information on methods to construct buffers and fire breaks on private property in wild land interface areas.	Wildfires	LCEMA, All VFDs	Federal, State, County	M	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Identify roads that require elevation and paving, and that have a high potential for flooding and/or washing during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Co Eng	State, County, Municipal	M	M
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during flood events.	Flooding	ALDOT, Co Eng	Federal, State, County	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
4	Partner with non-profit and private organizations, as possible, to construct new public shelter facilities in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Non-Profits, Private Entities	State	L	M
4	Secure funds to continue efforts to assist citizens in constructing private shelters on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, Private	H	M
4	Work with developers, homebuilders and contractors to promote construction of a safe room in all new residential development.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, City Bldg Off	County, Municipal	M	M

5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H
5	Inventory the county's emergency response services to identify any existing needs or shortfalls in terms of personnel, equipment, or required resources.	All Hazards	LCEMA, All VFDs	County, Municipal	H	H
5	Investigate the need and feasibility of establishing a local reserve fund for repairing and/or incorporating hazard mitigation measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H	H
5	Continue to research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services for available grant and loan programs (e.g., AFGP, FMA, HMGP,-BRIC, etc.).	All Hazards	LCEMA	County, Municipal	M	H
5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Investigate the need and feasibility of upgrading communications systems and increasing coverage and compatibility across the county and municipalities.	All Hazards	LCEMA	County, Municipal	M	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L

5	Install warning sirens as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	Federal, State, Municipal	H	M
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Communicate with the general public at least annually to provide a status report of the plan and any project or programs that are a result of the plan and its implementation.	All Hazards	LCEMA	County	M	H
6	Develop an on-going cycle to provide regular updates to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	LCEMA	County	M	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop broadcast public service announcements for airing on local television and radio stations.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop print public service announcements for publication in local newspaper and agency newsletters.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H

6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	LCEMA, All VFDs	County, Municipal	M	H
1,5	Develop a drought and heat indicator plan and warning system that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
2,3	Investigate working with Lowndes County Extension System to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	All Hazards	LCEMA, LEPC	USDA, County	M	H
4,5	Maintain adequate emergency water supply to accommodate need during disaster events.	All Hazards	All Water Providers	State, Water Providers	M	M
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Town of White Hall New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Adopt and enforce modern building codes (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Bldg Off	County, Municipal	H	H
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local Planning and Bldg Off	Local	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	LCEMA, Co Eng	Local	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	LEPC, Local Coordinator	Local	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	LCEMA, SCADC	Local	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	LCEMA, LEPC	Local	M	H

3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	LCEMA, Alabama Forestry Commission	Local	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	LCEMA, Co Eng, Local Public Works	Local	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	LCEMA, Municipal Administrative Staff	Local	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	LCEMA, Local Governments	Local	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	LCEMA, Local Agencies	Local	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	LCEMA, SCADC	Local	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	LCEMA	Local	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	LCEMA, Local Bldg Off	Local	H	H

2,3	Develop land management course of training with County Extension System for decrease of property damage		LCEMA/ Extension Service	Extension Service, Local	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	LCEMA, Fire Protection Authorities	AFC, Local	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	LCEMA, Fire Protection Authorities, Bldg Off	Loca	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.1.9 Lowndes County Schools Hazard Mitigation Action Plan

Lowndes County Schools Deleted Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	Duplicate strategy.
6	Work with the county and municipalities to implement public awareness and education efforts about water conservation and water quality.	Strategy is completed.

Lowndes County Schools Continuing Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), to join/rejoin the NFIP.	Flooding	Co Eng, Councils	County, Municipal	H	H
4	Continue to identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities for protecting each facility to the maximum extent possible.	All Hazards	LCEMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H	H
4	Maintain and expand existing shelter and/or safer place facilities to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County,	H	M
4	Designate and upgrade/retrofit, as necessary, existing public and institutional facilities to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA, Shelter Operators	Federal, State, County, Municipal	M	M
5	Maintain a central emergency coordinator in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	LCEMA, Municipal Councils	County, Municipal	H	H
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H	H

5	Investigate the need for and acquire emergency electrical power generation equipment to provide back-up emergency electrical power to critical facilities.	All Hazards	LCEMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H	M
5	Update the Lowndes County Hazard Mitigation Plan every five years as required by regulations.	All Hazards	LCEMA	Federal, State, County	M	H
5	Municipalities should provide local human resources and other resources, such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H	H
5	Provide for incident command training for the local emergency coordinators and other responders.	All Hazards	LCEMA	Federal, State, County	H	H
5	Incorporate (or continue) development of a Geographic Information System (GIS) to maintain current cadastral and spatial data for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, LCEMA, E-911, County Tax Assessor, County and Municipal Bldg Off, Utilities	State, SCADC, County, Municipal	H	L
5	Purchase emergency power generators for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	LCEMA	County	L	M
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All Hazards	LCEMA, LEPC	County, Municipal	M	H
6	Create and distribute magnets that list all emergency contact information of local responding agencies.	All Hazards	LCEMA, LEPC, All Municipalities	County, Municipal, Private	M	H
6	Develop information website with links from Lowndes County Commission and municipal websites.	All Hazards	LCEMA, LEPC	County, Municipal, Private	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All Hazards	Lowndes County BOE	State & County	M	M

6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All Hazards	LCEMA, Lowndes County BOE	Federal, State, County, Municipal	L	H
6	Develop print public service announcements.	Extreme Heat, Drought	Farm Service Agency	State, County	M	H
6	Consider road signage program to ensure that citizens and travelers are aware of location of flood-prone areas.	Flooding	County Engineering	County, State	L	M
6	Publicize information on locations of existing public shelters and when to use them.	All Hazards	LCEMA	County	H	H
5,6	Work with Lowndes County medical providers to develop emergency supplies and education program.	All Hazards	Lowndes County Health Department	County, Medical Providers	M	H

Lowndes County Schools New Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	LCEMA, Co Eng, Local Bldg Off	Local	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	LCEMA, Local Officials	HMGP/Local	H	M
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	LCEMA, Lowndes County Schools	Local	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	LCEMA	Local	M	H
6	Include safety strategies for severe weather in driver education classes and materials.	Winter / Ice Storms	LCEMA, Lowndes County Schools	Local	H	H
6	Continue incorporation of hazard mitigation awareness in local schools	All	Lowndes County Board of Education	Lowndes County Schools	H	H
1,6	Purchase and distribute weather alert radios to all major offices on all school campuses.		LCEMA	Local	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought / EX. Heat	Pike County EMA, Local Water Systems, Health Dept.	Local Water Systems, Health Dept.	M	H
4,5,6	Investigate potential to utilize school busses as mobile hot spots to provide communication and Internet availability during disaster and/or pandemic events.	All	LCEMA, Lowndes County Schools	Local	H	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	LCEMA	LCEMA	H	H

5.5.2 Macon County Jurisdictions

5.5.2.1 Macon County Hazard Mitigation Action Plan

Macon County Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Develop a warning plan to install approximately 10 additional sirens at targeted sites to adequately cover population pockets in rural Macon County.	Macon County has transitioned to a mass notification call system and is no longer relying on warning sirens to alert residents of impending hazardous conditions.
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	Strategy is complete
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

Macon County Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the NFIP	Flooding	HMGP	Flood Plain Mgr	H	H
1	Incorporate and enforce flood management ordinances in all county and municipal zoning ordinances.	Flooding	Co Eng, Local Flood Plain Manager	Local, HMGP	M	M
1	Ensure that future land use and growth plans do not extend into flood plain area; Coordinate with updating of flood plain maps.	Flooding	Co Eng, Local Flood Plain Manager	N/A	M	H
1	Develop long-range growth and development plan for Macon County to address permitting and construction process in unincorporated areas.	Earthquake, Flooding, Landslides, Sinkholes, Wildfire	Co Eng	Local, HMGP, Regional Planning	M	M
1	Ensure Macon County EMA is involved in the review of all local future growth and development plans.	All	MCEMA	Local, HMGP, Regional Planning	H	M

1	Develop and utilize zoning ordinance to manage development in urban fringed areas.	Wildfire	Macon County Commission, Co Eng	Local, HMGP	L	M
1	Promote updated comprehensive plans for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	All	MCEMA, Macon County Planning Commission, Regional Planning Commission	Local, HMGP, Regional Planning	M	M
2	Utilize AEMA Flood Relocation Program to remove commercial and residential structures from flood prone areas, if necessary in the future.	Flooding	MCEMA, Local Flood Plain Manager	Local, HMGP, CDGP	M	L
3	Establish educational programs to provide information on methods to construct buffers and fire breaks on private property in urban interface areas.	Wildfire	MCEMA	Local, HMGP	L	H
3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.	Drought, Extreme Heat	MCEMA	Local, HMGP	L	M
4	Construct warning signage for limited visibility due to forest fires on major roads in targeted areas.	Wildfire	Macon County FD/VFDs	Local, HMGP, Fire	M	M
4	Maintain and expand existing shelter facilities to provide adequate pre-disaster care and space, as needed; expand Red Cross facilities.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, Red Cross, MGMC MCCA	M	L
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Designate and upgrade/retrofit, as necessary, 11 existing public facilities to provide shelter in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, ARC	H	L
4	Investigate construction of new public shelter facilities in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Secure funds to continue efforts to assist citizens in constructing/installing private shelters on their land at a rate of seven shelters per year.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Work with developer, home builders and contractors to promote construction of a safe room in all new residential development.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	N/A	L	H

4	Promote interconnected water resource mapping and planning process; Increase capacity of water systems for fire service and fire hydrants.	Drought, Extreme Heat	Macon County GIS	Local, HMGP, Fire	L	L
4	Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events to provide access and limit erosion and sedimentation. Include repetitive loss roads.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during floods/flash floods.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Maintain all roads to allow constant access for emergency response, recovery and repair and continual delivery of services to residents. This will be completed at eight roads per year.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with ten Volunteer Fire Departments.	All	MCEMA	N/A	M	H
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
5	Update the Macon County Hazard Mitigation Plan every five years as required by regulations.	All	MCEMA	Local, HMGP	H	H
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
5	Provide for incident command training for the local emergency coordinators and other responders. Give priorities to police and fire; meet all FEMA training requirements.	All	MCEMA	Local, HMGP	H	H
5	Pursue federal, state, HMGP, and other grants, for mitigation improvements to the full extent possible	All	MCEMA	Federal, State, HMGP,	H	H
6	Publicize information on locations of existing public safe rooms and when to use them; Coordinate with first responders; Utilize radio stations; Announce safe room openings in advance of events; Permanent evacuation and relocation procedures, to include evacuations from safe rooms.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, Local ARC	M	H

6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfire	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Lower Tallapoosa River Watershed organizations to implement public awareness and education efforts about water conservation and water quality; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.	Drought, Extreme Heat	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Macon County medical providers to develop emergency supplies.	All	EMS, MCEMA	Local, HMGP, Fire, Medical	L	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H
6	Develop print public service announcements	All	MCEMA	Local, HMGP	L	M
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Develop a portable information booth for display at local fairs and public events to distribute materials.	All	MCEMA	Local, HMGP	M	H
6	Work with Macon County Extension Service to develop adult training/certification courses on land management (best management practices) to decrease property damage during natural disaster events.	Flooding	MCEMA, Local Flood Plain Manager, Co Eng	Local, HMGP	M	H
6	Educate general population about natural hazards and hazard mitigation options.	All	MCEMA	Local, HMGP	M	H
6	Develop print public service announcements for publication in local newspaper, agency newsletters, and on social media sites.	All	MCEMA	Local, HMGP	M	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive	All	MCEMA	Local, HMGP	M	H

	educational preparedness program; Coordinate with Health Department, including Pandemic.					
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All	MCEMA	Local, HMGP	M	H
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All	MCEMA	Local, HMGP	M	H

Macon County New Hazard Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local	Local Planning and Bldg Officials	H	H
1	Further investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Local	MCEMA, SCADC	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Local	MCEMA, AFC	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H

4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
5	Utilize phone messaging system to provide warning of all impending hazardous conditions.	All	E911	E911, County, City, Towns	H	M
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	Local	MCEMA, Macon Co Eng, Local Public Works	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov’ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Continue distribution of hazard-related coloring and activity books	All	Local	MCEMA, Macon County Schools	H	H
6	Continue LEPC meetings to provide regular updates to county, municipal, utility, and emergency personnel	All	Local	MCEMA	H	H
6	Continue utilization of information booth for display of informational materials at public events	All	Local Agencies, State Agencies	MCEMA	H	H
6	Continue utilization of website and social media with timely information for citizens	All	Local	MCEMA	H	H
6	Work with Farm Agency and County Extension Office to establish drought information center	Drought / EX. Heat	Local Agencies, Other, TBD	Macon County Officials	H	H

6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	Local	MCEMA, Local Building Officials	H	H
6	Include safety strategies for severe weather in driver education classes and materials.	Winter / Ice Storms	Local	MCEMA, Macon County Schools	H	H
1,6	Purchase and distribute weather alert radios to all major offices on all school campuses.	Drought, Extreme Heat, Hail, Thunderstorms, Lightning, Tornadoes, Winter Storm	Local	MCEMA	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage	Dam Failure, Drought, Extreme Heat, Flooding, Landslides, Sinkholes, Wildfire	Extension Service, Local	MCEMA/ Extension Service	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	AFC, Local	MCEMA, Fire	M	H

				Protection Authorities		
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Loca	MCEMA, Fire Protection Authorities, Building Officials	M	H
4,5,6	Investigate potential to utilize school busses as mobile hot spots to provide communication and Internet availability during disaster and/or pandemic events.	All	Local	MCEMA, Macon County Schools	H	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.2 Town of Franklin Hazard Mitigation Action Plan

Town of Franklin Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Develop a warning plan to install approximately 10 additional sirens at targeted sites to adequately cover population pockets in rural Macon County.	Macon County has transitioned to a mass notification call system and is no longer relying on warning sirens to alert residents of impending hazardous conditions.
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	Strategy is complete
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

Town of Franklin Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Incorporate and enforce flood management ordinances in all county and municipal zoning ordinances.	Flooding	Co Eng, Local Flood Plain Manager	Local, HMGP	M	M
1	Ensure that future land use and growth plans do not extend into flood plain area; Coordinate with updating of flood plain maps.	Flooding	Co Eng, Local Flood Plain Manager	N/A	M	H
1	Ensure Macon County EMA is involved in the review of all local future growth and development plans.	All	MCEMA	Local, HMGP, Regional Planning	H	M
1	Develop and utilize zoning ordinance to manage development in urban fringed areas.	Wildfire	Macon County Commission, Co Eng	Local, HMGP	L	M
1	Promote updated comprehensive plans for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	All	MCEMA, Macon County Planning Commission, Regional Planning Commission	Local, HMGP, Regional Planning	M	M

2	Utilize AEMA Flood Relocation Program to remove commercial and residential structures from flood prone areas, if necessary in the future.	Flooding	MCEMA, Local Flood Plain Manager	Local, HMGP, CDGP	M	L
3	Establish educational programs to provide information on methods to construct buffers and fire breaks on private property in urban interface areas.	Wildfire	MCEMA	Local, HMGP	L	H
3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.	Drought, Extreme Heat	MCEMA	Local, HMGP	L	M
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Maintain and expand existing shelter facilities to provide adequate pre-disaster care and space, as needed; expand Red Cross facilities.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, Red Cross, MGMC MCCA	M	L
4	Designate and upgrade/retrofit, as necessary, 11 existing public facilities to provide shelter in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, ARC	H	L
4	Investigate construction of new public shelter facilities in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Secure funds to continue efforts to assist citizens in constructing/installing private shelters on their land at a rate of seven shelters per year.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Work with developer, home builders and contractors to promote construction of a safe room in all new residential development.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	N/A	L	H
4	Promote interconnected water resource mapping and planning process; Increase capacity of water systems for fire service and fire hydrants.	Drought, Extreme Heat	Macon County GIS	Local, HMGP, Fire	L	L
4	Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events to provide access and limit erosion and sedimentation. Include repetitive loss roads.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during floods/flash floods.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L

4	Maintain all roads to allow constant access for emergency response, recovery and repair and continual delivery of services to residents. This will be completed at eight roads per year.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with ten Volunteer Fire Departments.	All	MCEMA	N/A	M	H
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfire	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Lower Tallapoosa River Watershed organizations to implement public awareness and education efforts about water conservation and water quality; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.	Drought, Extreme Heat	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Macon County medical providers to develop emergency supplies.	All	EMS, MCEMA	Local, HMGP, Fire, Medical	L	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H
6	Educate general population about natural hazards and hazard mitigation options.	All	MCEMA	Local, HMGP	M	H

Town of Franklin New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Make application to participate in the NFIP	Flooding	HMGP	Flood Plain Manager	H	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local	Local Planning and Building Officials	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Local	MCEMA, SCADC	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Local	MCEMA, Alabama Forestry Commission	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
5	Utilize phone messaging system to provide warning of all impending hazardous conditions.	All	E911	E911, County, Muni's,	H	M

5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	Local	MCEMA, Macon Co Eng, Local Public Works	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Administrative Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Governments	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	Local	MCEMA, Local Building Officials	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage	Dam Failure, Drought, Extremet Heat, Flooding, Landslides, Sinkholes, Wildfire	Extension Service, Local	MCEMA/ Extension Service	H	H

3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	AFC, Local	MCEMA, Fire Protection Authorities	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Loca	MCEMA, Fire Protection Authorities, Building Officials	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.3 Town of Notasulga Hazard Mitigation Action Plan

Town of Notasulga Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Develop a warning plan to install approximately 10 additional sirens at targeted sites to adequately cover population pockets in rural Macon County.	Macon County has transitioned to a mass notification call system and is no longer relying on warning sirens to alert residents of impending hazardous conditions.
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	Strategy is complete
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

Town of Notasulga Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the NFIP	Flooding	HMGP	Flood Plain Manager	H	H
1	Incorporate and enforce flood management ordinances in all county and municipal zoning ordinances.	Flooding	Co Eng, Local Flood Plain Manager	Local, HMGP	M	M
1	Ensure that future land use and growth plans do not extend into flood plain area; Coordinate with updating of flood plain maps.	Flooding	Co Eng, Local Flood Plain Manager	N/A	M	H
1	Ensure Macon County EMA is involved in the review of all local future growth and development plans.	All	MCEMA	Local, HMGP, Regional Planning	H	M
1	Develop and utilize zoning ordinance to manage development in urban fringed areas.	Wildfire	Macon County Commission, Co Eng	Local, HMGP	L	M
1	Promote updated comprehensive plans for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	All	MCEMA, Macon County Planning	Local, HMGP, Regional Planning	M	M

			Commission, Regional Planning Commission			
2	Utilize AEMA Flood Relocation Program to remove commercial and residential structures from flood prone areas, if necessary in the future.	Flooding	MCEMA, Local Flood Plain Manager	Local, HMGP, CDGP	M	L
3	Establish educational programs to provide information on methods to construct buffers and fire breaks on private property in urban interface areas.	Wildfire	MCEMA	Local, HMGP	L	H
3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.	Drought, Extreme Heat	MCEMA	Local, HMGP	L	M
4	Maintain and expand existing shelter facilities to provide adequate pre-disaster care and space, as needed; expand Red Cross facilities.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, Red Cross, MGMC MCCA	M	L
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Designate and upgrade/retrofit, as necessary, 11 existing public facilities to provide shelter in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, ARC	H	L
4	Investigate construction of new public shelter facilities in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Secure funds to continue efforts to assist citizens in constructing/installing private shelters on their land at a rate of seven shelters per year.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Work with developer, home builders and contractors to promote construction of a safe room in all new residential development.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	N/A	L	H
4	Promote interconnected water resource mapping and planning process; Increase capacity of water systems for fire service and fire hydrants.	Drought, Extreme Heat	Macon County GIS	Local, HMGP, Fire	L	L
4	Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events to provide access and limit erosion and sedimentation. Include repetitive loss roads.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during floods/flash floods.	Flooding	Macon County Road	Local, HMGP, DOT	M	L

			Department, Co Eng			
4	Maintain all roads to allow constant access for emergency response, recovery and repair and continual delivery of services to residents. This will be completed at eight roads per year.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with ten VFDs.	All	MCEMA	N/A	M	H
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfire	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Lower Tallapoosa River Watershed organizations to implement public awareness/education efforts about water conservation and water quality; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.	Drought, Extreme Heat	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Macon County medical providers to develop emergency supplies.	All	EMS, MCEMA	Local, HMGP, Fire, Medical	L	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Educate general population about natural hazards and hazard mitigation options.	All	MCEMA	Local, HMGP	M	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H

Town of Notasulga New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local	Local Planning and Building Officials	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Local	MCEMA, SCADC	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Local	MCEMA, Alabama Forestry Commission	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
5	Utilize phone messaging system to provide warning of all impending hazardous conditions.	All	E911	E911, County, City/Towns	H	M

5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	Local	MCEMA, Macon Co Eng, Local Public Works	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov’ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	Local	MCEMA, Local Building Officials	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage	Dam Failure, Drought, Extremet Heat, Flooding, Landslides, Sinkholes, Wildfire	Extension Service, Local	MCEMA/ Extension Service	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H

3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	AFC, Local	MCEMA, Fire Protection Authorities	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Loca	MCEMA, Fire Protection Authorities, Building Officials	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.4 Town of Shorter Hazard Mitigation Action Plan

Town of Shorter Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Develop a warning plan to install approximately 10 additional sirens at targeted sites to adequately cover population pockets in rural Macon County.	Macon County has transitioned to a mass notification call system and is no longer relying on warning sirens to alert residents of impending hazardous conditions.
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	Strategy is complete
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

Town of Shorter Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the NFIP	Flooding	HMGP	Flood Plain Manager	H	H
1	Incorporate and enforce flood management ordinances in all county and municipal zoning ordinances.	Flooding	Co Eng, Local Flood Plain Manager	Local, HMGP	M	M
1	Ensure that future land use and growth plans do not extend into flood plain area; Coordinate with updating of flood plain maps.	Flooding	Co Eng, Local Flood Plain Manager	N/A	M	H
1	Ensure Macon County EMA is involved in the review of all local future growth and development plans.	All	MCEMA	Local, HMGP, Regional Planning	H	M
1	Develop and utilize zoning ordinance to manage development in urban fringed areas.	Wildfire	Macon County Commission, Co Eng	Local, HMGP	L	M
1	Promote updated comprehensive plans for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	All	MCEMA, Regional Planning Commission	Local, HMGP, Regional Planning	M	M

2	Utilize AEMA Flood Relocation Program to remove commercial and residential structures from flood prone areas, if necessary in the future.	Flooding	MCEMA, Local Flood Plain Manager	Local, HMGP, CDGP	M	L
3	Establish educational programs to provide information on methods to construct buffers and fire breaks on private property in urban interface areas.	Wildfire	MCEMA	Local, HMGP	L	H
3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.	Drought, Extreme Heat	MCEMA	Local, HMGP	L	M
4	Maintain and expand existing shelter facilities to provide adequate pre-disaster care and space, as needed; expand Red Cross facilities.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, Red Cross, MGMC MCCA	M	L
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Designate and upgrade/retrofit, as necessary, 11 existing public facilities to provide shelter in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, ARC	H	L
4	Investigate construction of new public shelter facilities in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Secure funds to continue efforts to assist citizens in constructing/installing private shelters on their land at a rate of seven shelters per year.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Work with developer, home builders and contractors to promote construction of a safe room in all new residential development.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	N/A	L	H
4	Promote interconnected water resource mapping and planning process; Increase capacity of water systems for fire service and fire hydrants.	Drought, Extreme Heat	Macon County GIS	Local, HMGP, Fire	L	L
4	Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events to provide access and limit erosion and sedimentation. Include repetitive loss roads.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during floods/flash floods.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L

4	Maintain all roads to allow constant access for emergency response, recovery and repair and continual delivery of services to residents. This will be completed at eight roads per year.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with ten Volunteer Fire Departments.	All	MCEMA	N/A	M	H
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfire	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Lower Tallapoosa River Watershed organizations to implement public awareness and education efforts about water conservation and water quality; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.	Drought, Extreme Heat	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Macon County medical providers to develop emergency supplies.	All	EMS, MCEMA	Local, HMGP, Fire, Medical	L	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Educate general population about natural hazards and hazard mitigation options.	All	MCEMA	Local, HMGP	M	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H

Town of Shorter New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local	Local Planning and Building Officials	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Local	MCEMA, SCADC	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Local	MCEMA, Alabama Forestry Commission	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
5	Utilize phone messaging system to provide warning of all impending hazardous conditions.	All	E911	E911, County, City/Towns	H	M

5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	Local	MCEMA, Macon Co Eng, Local Public Works	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov'ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	Local	MCEMA, Local Building Officials	H	H
2,3	Develop land management course of training with County Extension System for decrease of property damage	Dam Failure, Drought, Extremet Heat, Flooding, Landslides, Sinkholes, Wildfire	Extension Service, Local	MCEMA/ Extension Service	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H

3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	AFC, Local	MCEMA, Fire Protection Authorities	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Loca	MCEMA, Fire Protection Authorities, Building Officials	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.5 City of Tuskegee Hazard Mitigation Action Plan

City of Tuskegee Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Develop a warning plan to install approximately 10 additional sirens at targeted sites to adequately cover population pockets in rural Macon County.	Macon County has transitioned to a mass notification call system and is no longer relying on warning sirens to alert residents of impending hazardous conditions.
5	Investigate use of phone messaging system to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	Strategy is complete
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

City of Tuskegee Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the NFIP	Flooding	HMGP	Flood Plain Manager	H	H
1	Incorporate and enforce flood management ordinances in all county and municipal zoning ordinances.	Flooding	Co Eng, Local Flood Plain Manager	Local, HMGP	M	M
1	Ensure that future land use and growth plans do not extend into flood plain area; Coordinate with updating of flood plain maps.	Flooding	Co Eng, Local Flood Plain Manager	N/A	M	H
1	Ensure Macon County EMA is involved in the review of all local future growth and development plans.	All	MCEMA	Local, HMGP, Regional Planning	H	M
1	Develop and utilize zoning ordinance to manage development in urban fringed areas.	Wildfire	Macon County Commission, Co Eng	Local, HMGP	L	M
1	Promote updated comprehensive plans for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	All	MCEMA, Regional Planning Commission	Local, HMGP, Regional Planning	M	M

2	Utilize AEMA Flood Relocation Program to remove commercial and residential structures from flood prone areas, if necessary in the future.	Flooding	MCEMA, Local Flood Plain Manager	Local, HMGP, CDGP	M	L
3	Establish educational programs to provide information on methods to construct buffers and fire breaks on private property in urban interface areas.	Wildfire	MCEMA	Local, HMGP	L	H
3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.	Drought, Extreme Heat	MCEMA	Local, HMGP	L	M
4	Maintain and expand existing shelter facilities to provide adequate pre-disaster care and space, as needed; expand Red Cross facilities.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, Red Cross, MGMC MCCA	M	L
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Designate and upgrade/retrofit, as necessary, 11 existing public facilities to provide shelter in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, ARC	H	L
4	Investigate construction of new public shelter facilities in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Secure funds to continue efforts to assist citizens in constructing/installing private shelters on their land at a rate of seven shelters per year.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	HMGP, Private	H	L
4	Work with developer, home builders and contractors to promote construction of a safe room in all new residential development.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	N/A	L	H
4	Promote interconnected water resource mapping and planning process; Increase capacity of water systems for fire service and fire hydrants.	Drought, Extreme Heat	Macon County GIS	Local, HMGP, Fire	L	L
4	Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events to provide access and limit erosion and sedimentation. Include repetitive loss roads.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L

4	Continue bridge inspection and improvement efforts to prevent washing and/or failure during floods/flash floods.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
4	Maintain all roads to allow constant access for emergency response, recovery and repair and continual delivery of services to residents. This will be completed at eight roads per year.	Flooding	Macon County Road Department, Co Eng	Local, HMGP, DOT	M	L
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with ten Volunteer Fire Departments.	All	MCEMA	N/A	M	H
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
6	Support Alabama Forestry Commission efforts to help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfire	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Lower Tallapoosa River Watershed organizations to implement public awareness and education efforts about water conservation and water quality; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.	Drought, Extreme Heat	MCEMA, Local FDs and VFDs	Local, HMGP, Fire	L	H
6	Work with Macon County medical providers to develop emergency supplies.	All	EMS, MCEMA	Local, HMGP, Fire, Medical	L	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H

6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Educate general population about natural hazards and hazard mitigation options.	All	MCEMA	Local, HMGP	M	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H

City of Tuskegee New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Limit economic development activity in areas with a risk for landslides and land subsidence.	Landslides, Subsidence	Local	Local Planning and Building Officials	H	H
1	Support EMA efforts to investigate areas of topographical depressions to evaluate local risk for land subsidence or sinkholes.	Subsidence	Local	MCEMA, Macon Co Eng	M	H
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
1	Organize outreach to vulnerable populations, including establishing and promoting accessible heating centers in the community.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Conduct an inventory of locations where critical facilities, other buildings, and infrastructure are vulnerable to landslides.	Landslides	Local	MCEMA, SCADC	M	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
3	Assess vegetation in wildfire-prone areas to prevent landslides after fires.	Landslides	Local	MCEMA, Alabama Forestry Commission	M	H
4	Initiate local inventory of existing publicly- and privately-owned dams and record individual dam characteristics.	Dam Failure	Local	MCEMA, Macon Co Eng, Local	M	H

				Building Officials		
4	Support Alabama Office of Water Resources efforts to record existing dams and their characteristics on a statewide basis.	Dam Failure	Local	MCEMA, Macon Co Eng, Local Building Officials	M	H
5	Utilize phone messaging system to provide warning of all impending hazardous conditions.	All	E911	E911, County, City/Towns	H	M
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
5	Plan for and maintain adequate road and debris clearing capabilities.	High Winds, Winter / Ice Storms	Local	MCEMA, Macon Co Eng, Local Public Works	H	H
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov'ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Encourage homeowners to install carbon monoxide monitors and alarms.	Winter / Ice Storms	Local	MCEMA, Local Building Officials	H	H

2,3	Develop land management course of training with County Extension System for decrease of property damage	Dam Failure, Drought, Extremet Heat, Flooding, Landslides, Sinkholes, Wildfire	Extension Service, Local	MCEMA/ Extension Service	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H
3,6	Establish education program on buffer construction and fire breaks in wildland interface areas	Wildfire	AFC, Local	MCEMA, Fire Protection Authorities	M	H
3,6	Support Alabama Forestry Commission efforts to educate private landowners on best practices	Wildfire	Loca	MCEMA, Fire Protection Authorities, Building Officials	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.6 Macon County Schools Hazard Mitigation Action Plan

Macon County Schools Deleted Hazard Mitigation Strategies		
Goal	Action Description	Reason for Deletion
5	Designate a central emergency coordinator in each municipality and community to better facilitate communications with the Macon County EMA.	Duplicate Strategy

Macon County Schools Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Construct storm retrofits to educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	L	L
4	Construct/install community safe rooms to education buildings to include generators	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	H	L
4	Construct/install individual storm shelters to educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	L	L
5	Investigate need for and coordination of emergency water supply during disasters.	All	MCEMA	Local, HMGP	L	H
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
5	Provide generators for educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	H	L
6	Publicize information on locations of existing public safe rooms and when to use them; Coordinate with first responders; Utilize radio stations; Announce safe room openings in advance of events; Permanent evacuation and relocation procedures, to include evacuations from safe rooms.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, Local ARC	M	H
6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.	Drought, Extreme Heat	MCEMA	Local, HMGP, Fire	L	H

6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H
6	Incorporate hazard awareness and mitigation into the curricula of local schools.	All	MCEMA	Local, HMGP	M	H
6	Develop coloring and activity books at four appropriate age levels for widespread annual distribution.	All	MCEMA	Local, HMGP	M	H

Macon County Schools New Hazard Mitigation Strategies

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
2	Incorporate landslide and land subsidence potential into natural hazard education and awareness activities.	Landslides, Subsidence	Local	MCEMA, LEPC	M	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov'ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Continue distribution of hazard-related coloring and activity books	All	Local	MCEMA, Macon County Schools	H	H

6	Continue incorporation of hazard mitigation awareness in local schools	All	Macon County Schools	Macon County Board of Education	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
6	Include safety strategies for severe weather in driver education classes and materials.	Winter / Ice Storms	Local	MCEMA, Macon County Schools	H	H
1,6	Purchase and distribute weather alert radios to all major offices on all school campuses.	Drought, ExtremeHeat, Hail, Thunderstorms, Lightning, Tornadoes, Winter Storm	Local	MCEMA	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

5.5.2.7 Tuskegee University Hazard Mitigation Action Plan

Tuskegee University Continuing Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Purchase emergency generators for post-disaster mitigation, as needed.	All	MCEMA	HMGP, ADECA	H	M
4	Construct storm retrofits to educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA,	L	L
4	Construct/install individual storm shelters to educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	L	L
5	Municipalities should provide local human resources or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	All	MCEMA	Local, HMGP	H	H
5	Provide generators for educational buildings	Thunderstorms, Hurricanes, Tornadoes	Macon County BOE	HMGP, ADECA, Local	H	L
6	Publicize information on locations of existing public safe rooms and when to use them; Coordinate with first responders; Utilize radio stations; Announce safe room openings in advance of events; Permanent evacuation and relocation procedures, to include evacuations from safe rooms.	Thunderstorms, Hurricanes, Tornadoes	MCEMA	Local, HMGP, Local ARC	M	H
6	Develop an ongoing cycle to promote regular EMA updates to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	All	MCEMA	Local, HMGP	H	H
6	Cooperate and coordinate with various agencies and entities to assist with distribution of information and materials, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	All	MCEMA	Local, HMGP	H	H
6	Develop information website and social media sites with links from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	All	MCEMA	Local, HMGP	M	H

Tuskegee University New Hazard Mitigation Strategies						
Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Identify at-risk populations that may be exceptionally vulnerable in the event of long-term power outages.	Winter / Ice Storms	Local	LEPC, Local Coordinator	H	H
5	Maintain existing emergency generators to provide back-up power to critical facilities	All	HMGP/Local	MCEMA, Local Officials	H	M
6	Actively participate in natural hazard reporting and record keeping on local level to ensure that there is an accurate record of past hazard events, including severity	All	Local	MCEMA, Municipal Admin Staff	M	H
6	Continue communication with general public to promote participation in county's mass communication/ notification system.	All	Local	MCEMA, Local Gov'ts	H	H
6	Continue coordination with various local agencies (e.g. DHR, Board of Education, local churches) to assist with distribution of information	All	Local	MCEMA, Local Agencies	H	H
6	Develop an outreach program about earthquake risk and mitigation activities in homes, schools, and businesses.	Earthquake	Local	MCEMA, Macon County Schools	M	H
6	Educate homeowners on safety techniques to follow during and after an earthquake.	Earthquake	Local	MCEMA	M	H
6	Include earthquake potential in GIS hazard mapping for residents and design professionals.	Earthquake	Local	MCEMA, SCADC	M	H
6	Educate citizens that all fuel-burning equipment should be vented to the outside.	Winter / Ice Storms	Local	MCEMA	H	H
1,6	Purchase and distribute weather alert radios to all major offices on all school campuses.	All	Local	MCEMA	H	H
3,6	Multi-jurisdictional implementation of public awareness and education efforts about water conservation and quality	Drought, Extreme Heat	Local Water Systems, Health Dept.	MCEMA, Local Water Systems, Health Dept.	M	H
5,6	Encourage participation in a Mass Notification System, when available, for emergency hazard events.	All	MCEMA	MCEMA	H	H

SECTION 6: PLAN MAINTENANCE

Section Contents

6.1 Hazard Mitigation Monitoring, Evaluation, and Update Process
6.2 Hazard Mitigation Plan Incorporation
6.3 Public Awareness/Participation

6.1 Hazard Mitigation Monitoring, Evaluation, and Update Process

The AEMA Division D Phase IIIc Hazard Mitigation Plan is developed on a five-year time frame. It is intended to be reviewed on an annual basis for any necessary amendments, and to undergo a major review and update every five years. In this way, Lowndes and Macon Counties will have an ongoing mitigation plan and process. The County EMA Directors will continue to serve as the Local Emergency Planning Committee's (LEPC) facilitators in each county and will be responsible for holding regularly scheduled meetings, assigning specific tasks necessary to monitor and update the plan to LEPC members, and serving as the LEPC's liaison with those assigned implementation responsibilities. The facilitator will also serve as the LEPC's liaison with participating municipalities and the corresponding County Commission.

New LEPC committee members may be nominated by the EMA Director and then approved by the entire committee. After the AEMA Division D Phase IIIc Hazard Mitigation Plan is finalized and adopted, the LEPC shall meet at least once per year to review and update the plan, as necessary. Periodic review and revision of the Hazard Mitigation Plan is important to ensure the plan's currency and compliance with applicable regulations and to assess the progress of local mitigation actions. Review and revision of the Hazard Mitigation Plan may occur through the following procedures.

Annual Review Process.

On at least an annual basis, the County EMA Director shall facilitate a meeting of the Local Emergency Planning Committee, local jurisdictions, and other stakeholders. At a minimum, the scope of the annual county-level plan review meeting will include the following:

- Each member or a designated alternate must attend at least one meeting a year.
- A list of completed and ongoing mitigation projects will be reviewed at each meeting.
- Previously implemented mitigation actions will be evaluated for effectiveness.
- There will be an update on the status of current mitigation projects.
- Changing land use patterns and new developments will be addressed.
- Any additions or changes in risk assessment and/or risk vulnerability will be identified.
- Any other concerns will be addressed, possible future mitigation plans discussed, and any new projects will be adopted.

The general public will be invited to attend this meeting through public outreach, as further described in Section 6.3, and encouraged to provide their input into the annual review.

The facilitator will schedule the meetings at a time and location most convenient to LEPC members. All meetings will be advertised in the local newspaper and open to the public for their comments and suggestions. If modifications to the plan are required, the LEPC will oversee, recommend, and/or approve all revisions and amendments to the AEMA Division D Phase IIIc Hazard Mitigation Plan. The LEPC will then submit all revisions, except for mitigation projects or activities not of a countywide nature, for adoption (via signed resolutions) by all the jurisdictions. Any new projects or activities (developed and/or proposed prior to the first five-year and between subsequent five-year major updates), not of a countywide nature, will be added to the AEMA Division D Phase IIIc Hazard Mitigation Plan upon recommendation of the LEPC and

adoption (via signed resolution) by the appropriate governing body where the proposed project is to be located. In the event that emergency modifications to the plan are required and if any of the jurisdictions located therein are involved in an active disaster declaration at the time the modifications are needed, and if the LEPC is unable to meet in a timely fashion and prior to any AEMA and/or FEMA deadlines in order to conduct the revision and amendment process outlined in the immediately preceding paragraph above, then the County EMA Directors can recommend revisions and amendments to the AEMA Division D Phase IIIc Hazard Mitigation Plan. The County EMA Directors can then submit any emergency revisions, except for mitigation projects or activities not of a countywide nature, for written approval by the appropriate County Commission. The written approval of just the Chairperson of the County Commission is acceptable if (1) the membership of the County Commission is unable to meet in a timely fashion and prior to any AEMA and/or FEMA deadlines, and (2) if the proposed revisions do not require or involve local financial commitments or expenditures.

Any emergency projects or activities, not of a countywide nature, will be added to the AEMA Division D Phase IIIc Hazard Mitigation Plan upon recommendation of a County EMA Director and written approval by the appropriate municipal council where the proposed project or activity is to be located. The written approval of just the mayor of the municipality is acceptable if (1) the membership of the respective municipal council is unable to meet in a timely fashion and prior to any AEMA and/or FEMA deadlines, and (2) assuming that the proposed revisions do not require or involve local financial commitments or expenditures. If any emergency modifications to the plan are required and are adopted or approved without the expressed approval (either via signed resolutions or letters of approval) of the memberships of the appropriate governing bodies, the said governing bodies may reserve the right to express their approval and adoption via a later vote. A copy of and/or access to any and all adopted plan revisions will be provided to all LEPC members, the County Commission, and each of the municipalities.

Emergency Review Process.

In certain instances, such as a disaster occurrence impacting a participating jurisdiction, the full Annual Review Process may not be timely enough to address unforeseen issues created by a particular event. In these situations, a county EMA official may facilitate a county-level plan review meeting, similar to the process described above in the Annual Review Process, with the requisite public outreach. Once this meeting is completed, a local amendment may be adopted by a participating jurisdiction that only pertains to the revision of their specific Jurisdictional Mitigation Action Plan in a public session. After any local amendment, the local county EMA official shall submit documentation of the local amendment to the Chair of the plan monitoring and review process.

Five-Year Plan Update.

Before the five-year expiration of the Hazard Mitigation Plan, a thorough review, beginning approximately 18 months prior to plan expiration, shall be held to determine any significant changes in the planning area that may affect the county’s vulnerability to hazard impacts, and an evaluation of the mitigation strategy and jurisdictional mitigation action plans developed as part of this process. This plan update shall incorporate any changes to federal or state regulations that may affect the Hazard Mitigation Plan contents. The plan update process will follow a locally-driven, public process, similar to the annual plan review process outlined previously.

In addition, multiple state, regional, and local partners will be consulted to provide data or consultation in plan formation. Consulting entities will include: the U.S. Army Corps of Engineers, Alabama Forestry Commission, Geological Survey of Alabama (GSA), Alabama Department of Public Health (ADPH), Alabama Department of Transportation (ALDOT), Alabama Department of Environmental Management (ADEM), Alabama Historical Commission (AHC), neighboring county EMA offices, regional academic providers, and private sector entities, such as local chambers of commerce and the American Red Cross. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval.

Implementation of the plan will be the responsibility of a number of local governments and agencies. For each mitigation action item, a responsible agency has been identified. The County Emergency Management Agencies will coordinate implementation efforts with each of the local governments and with other agencies as necessary. A critical part of maintaining an effective and relevant natural hazard mitigation plan is ongoing public review and comment. The LEPC is dedicated to direct involvement of the citizens of the planning area in providing input on the plan throughout the five-year implementation cycle. A hard copy of the plan will be available for viewing at all appropriate agencies throughout the planning area, at minimum to include: the Lowndes County Emergency Management Agency office, the Macon County Emergency Management Agency office, the Lowndes and Macon County Administrator's office, the offices of the clerks of each municipality, and county or municipal government websites, if available. After adoption, a public information notice in the local newspaper will inform the public that the plan may be viewed at these locations.

If deemed appropriate by the County Emergency Management Director and once adopted, this plan shall be considered as an Annex to the County Emergency Operations Plan, which is administered through the County Emergency Management Agency office.

6.2 Hazard Mitigation Plan Incorporation

Once the AEMA Division D Phase IIIc Hazard Mitigation Plan is "approvable upon adoption" by FEMA, each jurisdiction shall proceed with adoption procedures. Each proposed action listed in the jurisdictional mitigation action plans are assigned to one or multiple lead agencies or departments to assign responsibility and accountability of action implementation to specific sources. In addition to the assigned local agency or department, each mitigation action plan also has a priority or status assigned that roughly coincides with an implementation timeline. The local jurisdictions included in the plan will seek to provide operational funding to actions that are ongoing and seek outside funding for capital projects that are outside the realm of normal funding during both pre-disaster and post-disaster periods.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning council will provide technical assistance for

incorporation, upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan and will not introduce additional hazard vulnerabilities to the local area and region at-large. The Bullock County EMA Director will incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including the Bullock County Emergency Operations Plan and county THIRA. During county-level plan reviews, participating communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, where feasible. This includes integrating the findings of the Hazard Mitigation Plan into documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. Local EMA officials or planning staffs of the appropriate regional planning council will provide technical assistance for incorporation, upon request. The participating jurisdictions will also work to ensure the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan and will not introduce additional hazard vulnerabilities to the local area and region at-large. The local comprehensive plans, however, are long-range in nature, often with 20-year goals and are only updated every 10 to 15 years. During the last five years of the hazard mitigation review cycle, none of the municipalities in Lowndes or Macon County have developed new, or updated existing, comprehensive plans or land use plans. Known communities that are in the process of beginning the comprehensive planning update process include Franklin, in Macon County. As communities update their long-range planning documents, the goals and actions of the appropriate county hazard mitigation plan will be incorporated in the planning documents, as appropriate and feasible. Beyond the local comprehensive planning process, projects identified in the hazard mitigation plan are often incorporated into a local government's community development program. Examples include Community Development Block Grant (CDBG) applications for road and drainage improvements. Local EMA directors will also incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including each county's Emergency Operations Plan and county THIRAs. During county-level plan reviews, participating communities will be asked to record the planning documents in which elements of the Hazard Mitigation Plan were incorporated.

The Hazard Mitigation Plan will also be provided to the Lee-Russell Council of Governments and South Central Alabama Development Commission (SCADC) for consistency with other regional planning and economic development activities, as well as local economic development councils.

6.3 Public Awareness/Participation

Public participation in the hazard mitigation planning process, including monitoring and review of the existing plan, and development and adoption of future plans, is a very important component. Though concerted efforts are made to engage the general public in the hazard mitigation planning process through county-level meetings that were advertised through several methods, there were very few unaffiliated members of the public that participated. Efforts will increase to involve local and state government agencies, businesses, academia, and the general public in the ongoing mitigation planning process to the maximum extent possible.

As described in the Monitoring, Evaluation, and Update process, any significant changes, amendments, or updates to the Hazard Mitigation Plan shall be discussed in open meetings prior to any adoption procedures. Any plan updates or major revisions will be adopted during a public session. The public will be informed of public hearings and other Hazard Mitigation related meetings through a variety of media sources, including but not limited to: local newspaper advertisements and notices, radio advertising, postings at high traffic community areas (e.g. libraries and government buildings), booths at local Severe Weather Expo events, social media such as local Facebook pages, telephone messages, and various websites such as local EMA offices, SCADC, and Open Meetings websites. The County EMA offices and SCADC will keep public copies and provide copies of the Hazard Mitigation Plan to the seat of government in each municipality, and other appropriate public locations. Press releases will be published via various media to inform the general public and stakeholders that the Hazard Mitigation Plan is available for review, where to find the Hazard Mitigation Plan, and how they can play a role in its creation and future revisions.

AEMA DIVISION D PHASE IIIc
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

SECTION 7: APPENDICES

Section Contents

7.1 Definitions
7.2 Public Participation Documentation
7.3 Hazard Mitigation Plan Local Approval

7.1 Definitions

Applicant: Entity, such as a State, Territory, or Indian Tribal government, applying to FEMA for a grant that will be accountable for the use of the funds. Once grant funds are awarded, the Applicant becomes the "Grantee."

Base Flood: A flood having a 1 percent chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE): The elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1–A30, AR, AR/A, AR/AE, AR/A1–A30, AR/AH, AR/AO, V1–V30, and VE that indicates the water surface elevation resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year.

Benefit-Cost Analysis (BCA): A quantitative procedure that assesses the cost-effectiveness of a hazard mitigation measure by taking a long-term view of avoided future damages as compared to the cost of a project.

Benefit-Cost Ratio (BCR): A numerical expression of the cost-effectiveness of a project calculated as the net present value of total project benefits divided by the net present value of total project costs.

Biomass: Biological material derived from living, or recently living organisms.

Building: A structure with two or more outside rigid walls and a fully secured roof that is affixed to a permanent site; a manufactured home or a mobile home without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community's floodplain management and building ordinances or laws. "Building" does not mean a gas or liquid storage tank or a recreational vehicle, park trailer, or other similar vehicle.

Clean-site certification: A letter from the appropriate local, State, Indian Tribal, or Federal entity stating that no further remedial action is required to protect human health or the environment.

Coastal Barrier Resource System (CBRS): A geographic unit designated to serve as a protective barrier against forces of wind and tidal action caused by coastal storms and serving as habitat for aquatic species. Congress restricted Federal spending and assistance for development-related activities within CBRS units to protect them from further development. Federal flood insurance is unavailable in these areas. CBRS units are identified on FEMA FIRMs.

Coastal High Hazard Area: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.

Combustible material: Any material that, in the form in which it is used and under the conditions anticipated, will ignite and burn or will add appreciable heat to an ambient fire.

Community Rating System (CRS): A program developed by FEMA to provide incentives for those communities in the NFIP that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Cost-effectiveness: Determined by a systematic quantitative method for comparing the costs of alternative means of achieving the same stream of benefits for a given objective. The benefits in the context of hazard mitigation are avoided future damages and losses. Cost-effectiveness is determined by performing a BCA.

Cost share: The portion of the costs of a federally assisted project or program not borne by the Federal Government.

Defensible space: An area that is either natural or manmade, where material capable of allowing a fire to spread unchecked has been treated, cleared, or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire-suppression operations to occur.

Dwelling: A building designed for use as a residence for no more than four families or a single-family unit in a building under a condominium form of ownership.

Elevated Building: A building that has no basement and a lowest floor that is elevated to or above the BFE by foundation walls, shear walls, posts, piers, pilings, or columns. Solid perimeter foundations walls are not an acceptable means of elevating buildings in Zones V and VE.

Environmental Benefits: Environmental benefits are direct or indirect contributions that ecosystems make to the environment and human populations. For FEMA BCA, certain types of environmental benefits may be realized when homes are removed and land is returned to open space uses. Benefits may include flood hazard reduction; an increase in recreation and tourism; enhanced aesthetic value; and improved erosion control, air quality, and water filtration.

Equipment: Tangible, nonexpendable, personal property having a useful life of more than 1 year and an acquisition cost of $5,000 or more per unit. A Grantee may use its own definition of equipment provided such definition would at least include all equipment defined above.

Federal Agency: Any department, independent establishment, Government corporation, or other agency of the executive branch of the Federal Government, including the U.S. Postal Service, but not the American National Red Cross.

Federal Cognizant Agency: The Federal agency responsible for reviewing, negotiating, and approving cost allocation plans or indirect cost proposals developed on behalf of all Federal agencies. The OMB publishes a list of Federal Cognizant Agencies.

Firebreak: a strip of cleared land that provides a gap in vegetation or other combustible material that is expected to slow or stop the progress of a wildfire.

Fire-proofing: Removal or treatment of fuels to reduce the danger of fires igniting or spreading. (e.g., fire-proofing roadsides, campsites, structural timber).

Fire-resistant material: Material that has a property that prevents or retards the passage of excessive heat, hot gases, or flames under conditions of use.

Fire retardant: Chemical applied to lumber or other products to slow combustion and flame spread.

Fire Severity Zone: Three concentric zones around a building used to determine the most effective design for defensible space.

Flammability: The relative ease with which fuels ignite and burn regardless of the quantity of fuel.

Flood Insurance Rate Map (FIRM): Official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones applicable to the community.

Floodplain: Any land area that FEMA has determined has at least a 1 percent chance in any given year of being inundated by floodwaters from any source.

Floodplain Management: The operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to, emergency preparedness plans, flood control works, and floodplain management regulations.

Floodway: The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Communities regulate development in these floodways to ensure that there are no increases in upstream flood elevations.

Freeboard: Freeboard is a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway

conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.

Fuel break: A natural or manmade change in fuel characteristics that affects fire behavior so that fires burning into them can be more readily controlled.

Fuel condition: Relative flammability of fuel as determined by fuel type and environmental conditions.

Governor's Authorized Representative (GAR): The individual, designated by the Governor, who serves as the grant administrator for all funds provided under HMGP; the person empowered by the Governor to execute, on behalf of the State, all necessary documents for disaster assistance.

Grant: An award of financial assistance for a specified purpose by the Federal government to an eligible Grantee.

Grantee: The entity, such as a State, Territory, or Indian Tribal government to which a grant is awarded and that is accountable for the use of the funds provided. The Grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document.

Green Open Space: Green open space is land that does not directly touch a natural body of water, such as a river, lake, stream, creek, or coastal body of water.

Hazardous fuels reduction: An area strategically located in relation to predicted fire hazard and occurrence where the vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled (e.g., vegetation management activities).

Hazard mitigation planning: A process used by governments to identify risks, assess vulnerabilities, and develop long-term strategies for protecting people and property from the effects of future natural hazard events.

HMGP Lock-In Ceiling: The level of HMGP funding available to a Grantee for a particular Presidential major disaster declaration.

Identified for Further Review: Subapplications identified for further review contain sufficient information for a preliminary determination of cost-effectiveness and feasibility. In certain instances, FEMA may work with Applicants to confirm cost-effectiveness and feasibility. Identification for further review is not a notification of award.

Ignition-resistant construction: Construction standards based on use of fire-resistant materials, non-combustible materials, and 1-hour fire-rated assemblies.

Increased Cost of Compliance: Coverage for expenses a property owner must incur, above and beyond the cost to repair the physical damage the structure actually sustained from a flooding event, to comply with mitigation requirements of State or local floodplain management ordinances or laws; acceptable mitigation measures are structure elevation, dry floodproofing, structure relocation, structure demolition, or any combination thereof.

Indian Tribal Government: A federally recognized governing body of an Indian or Alaska Native Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe under the Federally Recognized Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Indirect cost: Cost that is incurred by a Grantee for a common or joint purpose benefitting more than one cost objective that is not readily assignable to the cost objectives specifically benefited.

Indirect cost rate: Percentage established by a Federal department or agency for a Grantee to use in computing the dollar amount it charges to the grant to reimburse itself for indirect costs incurred in doing the work of the grant activity.

Management costs: Any indirect costs, administrative expenses, and any other expenses not directly chargeable to a specific project that are reasonably incurred by a Grantee or subgrantee in administering and managing a grant or subgrant award. For HMGP, management cost funding is provided outside of Federal assistance limits defined at 44 CFR Section 206.432(b).

Manufactured (Mobile) home: A structure, transportable in one or more sections that is built on a permanent chassis and designed for use with or without a permanent foundation when attached to the required utilities.

Mitigation: Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event.

Mitigation activity: A mitigation measure, project, plan, or action proposed to reduce risk of future damage, hardship, loss, or suffering from disasters. The term "measure" is used interchangeably with the term "project" in this program.

National Flood Insurance Program (NFIP): Provides the availability of flood insurance in exchange for the adoption of a minimum local floodplain management ordinance that regulates new and Substantially Improved development in identified flood hazard areas.

Non-combustible material: Material of which no part will ignite and burn when subjected to fire, such as any material conforming to ASTM E 136.

Nonflammable: Material unlikely to burn when exposed to flame under most conditions.

Non-Federal funds: Financial resources provided by sources other than the Federal Government. The term does not included funds provided to a State or local government through a Federal grant unless the authorizing statute for that grant explicitly allows the funds to be used as cost share for other Federal grants.

Non-Residential structure: Includes, but is not limited to small business concerns, places of worship, schools, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, mercantile structures, agricultural and industrial structures, warehouses, hotels and motels with normal room rentals for less than 6 months' duration, and nursing homes.

Office of Environmental Planning and Historic Preservation: Integrates the protection and enhancement of environmental, historic, and cultural resources into the FEMA mission and FEMA programs and activities; ensures that FEMA activities and programs related to disaster response and recovery, hazard mitigation, and emergency preparedness comply with Federal environmental and historic preservation (EHP) laws and Executive orders; and provides EHP technical assistance to FEMA staff, local, State, and Federal partners, and Grantees and subgrantees.

Otherwise Protected Areas (OPAs): Designation created by the Coastal Barrier Improvement Act. Flood insurance is restricted in OPAs even though they are not in the CBRS and may receive other forms of Federal assistance. OPAs are identified on FEMA FIRMs.

Period of Performance (POP): The period of time during which the Grantee is expected to complete the grant activities and to incur and expend approved funds.

Pile burning: Piling removed vegetation into manageable piles and burning the individual piles during safe and approved burning conditions.

Post-FIRM Building: A building for which construction or Substantial Improvement occurred after December 31, 1974, or on or after the effective date of an initial FIRM, whichever is later.

Practicable: An action that is capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of all pertinent factors, such as environment, cost, and technology.

Pre-FIRM Building: A building for which construction or Substantial Improvement occurred on or before December 31, 1974, or before the effective date of an initial FIRM.

Prescribed burning: The deliberate and managed use of fire ignited by management actions to meet specific fuels management objectives.

Presidential Major Disaster: Any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under the Stafford Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

Private non-profit (PNP): Any non-governmental agency or entity that currently has: (i) an effective ruling letter from the Internal Revenue Service granting tax exemption under section 501(c), (d), or (e) of the Internal Revenue Code of 1954; or (ii) satisfactory evidence from the State that the organization or entity is a non-profit one organized or doing business under State law.

Project: Any mitigation measure or action proposed to reduce risk of future damage, hardship, loss, or suffering from disasters.

Public Assistance: Supplementary Federal assistance provided under the Stafford Act to State and local governments or certain PNP organizations other than assistance for the direct benefit of individuals and families. For further information, see 44 CFR Part 206, Subparts G and H. Fire Management Assistance Grants under section 420 of the Stafford Act are also considered Public Assistance.

Replacement cost value: The cost to replace property with materials of like kind and quality, without any deduction for depreciation.

Riparian Area: The land that directly abuts a natural body of water, such as a river, lake, stream, creek, or coastal body of water.

Slash: The accumulation of vegetative materials such as tops, limbs, branches, brush, and miscellaneous residue results from forest management activities such as thinning, pruning, timber harvesting, and wildfire hazard mitigation.

Special Flood Hazard Area (SFHA): The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. An area having special flood, mudflow, or flood-related erosion hazards, and shown on a Flood Hazard Boundary Map or a FIRM as Zone A, AO, A1–A30, AE, A99, AH, AR, AR/A, AR/AE, AR/AH, AR/AO, AR/A1– A30, V1–V30, VE, or V.

State Hazard Mitigation Officer (SHMO): The representative of a State government who is the primary point of contact with FEMA, other Federal agencies, and local units of government in the planning and implementation of pre- and post-disaster mitigation activities.

Structural fire protection: The protection of homes or other buildings from wildland fire.

Subapplicant: The entity, such as a community/local government, Tribal government, or PNP, that submits a subapplication for FEMA assistance to the Applicant. Once funding is awarded, the subapplicant becomes the “subgrantee.”

Subgrant: An award of financial assistance under a grant by a Grantee to an eligible subgrantee.

Subgrantee: The entity, such as a community/local government, Tribal government, or PNP to which a subgrant is awarded and who is accountable to the Grantee for the use of the funds provided.

Substantial Damage: Damage of any origin sustained by a building whereby the cost of restoring the building to its before-damaged condition would equal or exceed 50 percent of the market value of the building before the damage occurred.

Wildfire: An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

Wildland-Urban Interface Area: That geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

All terms not listed above are used consistent with the term definitions used in 44 CFR unless otherwise specified.

7.2 Public Participation Documentation

An updated hazard mitigation plan for Lowndes County and Macon County, Alabama was developed as Phase IIIc of the Alabama Emergency Management Agency (AEMA) Division D Regional Hazard Mitigation Plan. Public participation was obtained through two online surveys, virtual public meetings, a draft review, and a final adoption process. The Local Emergency Planning Committee (LEPC) in each county was the primary organizational unit for development of the plan. The LEPC includes representation from each local jurisdiction, major industries, utility boards, emergency responders, housing and healthcare, and other interested stakeholders. LEPC membership lists are included in Section 7.2.1.

The online surveys included a public community survey and a stakeholder survey. The surveys were distributed by a link sent through email. LEPC members were asked to respond to the stakeholder survey and also to broadcast the email link for the community survey to garner public attention and response. Detailed survey responses are included in Section 7.2.2 and results are discussed in Section 1.8. Survey responses were also discussed during the LEPC meetings.

Three meetings were conducted with the LEPC for each county. Due to the restrictions of public gatherings because of the COVID-19 pandemic, all meetings were held virtually using Zoom software. Public notification for the meetings was provided by posting flyers in the counties and by email to the LEPC members. The first and third meetings were joint meetings of the Lowndes County LEPC and the Macon County LEPC to promote the sharing of regional issues and solutions. The second meetings were single county meetings with each county to discuss local hazard mitigation strategies. Therefore, a total of four meetings were held. Meeting notification flyers and emails, meeting summary which includes attendance list, and meeting presentations are included in Section 7.2.3.

And finally, a memorandum was distributed to LEPC members, local officials, EMA directors of surrounding counties, and applicable state and federal agencies asking for review of the 2021 AEMA Division D IIIc Multi-Jurisdictional Hazard Mitigation Plan. This communication is included in Section 7.2.4.

7.2.1 LEPC Membership

2020-2021 LEPC Membership:

LOWNDES COUNTY HAZARD MITIGATION LOCAL EMERGENCY PLANNING COMMITTEE

Name	Title/Position	Agency/Organization
David Butts / Rodney Rudolph	Lowndes County	EMA Director/County Engineer, Lowndes County
Charlie King	Lowndes County	Chair, Lowndes County
Jacqueline Thomas	Lowndes County	Administrator, Lowndes County
Santina Rogers	Lowndes County	Director, Lowndes County E911
Chris West	Lowndes County	Sheriff, Lowndes County
Donny Cooper	Town of Benton	Mayor, Town of Benton
Edie Hornsby	Town of Benton	Clerk, Town of Benton
Jacqulyn Boone	Town of Fort Deposit	Mayor, Town of Fort Deposit
Cynthia Jones	Town of Fort Deposit	Clerk, Town of Fort Deposit
Bob Hood	Town of Fort Deposit	Chief, Fort Deposit VFD
Obuty Ozier	Town of Gordonville	Mayor, Town of Gordonville
Katrina Smith	Town of Gordonville	Clerk, Town of Gordonville
Jimmie Davis	Town of Hayneville	Mayor, Town of Hayneville
Susie Smith	Town of Hayneville	Clerk, Town of Hayneville
Jesse McCall	Town of Hayneville	Chief, Hayneville VFD
Estella Love Rice	Town of Hayneville	Assistant, Hayneville VFD
Kelvin Mitchell	Town of Hayneville	Chief, Hayneville Police Department
Anne Spooner	Town of Lowndesboro	Mayor, Town of Lowndesboro
Julia Benton	Town of Lowndesboro	Clerk, Town of Lowndesboro
Brian Hudson	Town of Lowndesboro	Chief, Town of Lowndesboro VFD
Harold Bell	Town of Mosses	Mayor, Town of Mosses
Lucille Smith	Town of Mosses	Clerk, Town of Mosses
Delmartre Bethel	Town of White Hall	Mayor, Town of White Hall
Bertha White	Town of White Hall	Clerk, Town of White Hall
Jason Burroughs	Lowndes County Schools	Superintendent, Lowndes County Public Schools
Travis Rogers	Lowndes County Schools	President, Lowndes County Board of Education
Kirk Barrett	Community Stakeholder	Chief Operations Officer, Haynes Ambulance
Jackie Greene	Community Stakeholder	Administrator, Orchard Healthcare
Jennifer Roberts	Community Stakeholder	Public Health Environmentalist, Lowndes County Health Department
Hubert (Bo) Ansley	Community Stakeholder	Chief, Emergency Management Branch, U.S. Army Corps of Engineers
Paul Stuckey	Community Stakeholder	Work Unit Manager / Forester, Alabama Forestry Commission
Howard S. Powell, III	Community Stakeholder	President, Hayneville Communications
Andrew Edwards	Community Stakeholder	Reporter, The Lowndes Signal
Brenson Crenshaw	Community Stakeholder	Outside Plant Manager
Thomas Ellis	Community Stakeholder	Chair, Lowndes County Economic Development Commission

Ben Huguley	Community Stakeholder	Plant Manager, Sejong Alabama LLC
Ben Waits	Community Stakeholder	Sr. Manager - Environment, Health, Safety and Security, SABIC Innovative Plastics
Rodney Hartsfield	Community Stakeholder	SABIC Innovative Plastics
Herbert Malone	Community Stakeholder	Chairperson, Lowndes County Water Authority
George Sellers	Community Stakeholder	Alabama Power Co.
TBD	Community Stakeholder	Pintlala Water & Fire Protection Authority
Felicia Thomas	Community Stakeholder	Director, Lowndes County Department of Human Resources
Dustin Casey	Community Stakeholder	Chief, Burkeville VFD
Brent Crenshaw	Community Stakeholder	Chief, Braggs VFD
Fletcher Hayes	Community Stakeholder	Chief, Calhoun VFD
Willie Arnold	Community Stakeholder	Chief, Collirene VFD
Dorothy Maul	Community Stakeholder	Hicks Hill VFD
Monique Smith	Division D Coordinator	Alabama Emergency Management Agency

MACON COUNTY HAZARD MITIGATION LOCAL EMERGENCY PLANNING COMMITTEE

Name	Title/Position	Agency/Organization
Frank H. Lee	Macon County	Director, Macon County EMA/E911
Louis Maxwell	Macon County	Chairman, Macon County Commission
J.D. Smith	Macon County	County Engineer, Macon County
Brian Ware	Macon County	Compliance Officer, Macon County
Andre' Brunson	Macon County	Sheriff, Macon County Sheriff Department
Henry Peavy	Town of Franklin	Mayor, Town of Franklin
Micha Segrest	Town of Franklin	Town Clerk, Town of Franklin
Tommy Miller	Town of Notasulga	Mayor, Town of Notasulga
Simona Miller	Town of Notasulga	Asst. Town Clerk, Town of Notasulga
Denise Pilato	Town of Notasulga	Councilmember, Town of Notasulga
George Davis	Town of Shorter	Clerk, Town of Shorter
Sandor Maloy	Town of Shorter	Police Chief, Town of Shorter
Valerie Smith	Town of Shorter	EOC Coordinator, Town of Shorter
Lawrence Haygood	City of Tuskegee	Mayor, City of Tuskegee
Derrick Swanson	City of Tuskegee	Acting City Manager, City of Tuskegee
Lloyd Jenkins	City of Tuskegee	Assistant Chief of Police, City of Tuskegee
Willie Smith	City of Tuskegee	Fire Marshall, City of Tuskegee
Gerald Long	City of Tuskegee	General Manager, Utilities Board of Tuskegee
Jacquiline Brooks	Macon County Schools	Superintendent, Macon County Schools
AJ Nelson	Macon County Schools	Student Services Coordinator, Macon County Schools
Harold "Kippy" Tate	Tuskegee University	VP, Facilities and Construction
Patrick Mardis	Tuskegee University	Director of Public Safety, Tuskegee University
Larry Foy	Community Stakeholders	Fire Chief, Central Alabama Veterans Health Care System

Danielle Rice	Community Stakeholders	Emergency Management Coordinator, Central Alabama Veterans Health Care System
Mike Bentley	Community Stakeholders	President, Macon County Volunteer Fire Assoc.
Elnora Love	Community Stakeholders	Administrator, Macon County Water Authority
Anita L. Evans	Community Stakeholders	Administrator, Magnolia Haven Health & Rehab Ctr.
Kirk Barrett	Community Stakeholders	Chief Operations Officer, Haynes Ambulance
Jennifer Smith	Community Stakeholders	Health/Nutrition/Mental Health Coordinator, Tuskegee Macon County Headstart
Alvin Howard	Community Stakeholders	Representative, Star Mindingall Water Authority
Joe Turnham	Community Stakeholders	Executive Director, Macon County Economic Development Authority
Ron Boyer	Community Stakeholders	Engineer, Hanon Systems Alabama Corp.
Bernice L. Frazier	Community Stakeholders	President, Southern Christian Leadership Foundation

7.2.2 Survey Results

An online survey was conducted in Lowndes and Macon Counties to obtain helpful information about the residents' knowledge, needs, and concerns regarding natural hazards and their local impact. The survey consisted of multiple choice and short answer questions that focused on understanding the responder's knowledge, needs, and concerns related to hazard events and hazards preparation. The survey was focused on qualitative research rather than quantitative research, which revealed people's feelings and perceptions about natural hazards. The target population for the hazard mitigation survey was individuals who live or work in Lowndes and Macon Counties, and the sampling method that was chosen was voluntary sampling because people chose to participate in the surveys.

Two types of surveys were conducted. One was a survey for stakeholders involved in the hazard mitigation planning process. The second survey was a citizen/resident survey distributed through an email broadcast across the counties. In Lowndes County, there were ten responses to the stakeholder survey and 48 responses to the community survey. In Macon County, there were nine responses to the stakeholder survey and 136 responses to the community survey. Results from the stakeholder surveys indicated that tornadoes, high winds, thunderstorms, and lightning were the most probable hazard events to occur in both Lowndes and Macon Counties. Hazard events that stakeholders felt would have the most devastating impact on the counties included tornadoes, high winds, thunderstorms, lightning, extreme temperatures, flooding and drought.

Community Survey Results – Lowndes County and Macon County

	Lowndes County	Macon County
Number of Responses	48	136

Do you live or work in Lowndes/Macon County?	Lowndes County	Macon County
Yes	95.83%	97.79%
No	4.17%	2.21%

Please select which place you live or work in.

Lowndes County		Macon County	
Benton	0.00%	Tuskegee	71.32%
Fort Deposit	16.67%	Franklin	2.21%
Gordonville	4.17%	Notasulga	15.44%
Haynesville	6.25%	Shorter	5.88%
Lowndesboro	18.75%	Unincorporated Macon County	5.15%
Mosses	0.00%		
White Hall	35.42%		
Unincorporated Lowndes County	18.75%		

Do you live in a flood plain?	Lowndes County	Macon County
Yes	2.08%	7.35%
No	70.83%	48.53%
I do not know	27.08%	44.12%

Do you have Nation Flood Insurance (NFIP)?	Lowndes County	Macon County
Yes	4.17%	8.09%
No	77.08%	75.74%
I do not know	18.75%	16.18%

How prepared do you feel for natural hazard events such as tornadoes, floods, or severe storms?	Lowndes County	Macon County
Very Prepared	10.42%	4.41%
Prepared	50.00%	42.65%
Neither Prepared nor Prepared	18.75%	22.79%
Not Prepared	12.50%	24.26%
Very Unprepared	8.33%	5.88%

Please Select all that apply. Which resource makes you feel more prepared for a national hazard event?	Lowndes County	Macon County
Educational Brochures	20.83%	44.85%
Access to Safe Rooms	60.42%	55.88%
Access to Community Shelters	41.67%	46.32%
Community Classes on Natural Hazards	27.08%	29.41%
Relocating to a Safer Location	45.83%	38.97%
Readiness Kit	45.83%	72.79%
Other (please specify)	8.33%	9.56%

Please select all that apply. Which of the following information sources are the most effective at warning you of approaching storms or natural hazards in your community?	Lowndes County	Macon County
Cell Phone Alerts	87.50%	92.65%
Facebook Posts	25.00%	36.03%
Websites	22.92%	19.85%
Newspaper	4.17%	8.09%
Radio	58.33%	36.76%
Outdoors Sirens	64.58%	56.62%
Telephone	43.75%	33.82%

Twitter Posts	2.08%	4.41%
Weather Alert Radio	64.58%	64.71%
TV Coverage	62.50%	79.41%
Other (please specify)	0.00%	4.41%

Please indicate your personal level of concern about the effects of each natural hazard's potential impact on life and property in your county.

Lowndes County	Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	2.08%	27.08%	18.75%	10.42%	6.25%	35.42%
Drought	0.00%	35.42%	22.92%	14.58%	8.33%	18.75%
Earthquakes	0.00%	10.42%	12.50%	20.83%	8.33%	47.92%
Extreme Temperature (Heat or Cold)	6.25%	25.00%	29.17%	18.75%	6.25%	14.58%
Flooding/ Flash Flooding	6.25%	33.33%	27.08%	8.33%	12.50%	12.50%
Hail	2.08%	33.33%	35.42%	18.75%	2.08%	8.33%
High Winds/ Thunderstorms	10.42%	64.58%	18.75%	2.08%	0.00%	4.17%
Landslides	2.08%	14.58%	8.33%	22.92%	10.42%	41.67%
Lightning	12.50%	45.83%	20.83%	8.33%	6.25%	6.25%
Sinkholes/ Land Subsidence	4.17%	14.58%	22.92%	14.58%	14.58%	29.17%
Tropical Depression/ Tropical Storm/ Hurricane	10.42%	43.75%	37.50%	4.17%	4.17%	0.00%
Wildfire	0.00%	35.42%	27.08%	14.58%	4.17%	18.75%
Tornado	20.83%	64.58%	12.50%	2.08%	0.00%	0.00%
Winter Storm	8.33%	31.25%	31.25%	10.42%	4.17%	14.58%

Macon County	Hazard	Very Concerned	Somewhat Concerned	Neither Concerned or Not Concerned	Somewhat Not Concerned	Not Concerned
Dam Failure	5.15%	13.97%	19.85%	21.32%	8.82%	30.88%
Drought	8.82%	22.06%	39.71%	16.18%	5.15%	8.09%
Earthquakes	9.56%	16.18%	21.32%	22.06%	5.88%	25.00%
Extreme Temperature (Heat or Cold)	8.09%	38.97%	30.88%	13.97%	2.21%	5.88%
Flooding/ Flash Flooding	11.76%	36.76%	31.62%	7.35%	4.41%	8.09%
Hail	6.62%	32.35%	37.50%	11.03%	7.35%	5.15%
High Winds/ Thunderstorms	16.91%	50.74%	27.94%	2.94%	0.00%	1.47%
Landslides	5.88%	14.71%	15.44%	22.79%	12.50%	28.68%
Lightning	10.29%	48.53%	27.21%	6.62%	4.41%	2.94%
Sinkholes/ Land Subsidence	8.82%	25.00%	23.53%	20.59%	11.03%	11.03%
Tropical Depression/ Tropical Storm/ Hurricane	13.97%	42.65%	31.62%	6.62%	2.94%	2.21%
Wildfire	9.56%	27.94%	34.56%	9.56%	7.35%	11.03%
Tornado	23.53%	56.62%	16.18%	2.21%	0.00%	1.47%
Winter Storm	5.88%	34.56%	39.71%	11.03%	3.68%	5.15%

Do you have experience dealing with the effects of each natural hazard's potential impact on life and/or property in your county?	Lowndes County		Macon Couty	
	Yes	No	Yes	No
Dam Faulire	8.33%	91.67%	1.47%	98.53%
Drought	43.75%	56.25%	36.76%	63.24%
Earthquakes	0.00%	100.00%	7.35%	92.65%
Extreme Temperature (Heat or Cold)	60.42%	39.58%	58.09%	41.91%

Flooding/ Flash Flooding	54.17%	45.83%	50.74%	49.26%
Hail	60.42%	39.58%	61.03%	38.97%
High Winds/ Thunderstorms	75.00%	25.00%	77.94%	22.06%
Landslides	2.08%	97.92%	2.94%	97.06%
Lightning	64.58%	35.42%	69.12%	30.88%
Sinkholes/ Land Subsidence	4.17%	95.83%	12.50%	87.50%
Tropical Depression/ Tropical Storm/ Hurricane	64.58%	35.42%	61.03%	38.97%
Wildfire	16.67%	83.33%	19.85%	80.15%
Tornado	62.50%	37.50%	62.50%	37.50%
Winter Storm	58.33%	41.67%	57.35%	42.65%

Please identify your age range.	Lowndes County	Macon County
18-25	4.17%	2.21%
26-35	10.42%	5.15%
36-45	12.50%	10.29%
46-55	45.83%	25.74%
56-65	20.83%	20.59%
66-75	4.17%	27.94%
75 and Older	2.08%	8.09%

Which race/ethnicity best describes you? (Please choose only one.)	Lowndes County	Macon County
American Indian or Alaskan Native	0.00%	0.74%
Asian / Pacific Islander	0.00%	0.00%
Black or African American	58.33%	76.47%
Hispanic	2.08%	0.74%
Prefer Not to Answer	8.33%	4.41%
White / Caucasian	29.17%	15.44%
Multiple ethnicity / Other (please specify)	2.08%	2.21%

Stakeholder Survey Results – Lowndes County and Macon County

	Lowndes County	Macon County
Number of Responses	10	9
Name, Title, Organization Represented	10	9
What natural hazards have occurred in Lowndes Macon County since 2014. What year/month did these events take place?	Tornadoes; Hurricane (2020); Flooding; Drought (2018); Ice Storms	Hurricane (2020); Tornado (2019); Flooding (2015); Lightning (2016) (2019); Straight Line Winds
How has your community been impacted by natural disasters since 2014?	Property Damage (Tornadoes); Trees Down from Hurricane; Power Outages; Flooding; Lost Crops, Timber, Livestock; Lost Homes, Lack of Water Service; Stress on Forestry and Livestock from Drought	Power Outage; Structural Damage; Severely Damaged and Impassable Roads and Bridges - Detours Required for School Busses and General Travel; Power Outages; Lightning Strikes; Railways Blocked with Trees; Flood Related Accidents
Any local information regarding dam failure in Lowndes/Macon County?	None	One dam in a flooding condition
Any local information regarding landslides?	None	None
	Lowndes County	Macon County
What is the probability of a dam failure?		
Very Low	50.00%	33.33%
Low	50.00%	55.56%
Medium	0.00%	11.11%
High	0.00%	0.00%
What would be in the impact of dam failure?		
Minor	20.00%	33.33%
Limited	40.00%	44.44%
Critical	40.00%	22.22%
Catastrophic	0.00%	0.00%
10. What is the probability of a drought?		
Very Low	10.00%	22.22%
Low	30.00%	11.11%
Medium	30.00%	55.56%
High	30.00%	11.11%
What would be in the impact of a drought?		
Minor	10.00%	0.00%
Limited	20.00%	33.33%
Critical	70.00%	44.44%
Catastrophic	0.00%	22.22%
What is the probability of an earthquake?		
Very Low	90.00%	88.89%
Low	10.00%	0.00%
Medium	0.00%	11.11%
High	0.00%	0.00%
What would be in the impact of an earthquake?		
Minor	55.56%	22.22%
Limited	11.11%	44.44%
Critical	33.33%	22.22%
Catastrophic	0.00%	11.11%
What is the probability of a extreme temperature (hot or cold)?		
Very Low	0.00%	11.11%
Low	40.00%	0.00%
Medium	40.00%	55.56%
High	20.00%	33.33%

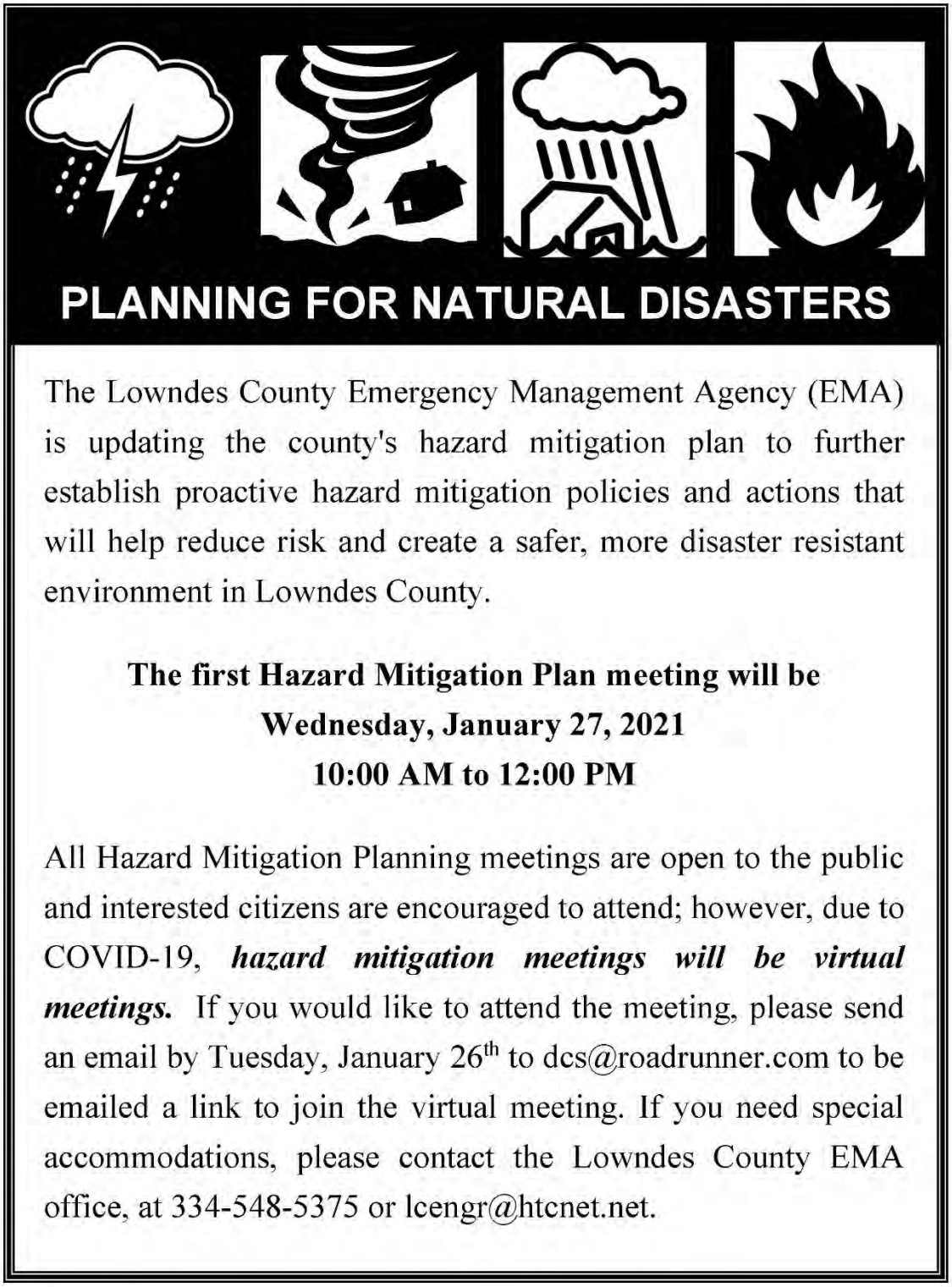
	Lowndes County	Macon County
What would be in the impact of extreme temperature (hot or cold)?		
Minor	0.00%	0.00%
Limited	50.00%	44.44%
Critical	40.00%	55.56%
Catastrophic	10.00%	0.00%
What is the probability of flooding?		
Very Low	0.00%	22.22%
Low	20.00%	33.33%
Medium	70.00%	11.11%
High	10.00%	33.33%
What would be in the impact of flooding?		
Minor	0.00%	0.00%
Limited	20.00%	44.44%
Critical	60.00%	33.33%
Catastrophic	20.00%	22.22%
What is the probability of hail?		
Very Low	10.00%	22.22%
Low	60.00%	44.44%
Medium	30.00%	33.33%
High	0.00%	0.00%
What would be in the impact of hail?		
Minor	10.00%	11.11%
Limited	70.00%	77.78%
Critical	20.00%	11.11%
Catastrophic	0.00%	0.00%
What is the probability of high winds/thunderstorms?		
Very Low	0.00%	0.00%
Low	10.00%	11.11%
Medium	20.00%	33.33%
High	70.00%	55.56%
What would be in the impact of high winds/thunderstorm?		
Minor	0.00%	0.00%
Limited	10.00%	33.33%
Critical	70.00%	55.56%
Catastrophic	20.00%	11.11%
What is the probability of landslides?		
Very Low	50.00%	75.00%
Low	50.00%	25.00%
Medium	0.00%	0.00%
High	0.00%	0.00%
What would be in the impact of landslides?		
Minor	40.00%	22.22%
Limited	40.00%	66.67%
Critical	20.00%	0.00%
Catastrophic	0.00%	11.11%
What is the probability of lightning?		
Very Low	0.00%	0.00%
Low	10.00%	0.00%
Medium	70.00%	66.67%
High	20.00%	33.33%
What would be in the impact of lightning?		
Minor	0.00%	22.22%
Limited	50.00%	22.22%

Critical	50.00%	55.56%
Catastrophic	0.00%	0.00%
	Lowndes County	Macon County
What is the probability of sinkholes?		
Very Low	50.00%	22.22%
Low	40.00%	55.56%
Medium	10.00%	11.11%
High	0.00%	11.11%
What would be in the impact of sink holes?		
Minor	30.00%	22.22%
Limited	50.00%	44.44%
Critical	20.00%	22.22%
Catastrophic	0.00%	11.11%
What is the probability of a tropical depression/ tropical storm/ hurricane?		
Very Low	0.00%	22.22%
Low	30.00%	22.22%
Medium	60.00%	33.33%
High	10.00%	22.22%
What would be in the impact of a tropical depression/ tropical storm/ hurricane?		
Minor	0.00%	0.00%
Limited	10.00%	33.33%
Critical	90.00%	44.44%
Catastrophic	0.00%	22.22%
What is the probability of a tornado?		
Very Low	0.00%	0.00%
Low	10.00%	11.11%
Medium	40.00%	55.56%
High	50.00%	33.33%
What would be in the impact of a tornado?		
Minor	0.00%	0.00%
Limited	0.00%	11.11%
Critical	60.00%	44.44%
Catastrophic	40.00%	44.44%
What is the probability of a wildfire?		
Very Low	20.00%	22.22%
Low	50.00%	55.56%
Medium	20.00%	11.11%
High	10.00%	11.11%
What would be in the impact of a wildfire?		
Minor	10.00%	0.00%
Limited	50.00%	66.67%
Critical	30.00%	22.22%
Catastrophic	10.00%	11.11%
What is the probability of a winter storm?		
Very Low	20.00%	11.11%
Low	50.00%	55.56%
Medium	30.00%	22.22%
High	0.00%	11.11%
What would be in the impact of a winter storm?		
Minor	10.00%	0.00%
Limited	50.00%	55.56%
Critical	40.00%	33.33%
Catastrophic	0.00%	11.11%

7.2.3 LEPC Meeting Notes and Presentations

7.2.3.1 Meeting 1: Lowndes County and Macon County LEPCs

Lowndes County Meeting Flyer:



PLANNING FOR NATURAL DISASTERS

The Lowndes County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Lowndes County.

The first Hazard Mitigation Plan meeting will be
Wednesday, January 27, 2021
10:00 AM to 12:00 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, January 26th to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Lowndes County EMA office, at 334-548-5375 or lcengr@htcnet.net.

Macon County Meeting Flyer:



PLANNING FOR NATURAL DISASTERS

The Macon County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Macon County.

The first Hazard Mitigation Plan meeting will be
Wednesday, January 27, 2021
10:00 AM to 12:00 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, January 26th to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Macon County EMA office, at 334-724-2626 or frankhlee79@gmail.com.

Lowndes County Email Notification:

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, January 20, 2021 4:17 PM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Plan Update
Attachments: lowndes-county-plan 2015.pdf

Hello,

On behalf of the Lowndes County Emergency Management Agency, I am writing to request your participation in an update of the Lowndes County Multi-Jurisdictional Hazard Mitigation Plan, as required by the Federal Emergency Management Agency (FEMA). There will be three virtual meetings as shown in the meeting schedule below. The Lowndes County Hazard Mitigation Plan is being updated in conjunction with the Macon County Hazard Mitigation Plan, as part of the Alabama Emergency Management Agency (AEMA) Division D Regional Plan. Therefore, the first and the last meetings will be joint meetings with Macon County stakeholders. The second meeting will be individual county meetings to review hazard mitigation activities by county. You will receive an electronic meeting invitation on the Monday before each meeting. I am also sending a copy of the previous Lowndes County Hazard Mitigation Plan for your review and reference.

Hazard Mitigation Plan Update Meeting Schedule

Meeting 1: Wednesday, January 27th -- 10:00 AM to 12:00 PM – Joint County Meeting
Meeting 2: Lowndes County -- Wednesday, February 3rd -- 10:00 AM to 12:00 PM
Macon County – Wednesday, February 3rd – 1:30 PM to 3:30 PM
Meeting 3: Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

Stakeholder participation in this planning process is very important to Lowndes County and vital to the AEMA/FEMA approval of the updated hazard mitigation plan. In fact, FEMA requires that at least one representative from each jurisdiction in each county participate in the planning process. The stakeholder list includes one elected official and one administrative staff member for each local government, as well as representatives for education, emergency responders, healthcare, industry, and utilities. For Lowndes County, the jurisdictions included in the hazard mitigation plan are as follows:

- Lowndes County
- Town of Benton
- Town of Fort Deposit
- Town of Gordonville
- Town of Hayneville
- Town of Lowndesboro
- Town of Mosses
- Town of Hayneville
- Lowndes County Schools/Board of Education

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact David Butts, Lowndes County EMA Director, at lcengr@htcnet.net. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4181
C: 334-590-0655
dcs@roadrunner.com

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Thursday, January 21, 2021 8:40 AM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Plan Update - Correction
Attachments: lowndes-county-plan 2015.pdf

Hello All,

In my previous email, I mistakenly omitted the Town of White Hall from the list of jurisdictions covered in the Lowndes County Hazard Mitigation Plan. A corrected list of participating jurisdictions is provided below:

- Lowndes County
- Town of Benton
- Town of Fort Deposit
- Town of Gordonville
- Town of Hayneville
- Town of Lowndesboro
- Town of Mosses
- Town of White Hall
- Lowndes County Schools/Board of Education

My apologies,
Tracy Delaney

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, January 20, 2021 4:17 PM
To: 'dcs@roadrunner.com' <dcs@roadrunner.com>
Subject: Lowndes County Hazard Mitigation Plan Update

Hello,

On behalf of the Lowndes County Emergency Management Agency, I am writing to request your participation in an update of the Lowndes County Multi-Jurisdictional Hazard Mitigation Plan, as required by the Federal Emergency Management Agency (FEMA). There will be three virtual meetings as shown in the meeting schedule below. The Lowndes County Hazard Mitigation Plan is being updated in conjunction with the Macon County Hazard Mitigation Plan, as part of the Alabama Emergency Management Agency (AEMA) Division D Regional Plan. Therefore, the first and the last meetings will be joint meetings with Macon County stakeholders. The second meeting will be individual county meetings to review hazard mitigation activities by county. You will receive an electronic meeting invitation on the Monday before each meeting. I am also sending a copy of the previous Lowndes County Hazard Mitigation Plan for your review and reference.

Hazard Mitigation Plan Update Meeting Schedule

Meeting 1:	Wednesday, January 27th -- 10:00 AM to 12:00 PM – Joint County Meeting
Meeting 2:	Lowndes County -- Wednesday, February 3rd -- 10:00 AM to 12:00 PM
	Macon County – Wednesday, February 3rd – 1:30 PM to 3:30 PM
Meeting 3:	Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

Stakeholder participation in this planning process is very important to Lowndes County and vital to the AEMA/FEMA approval of the updated hazard mitigation plan. In fact, FEMA requires that at least one representative from each

jurisdiction in each county participate in the planning process. The stakeholder list includes one elected official and one administrative staff member for each local government, as well as representatives for education, emergency responders, healthcare, industry, and utilities. For Lowndes County, the jurisdictions included in the hazard mitigation plan are as follows:

- Lowndes County
- Town of Benton
- Town of Fort Deposit
- Town of Gordonville
- Town of Hayneville
- Town of Lowndesboro
- Town of Mosses
- Town of Hayneville
- Lowndes County Schools/Board of Education

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact David Butts, Lowndes County EMA Director, at lcengr@htcnet.net. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4161
C: 334-590-0655
dcs@roadrunner.com

Macon County Email Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Thursday, January 21, 2021 2:20 PM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation Plan
Attachments: macon-county-plan 2015.pdf

Hello,

On behalf of the Macon County Emergency Management Agency, I am writing to request your participation in an update of the Macon County Multi-Jurisdictional Hazard Mitigation Plan, as required by the Federal Emergency Management Agency (FEMA). There will be three virtual meetings as shown in the meeting schedule below. The Macon County Hazard Mitigation Plan is being updated in conjunction with the Lowndes County Hazard Mitigation Plan, as part of the Alabama Emergency Management Agency (AEMA) Division D Regional Plan. Therefore, the first and the last meetings will be joint meetings with Lowndes County stakeholders. The second meeting will be individual county meetings to review hazard mitigation activities by county. You will receive an electronic meeting invitation on the Monday before each meeting. I am also sending a copy of the previous Macon County Hazard Mitigation Plan for your review and reference.

Hazard Mitigation Plan Update Meeting Schedule

Meeting 1:	Wednesday, January 27th -- 10:00 AM to 12:00 PM – Joint County Meeting
Meeting 2:	Lowndes County -- Wednesday, February 3rd -- 10:00 AM to 12:00 PM
	Macon County – Wednesday, February 3rd – 1:30 PM to 3:30 PM
Meeting 3:	Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

Stakeholder participation in this planning process is very important to Macon County and vital to the AEMA/FEMA approval of the updated hazard mitigation plan. In fact, FEMA requires that at least one representative from each jurisdiction in each county participate in the planning process. The stakeholder list includes one elected official and one administrative staff member for each local government, as well as representatives for education, emergency responders, healthcare, industry, and utilities. For Macon County, the jurisdictions included in the hazard mitigation plan are as follows:

- Macon County
- Town of Franklin
- Town of Notasulga
- Town of Shorter
- City of Tuskegee
- Macon County Schools / Board of Education
- Tuskegee University

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact Frank H. Lee, Macon County EMA Director, at frankhlee79@gmail.com. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation.

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4181
C: 334-590-0655
dcs@roadrunner.com

Lowndes County Meeting 1 Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Monday, January 25, 2021 10:00 AM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Plan Update - Meeting 1

Hello!

Please join the first **virtual meeting** for the Lowndes and Macon Counties Hazard Mitigation Plan Updates by clicking on the Zoom link below. You may also join by telephone if you do not have access to video.

The meeting is scheduled for **Wednesday, January 27, 2021 from 10:00 AM to 12:00 PM.**

Please contact me if you have any questions, comments, or issues.

Topic: Lowndes-Macon Hazard Mitigation Plan Updates - Meeting 1
Time: Jan 27, 2021 10:00 AM Central Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/89573825738?pwd=ak5MSCtyaFJoUTVwM01lNk9UazBEZz09

Meeting ID: 895 7382 5738
Passcode: 130757
One tap mobile
+13126266799,,89573825738#,,,,*130757# US (Chicago)
+16465588656,,89573825738#,,,,*130757# US (New York)

Dial by your location
+1 312 626 6799 US (Chicago)
+1 646 558 8656 US (New York)
+1 301 715 8592 US (Washington DC)
+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 895 7382 5738
Passcode: 130757
Find your local number: https://us02web.zoom.us/u/kbYxT7uzoA

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

1

Lowndes County Meeting 1 Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Monday, January 25, 2021 10:07 AM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation Plan Update - Meeting 1

Hello!

Please join the first **virtual meeting** for the Lowndes and Macon Counties Hazard Mitigation Plan Updates by clicking on the Zoom link below. You may also join by telephone if you do not have access to video.

The meeting is scheduled for **Wednesday, January 27, 2021 from 10:00 AM to 12:00 PM.**

Please contact me if you have any questions, comments, or issues.

Topic: Lowndes-Macon Hazard Mitigation Plan Updates - Meeting 1
Time: Jan 27, 2021 10:00 AM Central Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/89573825738?pwd=ak5MSCtyaFJoUTVwM01INk9UazBEZz09

Meeting ID: 895 7382 5738
Passcode: 130757
One tap mobile
+13126266799,,89573825738#,,,,*130757# US (Chicago)
+16465588656,,89573825738#,,,,*130757# US (New York)

Dial by your location
+1 312 626 6799 US (Chicago)
+1 646 558 8656 US (New York)
+1 301 715 8592 US (Washington DC)
+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 895 7382 5738
Passcode: 130757
Find your local number: https://us02web.zoom.us/u/kbYxT7uzoA

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

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Lowndes County and Macon County Meeting 1 Summary and Attendance List

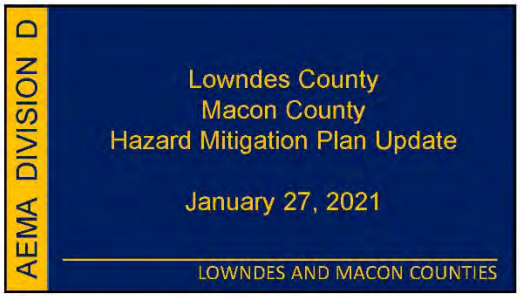
The first joint meeting of the Lowndes County and Macon County Local Emergency Planning Committees was conducted virtually via Zoom on Wednesday, January 27, 2021 from 10:00 AM to 12:00 PM. The purpose of the meeting was the update of the 2015 Lowndes County Multi-Jurisdictional Hazard Mitigation Plan and the 2015 Macon County Multi-Jurisdictional Hazard Mitigation Plan as part of the AEMA Division D Regional Hazard Mitigation Plan. Because of the virtual meeting setting, there is no signed attendance roster. There were 32 persons participating on the Zoom Meeting, including the following:

Delmartre Bethel	Chris Griffin	J.D. Smith
Jacqulyn Boone	Tony Haygood	Lucille Smith
Ike Bright	Mia Hutcherson	Monique Smith
David Butts	Lloyd Jenkins	Willie Smith
J.L. Christian	Frank Lee	Valerie Smith
Donny Cooper	Simona Miller	Anne Spooner
Tracy Delaney	Town of Mosses	Derrick Swanson
Thomas Ellis	Orbuty Ozier	Joe Turnham
Jackie Greene	Denise Pilato	Ben Waits

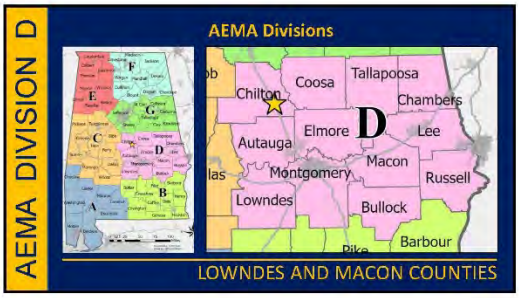
Introductions were made and Mrs. Delaney explained the purpose of the meeting including the required updates of the Lowndes County Multi-Jurisdictional Hazard Mitigation Plan and the Macon County Multi-Jurisdictional Hazard Mitigation Plan, and the transition from county plans to the AEMA Division D Regional Multi-Jurisdictional Hazard Mitigation Plan. A demographic profile of the two counties was provided and major employers were discussed.

Mrs. Delaney explained the risk assessment process and outlined which hazards impacted the planning area. She then discussed the past frequency, time frame, and magnitude of each natural hazard that would be addressed in the plan. Committee members were provided the opportunity to discuss hazard events in their counties. The discussion then moved on to the identification of critical facilities in Lowndes and Macon Counties. Committee members stated that the following should be included in critical facilities: schools, large industries, universities, healthcare facilities including assisted living and nursing homes, jails, concentrations of commercial development, government buildings, emergency responder facilities, county shops, public utilities, telecommunications, airports/aviation facilities, fueling centers, national guard facilities, evacuation routes, and storm shelters.

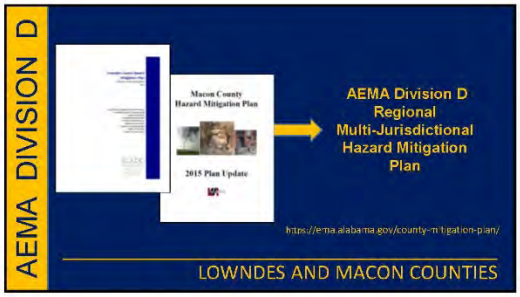
To conclude the meeting, Mrs. Delaney provided an overview of the items for discussion at the next meeting, along with the meeting date and times. She also stated that she would be sending an email with survey links to be further distributed to residents and other stakeholders. The meeting presentation is attached.


AEMA DIVISION D
Lowndes County
Macon County
Hazard Mitigation Plan Update
January 27, 2021
LOWNDES AND MACON COUNTIES

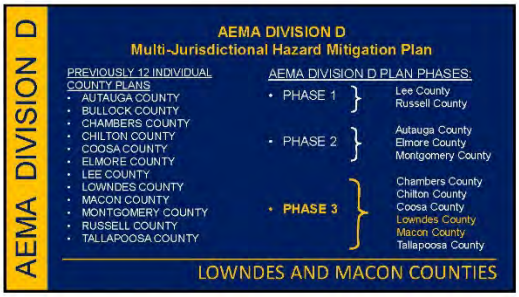
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AEMA DIVISION D
AEMA Divisions
Chilton
Coosa
Tallapoosa
Chambers
Elmore
D
Lee
Autauga
Montgomery
Macon
Russell
Lowndes
Bullock
Barbour
LOWNDES AND MACON COUNTIES

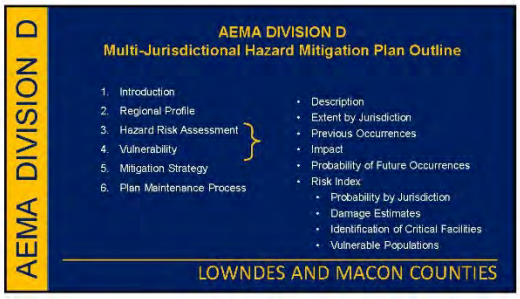
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AEMA DIVISION D
Macon County Hazard Mitigation Plan
2015 Plan Update
AEMA Division D Regional Multi-Jurisdictional Hazard Mitigation Plan
https://ema.alabama.gov/county-mitigation-plan/
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
AEMA DIVISION D
Multi-Jurisdictional Hazard Mitigation Plan
PREVIOUSLY 12 INDIVIDUAL COUNTY PLANS
AUTAUGA COUNTY
BULLOCK COUNTY
CHAMBERS COUNTY
CHILTON COUNTY
COOSA COUNTY
ELMORE COUNTY
LEE COUNTY
LOWNDES COUNTY
MACON COUNTY
MONTGOMERY COUNTY
RUSSELL COUNTY
TALLAPOOSA COUNTY
AEMA DIVISION D PLAN PHASES:
PHASE 1
Lee County
Russell County
PHASE 2
Autauga County
Elmore County
Montgomery County
PHASE 3
Chambers County
Chilton County
Coosa County
Lowndes County
Macon County
Tallapoosa County
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
AEMA DIVISION D
Multi-Jurisdictional Hazard Mitigation Plan Outline
1. Introduction
2. Regional Profile
3. Hazard Risk Assessment
4. Vulnerability
5. Mitigation Strategy
6. Plan Maintenance Process
Description
Extent by Jurisdiction
Previous Occurrences
Impact
Probability of Future Occurrences
Risk Index
Probability by Jurisdiction
Damage Estimates
Identification of Critical Facilities
Vulnerable Populations
LOWNDES AND MACON COUNTIES

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What is a natural hazard?
a threat of a naturally occurring event that will have a negative effect on people or the environment
Floods (riverine flooding, storm surge, flash floods)
High Winds (hurricanes, tornadoes, windstorms)
Winter / Ice Storms
Landslides
Sinkholes and Land subsidence
Earthquakes
Drought
Hail
Wildfires
Extreme Temperatures
Thunderstorms and Lightning
Dam Failure
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

What is hazard mitigation?

Hazard mitigation reduces disaster damages and is defined as ***sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.***

- Increase risk awareness
- Protect critical facilities
- Removal of structures from flood hazard areas
- Mitigation savvy development codes and regulations

Local governments have the responsibility to protect the health, safety, and welfare of their citizens. Proactive mitigation policies and actions help reduce risk and create safer, more disaster-resilient communities. Mitigation is an investment in your community's future safety and sustainability.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Role of hazard mitigation?

Consider the critical importance of mitigation to:

- Protect public safety and prevent loss of life and injury.
- Reduce harm to existing and future development.
- Prevent damage to a community's unique economic, cultural, and environmental assets.
- Minimize operational downtime and accelerate recovery of government and business after disasters.
- Reduce the costs of disaster response and recovery and the exposure to risk for first responders.
- Help accomplish other community objectives, such as leveraging capital improvements, infrastructure protection, open space preservation, and economic resiliency.

LOWNDES AND MACON COUNTIES

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Disaster Mitigation Act of 2000

"Instead of repeated damage and continual demands for federal disaster assistance, resilient communities proactively protect themselves against hazards, build self-sufficiency, and become more sustainable."



- Requires that each local government prepare and adopt a multi- hazard mitigation plan
- Must have an adopted hazard mitigation plan to be eligible for disaster recovery funds in the event of a natural disaster
- Hazard mitigation plan must be maintained and updated every five years

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Local Emergency Planning Committee (LEPC)

- Local Governments – County and Municipal
- Law Enforcement
- Emergency Services
- Healthcare
- Education
- Natural Resources
- Business, Industry and Communications
- Utility Services
- Non-Profit and Faith-Based Organizations

Role:

- Oversight and Guidance
- Liaison to Community and Respective Organizations
- Build Awareness
- Assist in Implementation

LOWNDES AND MACON COUNTIES

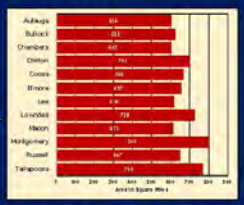
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AEMA DIVISION D

Area Profile – Land Area



Total Land Area = 8,024 Square Miles
15.3% of State of Alabama



LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Area Profile – Population Change



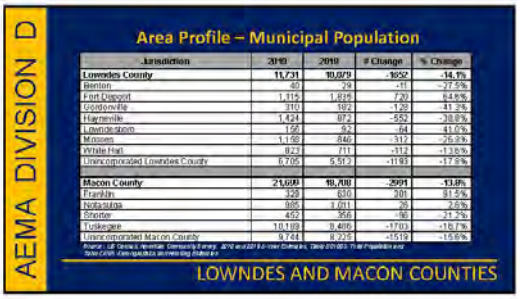
AEMA Division D Population = 250,617 Persons
15.4 % of State of Alabama

County	2010 Population	2019 Population	# Change	% Change
Autauga	53,155	55,380	2,225	4.2%
Bullock	10,923	10,246	-676	-6.2%
Chambers	34,579	33,660	-919	-2.7%
Chilton	43,121	44,065	934	2.2%
Coosa	11,470	10,757	-713	-6.2%
Elmore	77,650	81,144	3,494	4.5%
Lee	140,010	161,152	26,142	13.4%
Lowndes	**11,731**	**10,079**	**-1,652**	**-14.1%**
Macon	**21,699**	**18,798**	**-2,901**	**-13.8%**
Montgomery	229,018	226,941	-1,077	-0.5%
Russell	51,663	57,962	6,299	12.2%
Talladega	41,534	40,541	-993	-2.4%

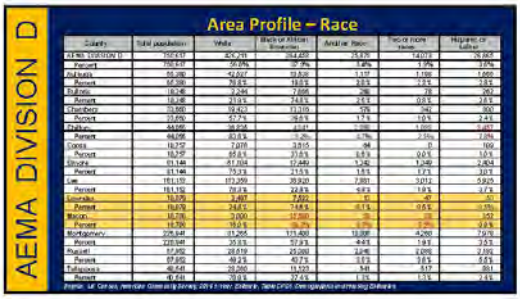
Source: US Census, American Community Survey, 2014 and 2019 5-Year Estimates, Table DP05: Demographics and Housing Estimates

LOWNDES AND MACON COUNTIES

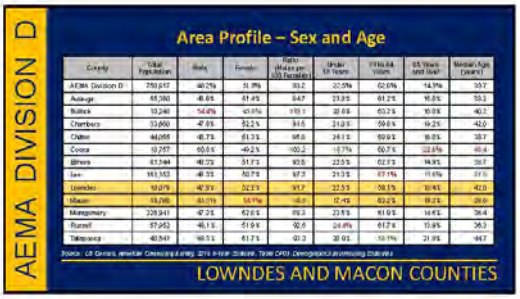
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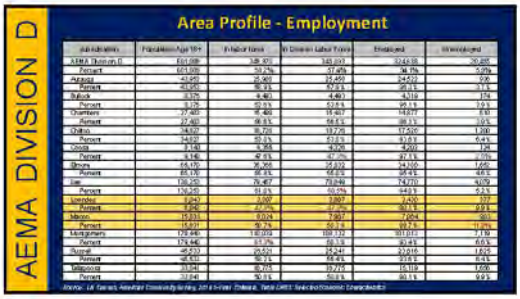
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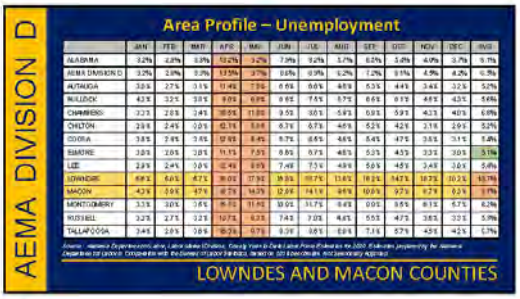
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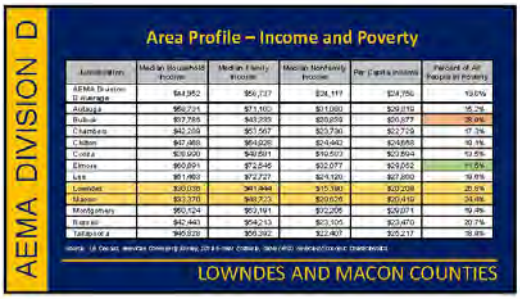
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AEMA DIVISION D

Area Profile – Housing Occupancy and Value

Jurisdiction	Total Housing Units	Occupied Housing Units	Owner Occupied Housing	Renter Occupied Housing	Vacant Housing Units	Median Value: Owner Occupied Units
AEMA Division D	344,889	289,989	65.0%	35.0%	15.9%	$113,417
Autauga	23,460	91.10%	73.3%	26.7%	8.9%	$154,500
Bullock	4,557	77.30%	71.1%	28.9%	22.7%	$70,300
Chambers	16,988	79.20%	67.5%	32.5%	20.8%	$97,100
Chilton	19,761	86.80%	74.5%	25.5%	14.8%	$107,300
Coosa	6,595	81.20%	79.2%	20.8%	18.9%	$94,000
Elmore	34,166	87.00%	73.3%	26.7%	13.0%	$165,600
Lee	64,972	87.30%	61.8%	38.4%	12.7%	$162,300
Lowndes	5,204	81.40%	74.5%	25.7%	18.6%	$70,000
Macon	10,296	72.80%	65.5%	34.5%	27.4%	$80,600
Montgomery	104,597	85.50%	59.4%	41.6%	14.5%	$120,000
Russell	27,660	84.00%	66.2%	33.8%	16.0%	$122,000
Talapoosa	22,421	72.30%	74.9%	25.1%	27.7%	$156,300

Source: US Census, American Community Survey, 2015 5-Year Estimate, Table DP04, Selected Housing Characteristics

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Area Profile – Housing Type and Age

Jurisdiction	Total Housing Units	Single Unit	Multi Units	Mobile Home	Boat, Car, Van	Build Prior to 1980 (40 Years Old)
AEMA Division D	344,889	68.3%	17.4%	14.4%	0.1%	42.3%
Autauga	23,460	72.2%	8.8%	18.8%	0.2%	32.9%
Bullock	4,557	52.8%	10.6%	37.4%	0.8%	40.4%
Chambers	16,988	70.2%	16.4%	13.3%	0.1%	58.4%
Chilton	19,761	82.0%	5.5%	12.1%	0.2%	41.4%
Coosa	6,595	65.8%	2.9%	31.2%	0.1%	49.3%
Elmore	34,166	75.8%	8.5%	15.0%	0.4%	33.1%
Lee	64,972	59.2%	24.5%	16.2%	0.1%	26.1%
Lowndes	5,204	55.8%	7.0%	37.2%	0.1%	58.2%
Macon	10,296	84.9%	14.9%	20.2%	0.0%	56.6%
Montgomery	104,597	72.1%	23.6%	4.1%	0.0%	52.3%
Russell	27,660	67.8%	17.2%	15.0%	0.0%	45.9%
Talapoosa	22,421	72.0%	9.1%	18.9%	0.0%	47.1%

Source: US Census, American Community Survey, 2015 5-Year Estimate, Table DP04, Selected Housing Characteristics

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Major Employers

Lowndes County		
American Colloid Company	Bentonite Clay	20 to 49
Bates Turkey Farm	Poultry/Turkey Processing	31
Chowet Weldparts	Welded Automotive Parts	75
Daehan Solutions Alabama	Interior Sound Insulation Components	310
Findley Timber	Logging & Lumber Processing	10
Kinch Foods	Feed Mill	20 to 49
Priester Pecan	Pecans, Candies, Baked Goods	50
Saudi Basic Industries Corporation (SABIC)	Engineered Plastics	350
Sejong Alabama LLC	Mufflers & Exhaust Systems	170
Macon County		
Beck's Turf	Sod, Floriculture Production	40
Fiblast	Plastics Manufacturing	1 to 4
Hanon Systems Alabama Corporation	Automobile Parts Manufacturing	500
Logoshi	Freight Traffic Manager	21
Lynn's Travel Center	Fuel, Food, Retail	
Moore & Davis Nursery	Wholesale Nursery	17
VictoryLand		

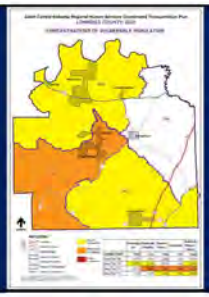
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Vulnerable Populations and Concentrations

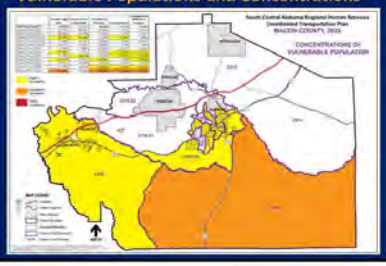
- Concentrations of Population
- Elderly Population
- Persons With a Disability
- Persons in Poverty
- Unemployed Persons
- Households Without a Vehicle



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AEMA DIVISION D

Vulnerable Populations and Concentrations



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AEMA DIVISION D

Risk Assessment

- Hazard Overview
- Hazard Profiles
- Technological and Human-Caused Hazards
- Vulnerability Overview
- Probability of Future Occurrence and Loss Estimation
- Total Population and Property Valuation Summary by Jurisdiction
- Critical Facilities/Infrastructure by Jurisdiction
- Hazard Impacts

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- Avalanche
- Coastal Erosion
- Dam Failure
- Drought / Extreme Heat
- Earthquake
- Flooding
- Hail
- Hurricane, Tropical Depression, Tropical Storm
- Landslides
- Land Subsidence / Sinkholes
- Lightening
- Tornadoes
- Tsunami
- Volcano
- Wildfire
- Winter Storms

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- **Background:** definition/description of the hazard, its characteristics, and potential effects.
- **Locations Affected**
- **Extent:** potential strength or magnitude of the hazard.
- **Historical Occurrences:** history of previous hazard events in the planning area, including their impacts.
- **Probability of Future Events:** likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low, or Very Low described below.
  - **High:** Probable major damage in a 1-10 Year Period
  - **Medium:** Probable major damage in a 10-50 Year Period
  - **Low:** Probable major damage in a 100 Year Period
  - **Very Low:** No probable major damage in a 100 Year Period

LOWNDES AND MACON COUNTIES

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Flash Flooding

Lowndes County
Frequency: 9 flash floods in 13 Years
Events: 2007, 2008, 2011, 2012, 2017
Magnitude: County Wide

Macon County
Frequency: 2 flash floods in 13 Years
Events: 2009, 2015
Magnitude: County Wide

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Tornadoes

Lowndes County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2012, 2017
Magnitude: EF0 to EF2

Macon County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2013, 2014, 2017, 2019
Magnitude: EF0 to EF3



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Drought

Lowndes County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

Macon County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

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High Winds and Thunderstorms

Lowndes County
Frequency: 301 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

Macon County
Frequency: 300 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

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Wildfire

Lowndes County
Frequency: 191 Wildfires in 13 Years
Magnitude: 1,980.25 Acres Burned

Macon County
Frequency: 849 Wildfires in 13 Years
Magnitude: 13,115 acres burned



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Dam and Levee Failures

Lowndes County
Frequency: 0 Events

Macon County
Frequency: 0 Events

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Winter Storms

Lowndes County
Frequency: 3 Events in 13 Years
Events: 2014, 2018
Magnitude: County Wide

Macon County
Frequency: 3 Events in 13 Years
Events: 2014, 2018
Magnitude: County Wide



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Hail Storms

Lowndes County
Frequency: 12 Events in 13 Years
Events: 2006, 2007, 2008, 2010, 2012, 2017, 2019
Magnitude: County Wide

Macon County
Frequency: 10 Events in 13 Years
Events: 2006, 2010, 2011, 2012, 2013, 2019
Magnitude: County Wide



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Lightning Storms

Lowndes County
Frequency: 0 Events in 13 Years
Magnitude: County Wide

Macon County
Frequency: 0 Events in 13 Years
Magnitude: County Wide



Source: The Ottawa Citizen

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Extreme Temperatures

Lowndes County
Frequency: 4 Events in 13 Years
Events: 2007, 2012
Magnitude: County Wide

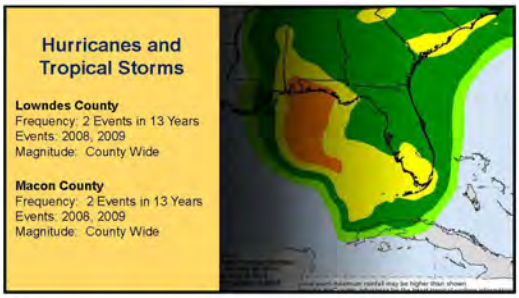
Macon County
Frequency: 3 Events in 13 Years
Events: 2007, 2012
Magnitude: County Wide



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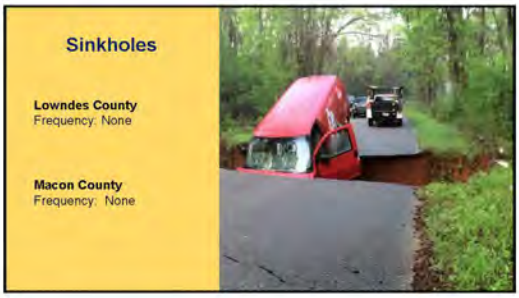
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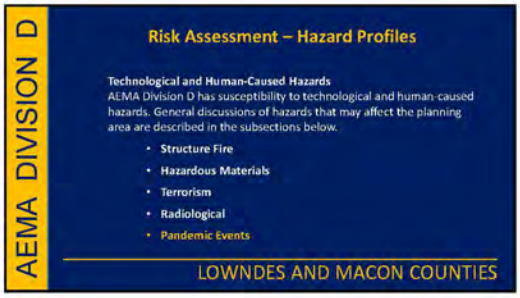
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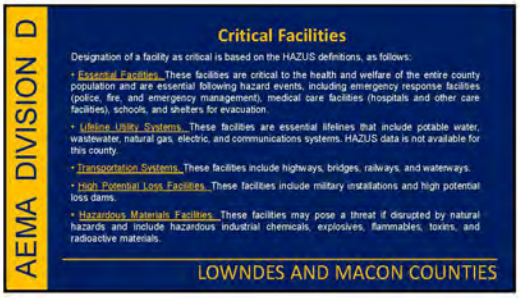
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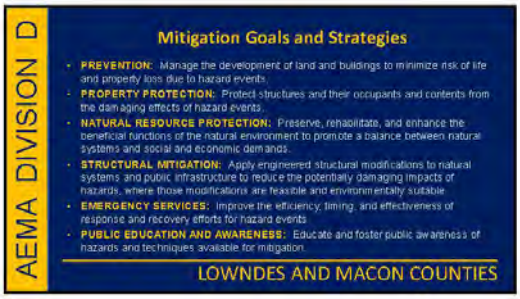
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AEMA DIVISION D
Division D Hazard Mitigation Plan Update
What's Next:
• Hazard Risk Assessment
• Hazard Mitigation Goals
• Jurisdiction Action Plans
LOWNDES AND MACON COUNTIES

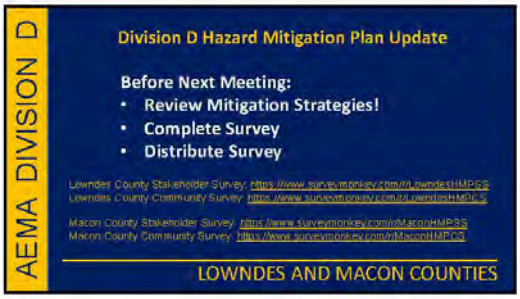
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AEMA DIVISION D
Mitigation Goals and Strategies
• PREVENTION: Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.
• PROPERTY PROTECTION: Protect structures and their occupants and contents from the damaging effects of hazard events.
• NATURAL RESOURCE PROTECTION: Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
• STRUCTURAL MITIGATION: Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
• EMERGENCY SERVICES: Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
• PUBLIC EDUCATION AND AWARENESS: Educate and foster public awareness of hazards and techniques available for mitigation.
LOWNDES AND MACON COUNTIES

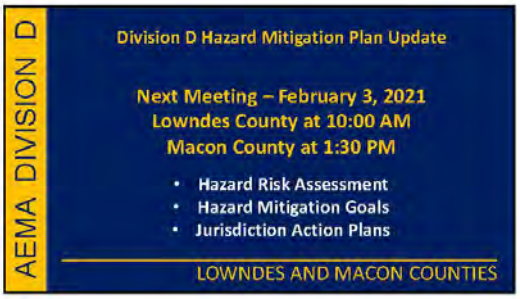
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AEMA DIVISION D
Mitigation Goals and Strategies
Each adopting jurisdiction must have at least two strategies per hazard
LOWNDES COUNTY
• Lowndes County
• Town of Benton
• Town of Fort Deposit
• Town of Gordonville
• Town of Hayneville
• Town of Lowndesboro
• Town of Mosses
• Town of White Hall
• Lowndes County Schools/Board of Education
MACON COUNTY
• Macon County
• Town of Franklin
• Town of Notasulga
• Town of Shorter
• City of Tuskegee
• Macon County Schools / Board of Education
• Tuskegee University
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
Division D Hazard Mitigation Plan Update
Before Next Meeting:
• Review Mitigation Strategies!
• Complete Survey
• Distribute Survey
Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS
Lowndes County Community Survey: https://www.surveymonkey.com/r/LowndesHMPCS
Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS
Macon County Community Survey: https://www.surveymonkey.com/r/MaconHMPCS
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
Division D Hazard Mitigation Plan Update
Next Meeting – February 3, 2021
Lowndes County at 10:00 AM
Macon County at 1:30 PM
• Hazard Risk Assessment
• Hazard Mitigation Goals
• Jurisdiction Action Plans
LOWNDES AND MACON COUNTIES

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dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, January 27, 2021 12:27 PM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Plan Update
Attachments: Lowndes-Macon Hazard Mitgation Meeting 1 - 012721.pdf

Hello Everyone,

Thank you to those that were able to participate in today's Zoom meeting about the Lowndes and Macon County Hazard Mitigation Plan Updates. I have attached a PDF file of today's presentation for those who were not able to attend.

Additionally, the link to the hazard mitigation stakeholder survey is below. Please take time to complete this survey as soon as possible. It should only take 5 to 10 minutes.
https://www.surveymonkey.com/r/LowndesHMPSS

Finally, please plan to attend the next meetings as listed below. I will send the Zoom Meeting Invitations out by Monday, February 1st.

Hazard Mitigation Plan Update Meeting Schedule

Meeting 2: **Lowndes County -- Wednesday, February 3rd -- 10:00 AM to 12:00 PM**
Macon County – Wednesday, February 3rd – 1:30 PM to 3:30 PM
Meeting 3: Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

Stakeholder participation in this planning process is very important to Lowndes County and vital to the AEMA/FEMA approval of the updated hazard mitigation plan. In fact, FEMA requires that at least one representative from each jurisdiction in each county participate in the planning process. The stakeholder list includes representatives for each local government, as well as representatives for education, emergency responders, healthcare, industry, and utilities. For Lowndes County, the jurisdictions included in the hazard mitigation plan are as follows:

- Lowndes County
- Town of Benton
- Town of Fort Deposit
- Town of Gordonville
- Town of Hayneville
- Town of Lowndesboro
- Town of Mosses
- Town of Hayneville
- Lowndes County Schools/Board of Education

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact David Butts, Lowndes County EMA Director, at lcengr@htcnet.net. I will attempt to gather your participation in a different manner, if possible.

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, January 27, 2021 12:37 PM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation Plan Update
Attachments: Lowndes-Macon Hazard Mitgation Meeting 1 - 012721.pdf

Hello Everyone,

Thank you to those that were able to participate in today's Zoom meeting about the Lowndes and Macon County Hazard Mitigation Plan Updates. I have attached a PDF file of today's presentation for those who were not able to attend.

Additionally, the link to the hazard mitigation stakeholder survey is below. Please take time to complete this survey as soon as possible. It should only take 5 to 10 minutes.
https://www.surveymonkey.com/r/MaconHMPSS

Finally, please plan to attend the next meetings as listed below. I will send the Zoom Meeting Invitations out by Monday, February 1st.

Hazard Mitigation Plan Update Meeting Schedule

Meeting 2: Lowndes County -- Wednesday, February 3rd -- 10:00 AM to 12:00 PM
Meeting 2: Macon County – Wednesday, February 3rd – 1:30 PM to 3:30 PM
Meeting 3: Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

Stakeholder participation in this planning process is very important to Macon County and vital to the AEMA/FEMA approval of the updated hazard mitigation plan. In fact, FEMA requires that at least one representative from each jurisdiction in each county participate in the planning process. The stakeholder list includes representatives for each local government, as well as representatives for education, emergency responders, healthcare, industry, and utilities. For Macon County, the jurisdictions included in the hazard mitigation plan are as follows:

- Macon County
- Town of Franklin
- Town of Notasulga
- Town of Shorter
- City of Tuskegee
- Macon County Schools / Board of Education
- Tuskegee University

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact Frank H. Lee, Macon County EMA Director, at frankhlee79@gmail.com. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

7.2.3.2 Meeting 2: Lowndes County LEPC

Lowndes County Meeting Flyer



PLANNING FOR NATURAL DISASTERS

The Lowndes County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Lowndes County.

The second Hazard Mitigation Plan meeting will be
Wednesday, February 3, 2021
10:00 AM to 12:00 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, February 2nd to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Lowndes County EMA office, at 334-548-5375 or lcengr@htcnet.net.

Lowndes County Email Meeting Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Monday, February 1, 2021 10:25 AM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Plan Meeting 2
Attachments: lowndes-county-plan 2015.pdf

Hello!

Please join the second **virtual meeting** for the Lowndes County Hazard Mitigation Plan Update by clicking on the Zoom link below. You may also join by telephone if you do not have access to video.

The meeting is scheduled for **Wednesday, February 3, 2021 from 10:00 AM to 12:00 PM.**

Prior to the meeting, please take time to review the Lowndes County Hazard Mitigation Strategy beginning on page 71 of the attached 2015 Lowndes County Hazard Mitigation Plan.

It is very important for at least one representative from each jurisdiction join these meeting. Please contact me if you have any questions, comments, or issues – see contact information below.

Thank you,
Tracy

Topic: Lowndes County Hazard Mitigation Meeting 2
Time: Feb 3, 2021 10:00 AM Central Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/87666337259?pwd=V0JHQmJUZFhsek9QSUY4VzNHZGJxUT09

Meeting ID: 876 6633 7259
Passcode: 482327
One tap mobile
+13126266799,,87666337259#,,,,*482327# US (Chicago)
+16465588656,,87666337259#,,,,*482327# US (New York)

Dial by your location
+1 312 626 6799 US (Chicago)
+1 646 558 8656 US (New York)
+1 301 715 8592 US (Washington DC)
+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)
+1 253 215 8782 US (Tacoma)
Meeting ID: 876 6633 7259
Passcode: 482327
Find your local number: https://us02web.zoom.us/u/kdGAKN5N3h

Tracy Delaney

South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

Lowndes County Meeting 2 Summary and Attendance List

The second meeting of the Lowndes County Local Emergency Planning Committees was conducted virtually via Zoom on Wednesday, February 3, 2021 from 10:00 AM to 12:00 PM. The purpose of the meeting was to determine hazard vulnerability in Lowndes County and to review the goals and mitigation strategies from the 2015 Lowndes County Hazard Mitigation Plan for current status and continued relevance. Because of the virtual meeting setting, there is no signed attendance roster. There were 15 persons participating on the Zoom Meeting, including the following:

Harold Bell	Tracy Delaney	Lucille Smith
Delmetre Bethel	Herbert Malone	Monique Smith
Jacqulyn Boone	Orbuty Ozier	Anne Spooner
Jason Burroughs	Howard Powell	Ben Waits
David Butts	Santina Rogers	
Jim Byard	Lowndes County	

Mrs. Delaney briefly reviewed information presented at the previous meeting regarding role and responsibilities of the LEPC, demographics, critical facilities, hazard risk assessment and the stakeholder and citizen surveys. She stated that she would be resending the links to the surveys to everyone in two separate email messages: one for LEPC members to take the Stakeholder Survey and one to be distributed to all contacts for the Community Survey.

The planning and regulatory tools available to each jurisdiction was discussed, along with the local participation in the National Flood Insurance Program (NFIP). It was noted that Gordonville is the only community not participating in the NFIP; however, Mayor Ozier asked how the Town of Gordonville could begin participating and stated that she would follow up on that. A review of hazard profiles was provided and committee members were asked to participate in developing a hazard risk index based on the risk and vulnerability to each hazard.

Mrs. Delaney then began a discussion of the previous plan goals and transitioning to new goals established for the AEMA Division D Regional Plan. Existing mitigation strategies were reviewed to identify actions that had been completed, actions that were no longer relevant and need to be deleted, and strategies that are still relevant and/or ongoing. The slide presentation and mitigation strategy review are attached.

To conclude the meeting, Mrs. Delaney reminded committee members of the date and time of the next meeting and asked each of them to further review the mitigation strategies and to take the stakeholder survey and distribute the community survey.

AEMA DIVISION D

Lowndes County
Hazard Mitigation Plan Update

February 3, 2021

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Divisions



LOWNDES AND MACON COUNTIES

2

AEMA DIVISION D

Lowndes County
Hazard Mitigation Plan Update
February 3, 2021

Participation Documentation
In Chat Box, please provide
Name, Title, Organization

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Division B Hazard Mitigation Plan Update

Last Meeting:
- Hazard Introduction
- LEPC Role/Responsibility
- Area Demographics
- Critical Facilities
- Hazard Risk Assessment
- Survey

Today's Meeting:
- Planning and Regulatory Tools
- Preliminary Goals and Action Plan Review
- Finalize Goals
- Jurisdiction Action Plans

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- Avalanche
- Coastal Erosion
- Dam Failure
- Drought / Extreme Heat
- Earthquake
- Flooding
- Hail
- Hurricane, Tropical Depression, Tropical Storm
- Landslides
- Land Subsidence / Sinkholes
- Lightening
- Tornadoes
- Tsunami
- Volcano
- Wildfire
- Winter Storms

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Planning and Regulatory Tools by Jurisdiction

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Zoning Ordinance	Building Codes	Flood Plain Regulations
Lowndes County					X
Benton			X	X	
Fort Deposit			X	X	
Gordonville			X	X	
Hayneville					
Lowndesboro	X		X		
Mosses	X		X		
White Hall					
Unincorp County					X

Notes:
1. *A Comprehensive Plan* is a current and active plan for managing existing and future growth and development throughout the jurisdiction.
2. *A Capital Improvement Plan* is a five- to six-year plan for capital facilities improvements tied directly to the comprehensive plan.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

National Flood Insurance Program Participation

CID	Name	County	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Ref-Emer Date	Tribal
Participating Communities							
010272#	Lowndes County	Lowndes	11/29/1974	9/15/1984	9/3/2014	9/15/1984	No
010302#	Benton	Lowndes	4/5/1973	7/1/1974	9/3/2014	4/5/1973	No
010394#	Fort Deposit	Lowndes	5/29/1975	11/4/2009	11/04/2009(M)	8/13/2012	No
010341#	Hayneville	Lowndes		11/4/2009	11/04/2009(M)	6/14/2010	No
010509#	Mosses	Lowndes		11/4/2009	11/04/2009(M)	8/1/2013	
010507#	White Hall	Lowndes		11/4/2009	9/3/2014	8/8/2010	No
Non Participating Communities							
010508#	Gantsville	Lowndes		11/4/2009	11/4/2009	11/4/2010	No

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- **Background:** definition/description of the hazard, its characteristics, and potential effects.
- **Locations Affected**
- **Extent:** potential strength or magnitude of the hazard.
- **Historical Occurrences:** history of previous hazard events in the planning area, including their impacts.
- **Probability of Future Events:** likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low, or Very Low described below.
  - **High:** Probable major damage in a 1-10 Year Period
  - **Medium:** Probable major damage in a 10-50 Year Period
  - **Low:** Probable major damage in a 100 Year Period
  - **Very Low:** No probable major damage in a 100 Year Period

LOWNDES AND MACON COUNTIES

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Flash Flooding

Lowndes County
Frequency: 9 flash floods in 13 Years
Events: 2007, 2008, 2011, 2012, 2017
Magnitude: County Wide

Macon County
Frequency: 2 flash floods in 13 Years
Events: 2009, 2015
Magnitude: County Wide

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Tornadoes

Lowndes County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2012, 2017
Magnitude: EF0 to EF2

Macon County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2013, 2014, 2017, 2019
Magnitude: EF0 to EF3



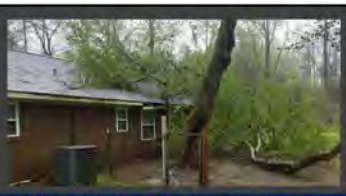
10

Drought

Lowndes County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

Macon County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

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High Winds and Thunderstorms

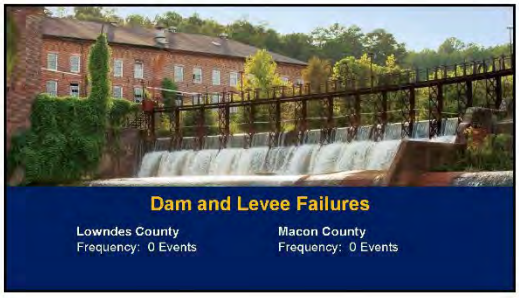
Lowndes County
Frequency: 301 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

Macon County
Frequency: 300 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

12



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15



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Earthquakes

Lowndes County
Frequency: None

Macon County
Frequency: None

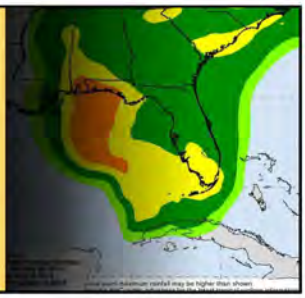


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Hurricanes and Tropical Storms

Lowndes County
Frequency: 2 Events in 13 Years
Events: 2008, 2009
Magnitude: County Wide

Macon County
Frequency: 2 Events in 13 Years
Events: 2008, 2009
Magnitude: County Wide



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Landslides

Lowndes County
Frequency: None

Macon County
Frequency: None



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Sinkholes

Lowndes County
Frequency: None

Macon County
Frequency: None



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AEMA DIVISION D

Vulnerability Assessment by Hazard

- Probability
- Impact
- Extent by Location
- Warning Time
- Duration

LOWNDES AND MACON COUNTIES

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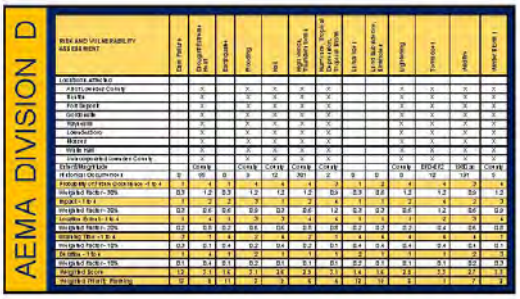
AEMA DIVISION D

Risk Index for Hazards

Probability	Very Low	Less than 1% annual probability	1	20%
	Low	Between 1% and 10% annual probability	2	
	Medium	Between 10% and 100% annual probability	3	
	High	100% annual probability	4	
Impact	Minor	Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.	1	30%
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.	3	
	Catastrophic	High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for one month or more.	4	
Location Extent	Negligible	Less than 1% of area affected.	1	20%
	Small	Between 1% and 10% of area affected.	2	
	Moderate	Between 10% and 50% of area affected.	3	
	Large	Between 50% and 100% of area affected.	4	
Warning Time	More than 24 hours	Self-explanatory	1	10%
	12 to 24 hours	Self-explanatory	2	
	6 to 12 hours	Self-explanatory	3	
	Less than 6 hours	Self-explanatory	4	
Duration	Less than 6 hours	Self-explanatory	1	10%
	Less than 24 hours	Self-explanatory	2	
	Less than one week	Self-explanatory	3	
	More than one week	Self-explanatory	4	

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AEMA DIVISION D



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AEMA DIVISION D

Lowndes County Hazards by Priority

(determined by risk and vulnerability assessment during Meeting 2)

PLEASE REVIEW CAREFULLY

1. Tornadoes
2. Winter Storms
3. Flooding, Flash Flooding
4. Hurricane, Tropical Depression/Storms
5. Drought/Extreme Heat
6. High Winds, Thunderstorms
7. Wildfires
8. Lightening
9. Hail
10. Land Subsidence, Sinkholes
11. Earthquakes
12. Landslides
13. Dam Failure

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Mitigation Goals and Strategies

Each adopting jurisdiction must have at least two strategies per hazard

LOWNDES COUNTY

- Lowndes County
- Town of Benton
- Town of Fort Deposit
- Town of Gordonville
- Town of Hayneville
- Town of Lowndesboro
- Town of Mosses
- Town of White Hall
- Lowndes County Schools/Board of Education

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

- **PREVENTION:** Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.
- **PROPERTY PROTECTION:** Protect structures and their occupants and contents from the damaging effects of hazard events.
- **NATURAL RESOURCE PROTECTION:** Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
- **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
- **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
- **PUBLIC EDUCATION AND AWARENESS:** Educate and foster public awareness of hazards and techniques available for mitigation.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment or development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program (NFIP) (Flooding)
7. Capital improvements planning (All Hazards)

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

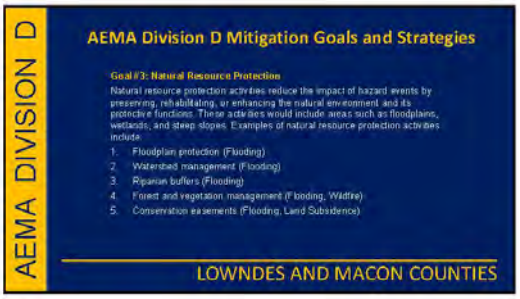
Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

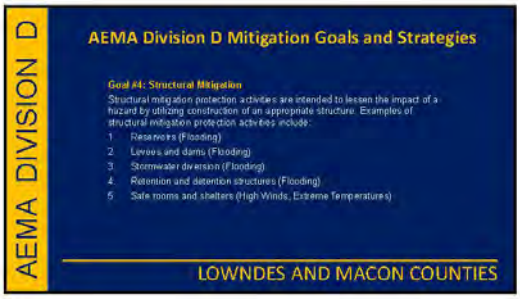
1. Acquisition of floodprone properties (Flooding)
2. Relocation of floodprone structures (Flooding)
3. Elevation of floodprone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

LOWNDES AND MACON COUNTIES

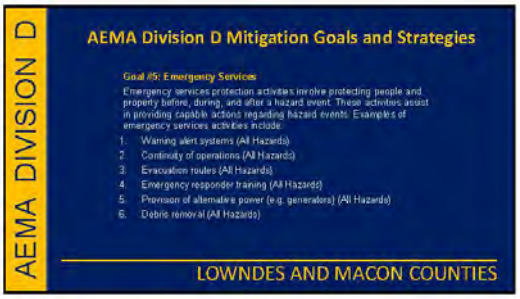
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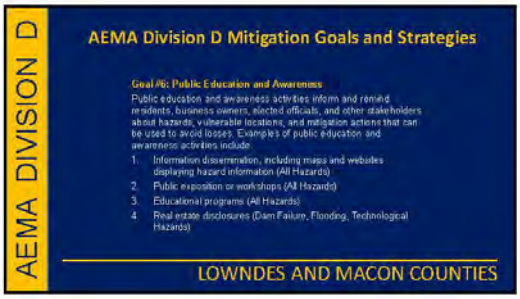
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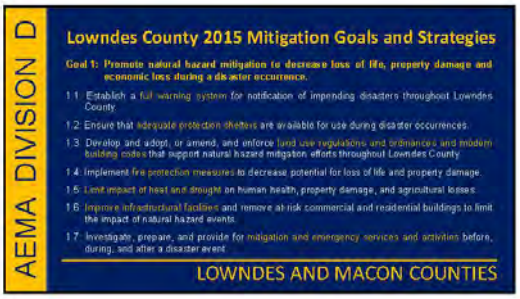
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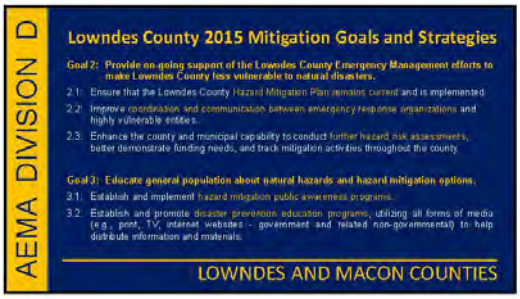
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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

AEMA DIV D	LOWNDES COUNTY
1. PREVENTION	Goal 1: 1.1 – Land Use Regulations, Ordinances and Building Codes
2. PROPERTY PROTECTION	
3. NATURAL RESOURCE PROTECTION	Goal 1: 1.4 – Fire Protection Measures Goal 1: 1.5 – Limit Impact of Heat and Drought
4. STRUCTURAL MITIGATION	Goal 1: 1.2 – Protection Shelters Goal 1: 1.6 – Improve Infrastructural Facilities
5. EMERGENCY SERVICES	Goal 1: 1.1 – Warning System Goal 1: 1.7 – Prepare/Provide for Emergency Services Before, During and After Event Goal 2: 2.1 – Hazard Mitigation Plan Remains Current Goal 2: 2.2 – Coordination/Communication Between Emergency Responders Goal 2: 2.3 – Additional Hazard Risk Assessment
6. PUBLIC EDUCATION AND AWARENESS	Goal 3: 3.1 – Hazard Mitigation Awareness Programs Goal 3: 3.2 – Disaster Prevention Education Programs

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies
LOWNDES COUNTY

Mitigation Strategy Review is provided in a separate document.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Division D Hazard Mitigation Plan Update

Next Meeting – February 10, 2021
Lowndes and Macon County
at 10:00 AM

Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS
Lowndes County Community Survey: https://www.surveymonkey.com/r/LowndesHMPCS

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Division D Hazard Mitigation Plan Update

Before Next Meeting:
- **Review Mitigation Strategies!**
- **Complete Survey**
- **Distribute Survey**

Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS
Lowndes County Community Survey: https://www.surveymonkey.com/r/LowndesHMPCS

Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS
Macon County Community Survey: https://www.surveymonkey.com/r/MaconHMPCS

LOWNDES AND MACON COUNTIES

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Status Abbreviations: C = Complete, O = Ongoing, N = Not Started

Status	2021 Validity			Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score	Lowndes County	Benton	Fort Deposit	Gordonville	Hayneville	Lowndesboro	Mosses	White Hall	Lowndes County Schools
	Y	N	N/A																
Goal 1: Promote natural hazard mitigation as a means to decrease loss of life, property damage and economic loss during a disaster occurrence.																			
1.1. Establish a full warning system for notification of impending disasters throughout Lowndes County.																			
O	✓			5	Install **warning sirens** as possible to ensure adequate coverage of population throughout Lowndes County, at a rate of one siren every two years and an estimated cost of $17,500 per siren.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA	Federal, State, Municipal	H		X	X	X	X	X	X	X	X	
O			✓	5	~~Designate~~ a **central emergency coordinator** in each municipality and community to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	Lowndes County EMA, Municipal Councils	County, Municipal	H		X	X	X	X	X	X	X	X	X
O	✓			5	Investigate use of **phone messaging system** to provide warning of all impending hazardous conditions.	All Hazards	Lowndes County E911	County, Municipal	H		X	X	X	X	X	X	X	X	X
1.2 Ensure that adequate protection shelters are available for use during disaster occurrences.																			
O	✓			4	Maintain and expand existing **shelter facilities** to provide adequate pre-disaster care and space, as needed.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA, Shelter Operators	Federal, State, County,	H		X	X	X	X	X	X	X	X	X
O	✓			4	Designate and upgrade/retrofit, as necessary, **existing public and institutional facilities** to provide shelter in areas of Lowndes County where there currently are no shelters, primarily targeting schools, churches, and community centers, at a rate of one site every two years.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA, Shelter Operators	Federal, State, County, Municipal	M		X	X	X	X	X	X	X	X	X
O	✓			4	Purchase **emergency power generators** for shelters to provide emergency power during natural disaster events.	Tornadoes, Hurricanes, Tropical Storms, Severe	Lowndes County EMA	County	L		X	X	X	X	X	X	X	X	X
O	✓			4	Partner with non-profit and private organizations, as possible, to **construct new public shelter facilities** in those areas of the county with no shelter facilities.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA, Non-Profits, Private Entities	State	L		X	X	X	X	X	X	X	X	
O	✓			4	Secure funds to continue efforts to **assist citizens in constructing private shelters** on their land at a rate of seven shelters per year. (Approx. $5,000 per shelter)	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA	Federal, Private	H		X	X	X	X	X	X	X	X	
o	✓			4	Work with developers, homebuilders and contractors to **promote construction of a safe room** in all new residential development.	Tornadoes, Hurricanes, Tropical Storms, Severe Storms	Lowndes County EMA, City Building Officials	County, Municipal	M		X	X	X	X	X	X	X	X	
N	✓			6	**Publicize information on locations of existing public shelters** and when to use them.	All Hazards	Lowndes County EMA	County	H		X	X	X	X	X	X	X	X	X

1.3 Develop and adopt, or amend, and enforce land use regulations and ordinances and modern building codes that support natural hazard mitigation efforts throughout Lowndes County.																				
O	✓			1	Incorporate and enforce **flood management provisions** in all county and municipal land use regulations and zoning ordinances.	Flooding	Building Officials	County, Municipal	H		X	X	X	X	X	X	X	X	
O	✓			1	Promote the **best use of flood plain areas** for environmental management, recreational development, and aesthetic enjoyment in all future land use and development plans and policies.	Flooding	County and Municipal Building Officials	County, Municipal	H		X	X	X	X	X	X	X	X	
N	✓			1	Develop **long-range growth and development plan** for Lowndes County to address permitting and construction process in unincorporated areas.	All Hazards	County Engineer	Federal, State, County	M		X								
N	✓			1	Adopt and enforce modern **building codes** (e.g., the 2003 International Building Code or the NFPA 5000) at the county and municipal levels.	All Hazards	County and Municipal Building Officials	County, Municipal	H		X	X	X	X	X	X	X	X	
N			✓	1	~~Ensure that the **Lowndes County Emergency Management Agency** is involved in the review of all local future growth and development plans.~~	All Hazards	County and Municipal Building Officials	County, Municipal	M		X	X	X	X	X	X	X	X	
N	✓			2	Identify and obtain **properties in floodplains to be used for greenways**, open spaces, parks, trails, and other recreational activities.	Flooding	Lowndes County, All Municipal Planning Officials	Federal, State, County, Municipal	H		X	X	X	X	X	X	X	X	
0	✓			1	Promote and encourage the County and municipalities that are located in known floodplains, and that are not participating in and/or are sanctioned by FEMA's National Flood Insurance Program (NFIP), **to join/rejoin the NFIP**.	Flooding	Lowndes County Engineering, Councils	County, Municipal	H		X	X	X	X	X	X	X	X	X
N	✓			6	Consider **road signage** program to ensure that citizens and travelers are **aware of location of flood-prone areas.**	Flooding	County Engineering	County, State	L		X	X	X	X	X	X	X	X	X
1.4 Implement fire protection measures to decrease potential for loss of life and property damage.																				
O	✓			3	Establish education program to **provide information on methods to construct buffers and fire breaks** on private property in wild land interface areas.	Wildfires	Lowndes County EMA, All VFDs	Federal, State, County	M		X	X	X	X	X	X	X	X	
O	✓			6	Support Alabama Forestry Commission efforts to help **educate private landowners** to protect their own and other's property through construction of fire lanes and fire breaks on forested property, making landowners aware of both their responsibility and liability.	Wildfires	Lowndes County EMA, All VFDs	County, Municipal	M		X	X	X	X	X	X	X	X	
1.5 Limit impact of heat and drought on human health, property damage and agricultural losses.																				
N			✓	6	~~Work with the county and municipalities to implement **public awareness and education efforts about water conservation and water quality.**~~	Extreme Heat, Drought	Water Providers	Municipal, Water Providers	M		X	X	X	X	X	X	X	X	X
O	✓			6	Work with Lowndes County medical providers to **develop emergency supplies and education program**.	All Hazards	Lowndes County Health Department	County, Medical Providers	M		X	X	X	X	X	X	X	X	X
C			✓	6	~~Work with Lowndes County Farm Service Agency and County Extension Service to **establish a drought information center.**~~	Extreme Heat, Drought	Lowndes County	Federal, State, County	M		X	X	X	X	X	X	X	X	
?	✓			3	Develop a **drought and heat indicator plan and warning system** that includes a response strategy.	Extreme Heat, Drought	Farm Service Agency	State, County	M		X	X	X	X	X	X	X	X	
?				6	Develop print **public service announcements**.	Extreme Heat, Drought	Farm Service Agency	State, County	M		X	X	X	X	X	X	X	X	X

1.6 Improve infrastructural facilities and remove at-risk commercial and residential buildings to limit the impact of natural hazard events.																					
O	✓			4	**Identify roads that require elevation and paving**, and that have a high **potential for flooding and/or washing** during flood events, to provide access and limit erosion and sedimentation.	Flooding	ALDOT, Lowndes County Engineering	State, County, Municipal	M		X	X	X	X	X	X	X	X		
O	✓			4	Continue **bridge inspection and improvement efforts** to prevent washing and/or failure during flood events.	Flooding	ALDOT, Lowndes County Engineering	Federal, State, County	H		X	X	X	X	X	X	X	X		
O	✓			4	Maintain **all county roads to allow constant access for emergency response**, recovery and repair, and continuity of delivery services at eight roads per year. Also, the LEPC will continue to work with the county and other jurisdictions to improve drainage systems in the unincorporated and incorporated parts of the county.	All Hazards	ALDOT, Lowndes County Engineering	Federal, State, County	H		X									
N	✓			2	Utilize **AEMA Flood Relocation Program** and other appropriate FEMA and/or AEMA programs to remove at-risk commercial and residential structures from flood prone and other natural hazard areas, if necessary in the future.	All Hazards	Lowndes County EMA, Lowndes County, All Municipalities	Federal, State, County, Municipal	H		X	X	X	X	X	X	X	X		
1.7 Investigate, prepare, and provide for mitigation and emergency services and activities before, during, and after a disaster event.																					
O	✓			5	~~Investigate~~ **need for emergency water supply** during disaster events.	All Hazards	All Water Providers	State, Water Providers	M		X	X	X	X	X	X	X	X		
			✓	3	~~**Limit non-critical water consumption** during severe drought conditions~~	Extreme Heat; Drought	All Water Providers	Water Providers	M		X	X	X	X	X	X	X	X		
O	✓			5	Inventory the county's emergency response services to **identify any existing needs or shortfalls** in terms of personnel, equipment, or required resources.	All Hazards	Lowndes County EMA, All VFDs	County, Municipal	H		X	X	X	X	X	X	X	X		
N	✓			5	Investigate the need and feasibility of **establishing a local reserve fund for repairing and/or incorporating hazard mitigation** measures for public and private facilities and infrastructure that are at risk of being damaged or have been damaged by natural hazards.	All Hazards	County Commission, All Municipal Councils	County, Municipal, Private	H		X	X	X	X	X	X	X	X		
O	✓			5	Continue to **research and provide hazard mitigation, emergency preparedness, and disaster recovery grant writing and/or administration services** for available grant and loan programs (e.g., AFGP, FMA, HMGP, ~~PDM~~, etc.).	All Hazards	Lowndes County EMA	County, Municipal	M		X	X	X	X	X	X	X	X		
O	✓			5	Investigate the need for and acquire **emergency electrical power generation equipment** to provide back-up emergency electrical power to critical facilities.	All Hazards	Lowndes County EMA , Lowndes County Commission, All Municipalities	Federal, State, County, Municipal	H		X	X	X	X	X	X	X	X	X	
Goal 2: Provide ongoing support of the Lowndes County Emergency Management efforts to make Lowndes County less vulnerable to natural disasters.																					
2.1 Ensure that the Lowndes County Hazard Mitigation Plan remains current and is implemented.																					
O	✓			5	Update the **Lowndes County Hazard Mitigation Plan every five years** as required by regulations.	All Hazards	Lowndes County EMA	Federal, State, County	M		X	X	X	X	X	X	X	X	X	
O	✓			6	Communicate with the general public at least annually to provide a **status report of the plan and any project or programs** that are a result of the plan and its implementation.	All Hazards	Lowndes County EMA	County	M		X	X	X	X	X	X	X	X		
O	✓			5	Municipalities should provide **local human resources and other resources,** such as materials and supplies, to assist in implementation of the Lowndes County Hazard Mitigation Plan and its regular update.	All Hazards	All Municipalities	Municipal	H		X	X	X	X	X	X	X	X	X	

2.2 Improve coordination and communication between emergency response organizations and highly vulnerable entities.																				
O	✓			5	Designate a **central emergency coordinator in each municipality and community** to better facilitate communications with the Lowndes County Emergency Management Agency.	All Hazards	County Commission, All Municipal Governments	County, Municipal	H		X	X	X	X	X	X	X	X	X
O	✓			5	Provide for **incident command training** for the local emergency coordinators and other responders.	All Hazards	Lowndes County EMA	Federal, State, County	H		X	X	X	X	X	X	X	X	X
O			✓	6	Develop an on-going cycle to **provide regular updates** to the Lowndes County Commission, municipal councils, fire protection and law enforcement officials, utility boards, and other emergency responders.	All Hazards	Lowndes County EMA	County	M		X	X	X	X	X	X	X	X	
				5	Investigate the need and feasibility of **upgrading communications systems** and increasing coverage and compatibility across the county and municipalities.	All Hazards	Lowndes County EMA	County, Municipal	M		X	X	X	X	X	X	X	X	
2.3 Enhance the county's and municipalities' capability to conduct further hazard risk assessments, better demonstrate funding needs, and track mitigation activities throughout the county.																				
O	✓			4	Continue to **identify the county's most at-risk critical facilities, and evaluate the potential mitigation techniques and activities** for protecting each facility to the maximum extent possible.	All Hazards	Lowndes County EMA, LEPC, Local Governments, Utilities	County, Municipal & All Utilities	H		X	X	X	X	X	X	X	X	X
O	✓			5	Incorporate (or continue) **development of a Geographic Information System (GIS) to maintain current cadastral and spatial data** for purposes of inventorying critical facilities and infrastructure, conducting more detailed hazard risk assessments, and for tracking permitting and land use patterns.	All Hazards	State, SCADC, Lowndes County EMA, E-911, County Tax Assessor, County and Municipal Building Officials, Utilities	State, SCADC, County, Municipal	H		X	X	X	X	X	X	X	X	X
Goal 3: Education general population about natural hazards and hazard mitigation options.																				
3.1 Establish and implement hazard mitigation public awareness program.																				
O	✓			6	Cooperate and coordinate with various agencies and entities to assist with **distribution of information and materials**, including Chambers of Commerce, DHR, Lowndes County Board of Education, churches, municipalities, etc.	All Hazards	Lowndes County EMA, LEPC	County, Municipal, Private	M		X	X	X	X	X	X	X	X	X
O	✓			6	Develop a **portable information booth for display** at local fairs and public events to distribute materials.	All Hazards	Lowndes County EMA, LEPC	County, Municipal	M		X	X	X	X	X	X	X	X	X
				6	Create and distribute **magnets that list all emergency contact information** of local responding agencies.	All Hazards	Lowndes County EMA, LEPC, All Municipalities	County, Municipal, Private	M		X	X	X	X	X	X	X	X	X
3.2 Establish and promote disaster prevention education programs, utilizing all forms of media (e.g., print, TV, internet websites - government and related non-governmental) to help distribute information and materials.																				
O	✓			6	Investigate working with Lowndes County Extension System to **develop adult training/certification courses on land management** (best management practices) to decrease property damage during natural disaster events.	All Hazards	Lowndes County EMA, LEPC	USDA, County	M		X	X	X	X	X	X	X	X	
N	✓			6	Develop **broadcast public service announcements** for airing on local television and radio stations.	All Hazards	Lowndes County EMA, LEPC	County, Municipal	M		X	X	X	X	X	X	X	X	
				6	Develop **print public service announcements** for publication in local newspaper and agency newsletters.	All Hazards	Lowndes County EMA, LEPC	County, Municipal	M		X	X	X	X	X	X	X	X	
				6	Develop **information website with links** from Lowndes County Commission and municipal websites.	All Hazards	Lowndes County EMA, LEPC	County, Municipal, Private	M		X	X	X	X	X	X	X	X	X
				6	Incorporate **hazard awareness and mitigation into the curricula of local schools.**	All Hazards	Lowndes County BOE	State & County	M		X	X	X	X	X	X	X	X	X
o	✓			6	Develop **coloring and activity books** at four appropriate age levels for widespread annual distribution.	All Hazards	Lowndes County EMA, Lowndes County BOE	Federal, State, County, Municipal	L		X	X	X	X	X	X	X	X	X

Lowndes County Meeting 2 Follow Up Emails

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Thursday, February 4, 2021 4:00 PM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation
Attachments: Lowndes Hazard Mitigation Meeting 2 - 020321.pdf; LOWNDES COUNTY HAZARD MITIGATION STRATEGY DRAFT 020321.pdf

Hello Everyone!

Please take 5 to 7 minutes to complete the survey at the link below:
Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS

Also, I have attached the following:

1. A PDF file of the PowerPoint presentation from Meeting 2. Please be sure to review the Risk and Vulnerability Assessment and Hazard Priority List on pages 25 and 26.
2. A draft Lowndes County Mitigation Strategy Review in a separate email. Please review the Priority/Status and Benefit/Cost Score for each mitigation strategy for your jurisdiction.

Finally, please plan to attend the next meetings as listed below. I will send the Zoom Meeting Invitations out by Monday, February 8th.

Hazard Mitigation Plan Update Meeting Schedule
Meeting 3: Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact David Butts, Lowndes County EMA Director, at lcengr@htcnet.net. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation!
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Thursday, February 4, 2021 4:05 PM
To: dcs@roadrunner.com
Subject: Lowndes County Hazard Mitigation Community Survey

Please forward this email to family, friends, and co-workers, asking them to **take less than TWO minutes** to complete the Lowndes County Hazard Mitigation Community Survey at the link below:

https://www.surveymonkey.com/r/LowndesHMPCS

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
dcs@roadrunner.com

7.2.3.3 Meeting 2: Macon County LEPC

Macon County Meeting Flyer



PLANNING FOR NATURAL DISASTERS

The Macon County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Macon County.

The second Hazard Mitigation Plan meeting will be
Wednesday, February 3, 2021
1:30 PM to 3:30 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, February 2nd to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Macon County EMA office, at 334-724-2626 or frankhlee79@gmail.com.

Macon County LEPC Meeting Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Monday, February 1, 2021 10:48 AM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation Plan Meeting 2
Attachments: macon-county-plan 2015.pdf

Hello!

Please join the second **virtual meeting** for the Macon County Hazard Mitigation Plan Update by clicking on the Zoom link below. You may also join by telephone if you do not have access to video.

The meeting is scheduled for **Wednesday, February 3, 2021 from 1:30 PM to 3:30 PM.**

Prior to the meeting, please take time to review the Macon County Hazard Mitigation Strategy beginning on page 169 of the attached 2015 Macon County Hazard Mitigation Plan.

It is very important for at least one representative from each jurisdiction join these meeting. Please contact me if you have any questions, comments, or issues – see contact information below.

Thank you,
Tracy

Time: Feb 3, 2021 01:30 PM Central Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/84387819351?pwd=VHNFTnNpOEF2ejkxVFAxbGNTdFBkQT09

Meeting ID: 843 8781 9351
Passcode: 407561
One tap mobile
+13017158592,,84387819351#,,,,*407561# US (Washington DC)
+13126266799,,84387819351#,,,,*407561# US (Chicago)

Dial by your location
+1 301 715 8592 US (Washington DC)
+1 312 626 6799 US (Chicago)
+1 646 558 8656 US (New York)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
+1 669 900 9128 US (San Jose)
Meeting ID: 843 8781 9351
Passcode: 407561
Find your local number: https://us02web.zoom.us/u/kza9tUbWs

Tracy Delaney

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Macon County Meeting 2 Summary and Attendance List

The second meeting of the Macon County Local Emergency Planning Committees was conducted virtually via Zoom on Wednesday, February 3, 2021 from 1:30 PM to 3:30 PM. The purpose of the meeting was to determine hazard vulnerability in Macon County and to review the goals and mitigation strategies from the 2015 Macon County Hazard Mitigation Plan for current status and continued relevance. Because of the virtual meeting setting, there is no signed attendance roster. There were 18 persons participating on the Zoom Meeting, including the following:

Lasundra Battle	Tony Haygood	Lashaunda Richardson
Jason Christian	Mia Hutcherson	J.D. Smith
Mack Crockett	Frank H. Lee	Jennifer Smith
George Davis	Coty Madden-Huguley	Monique Smith
Tracy Delaney	Simona Miller	Valerie Smith
Jimmy Ellis	Denise Pilato	Joe Turnham

Mrs. Delaney briefly reviewed information presented at the previous meeting regarding role and responsibilities of the LEPC, demographics, critical facilities, hazard risk assessment and the stakeholder and citizen surveys. She stated that she would be resending the links to the surveys to everyone in two separate email messages: one for LEPC members to take the Stakeholder Survey and one to be distributed to all contacts for the Community Survey.

The planning and regulatory tools available to each jurisdiction was discussed, along with the local participation in the National Flood Insurance Program (NFIP). It was noted that Franklin is the only community not participating in the NFIP; however, the Town of Franklin has minimal floodplains within its borders. County Engineer, J.D. Smith stated that the existing flood maps are currently undergoing review and revisions. A review of hazard profiles was provided and committee members were asked to participate in developing a hazard risk index based on the risk and vulnerability to each hazard. Committee members stated that Macon County had been included the 2020 Hurricane Sally FEMA Declaration ($2.3 million), as well as flooding declarations in 2015 and 2019 that caused repetitive road damage.

Mrs. Delaney then began a discussion of the previous plan goals and transitioning to new goals established for the AEMA Division D Regional Plan. Existing mitigation strategies were reviewed to identify actions that had been completed, actions that were no longer relevant and need to be deleted, and strategies that are still relevant and/or ongoing. The slide presentation and mitigation strategy review are attached.

To conclude the meeting, Mrs. Delaney reminded committee members of the date and time of the next meeting and asked each of them to further review the mitigation strategies and to take the stakeholder survey and distribute the community survey.

Macon County Meeting 2 Slide Presentation and Mitigation Strategy Review

AEMA DIVISION D

Macon County
Hazard Mitigation Plan Update

February 3, 2021

LOWNDES AND MACON COUNTIES

1

AEMA DIVISION D

AEMA Divisions



LOWNDES AND MACON COUNTIES

2

AEMA DIVISION D

Macon County
Hazard Mitigation Plan Update
February 3, 2021

Participation Documentation
In Chat Box, please provide
Name, Title, Organization

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Division B Hazard Mitigation Plan Update

Last Meeting:
- Hazard Introduction
- LEPC Role/Responsibility
- Area Demographics
- Critical Facilities
- Hazard Risk Assessment
- Survey

Today's Meeting:
- Planning and Regulatory Tools
- Preliminary Goals and Action Plan Review
- Finalize Goals
- Jurisdiction Action Plans

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- Avalanche
- Coastal Erosion
- Dam Failure
- Drought / Extreme Heat
- Earthquake
- Flooding
- Hail
- Hurricane, Tropical Depression, Tropical Storm
- Landslides
- Land Subsidence / Sinkholes
- Lightening
- Tornadoes
- Tsunami
- Volcano
- Wildfire
- Winter Storms

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Planning and Regulatory Tools by Jurisdiction

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Zoning Ordinance	Building Codes	Flood Plain Regulations
Macon County	X				X
Franklin					X
Notasulga	X		X	X	X
Shorter	X		X	X	X
Tuskegee	X		X	X	X
Unincorp County					X

Notes:

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

National Flood Insurance Program Participation

CID	Name	County	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Ref-Emer Date	Tribal
Participating Communities							
010149#	Macon County	Macon	1/6/1978	4/1/1982	11/18/2009	4/1/1982	No
010149#	Notasulga	Macon	10/25/1974	11/24/1978	11/18/09(M)	11/24/1978	No
010512#	Shorter	Macon		11/18/2009	11/18/09 (M)	3/2/2011	No
010150#	Tuskegee	Macon	8/16/1974	1/6/1982	1/18/2009	1/6/1982	No
Non Participating Communities							
010385#	Franklin	Macon		11/18/2009	11/18/2009	11/18/2010	No

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- **Background:** definition/description of the hazard, its characteristics, and potential effects.
- **Locations Affected**
- **Extent:** potential strength or magnitude of the hazard.
- **Historical Occurrences:** history of previous hazard events in the planning area, including their impacts.
- **Probability of Future Events:** likelihood of future hazard occurrences in the planning area. Many hazards may affect the entire planning area, while other hazards are more localized due to specific factors. These qualitative descriptions are from historical occurrences and other risk factors. Because of the lack of comprehensive quantitative data on many of the hazards, susceptibility to future damage will be noted by categories of High, Medium, Low, or Very Low described below.
  - **High:** Probable major damage in a 1-10 Year Period
  - **Medium:** Probable major damage in a 10-50 Year Period
  - **Low:** Probable major damage in a 100 Year Period
  - **Very Low:** No probable major damage in a 100 Year Period

LOWNDES AND MACON COUNTIES

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Flash Flooding

Lowndes County
Frequency: 9 flash floods in 13 Years
Events: 2007, 2008, 2011, 2012, 2017
Magnitude: County Wide

Macon County
Frequency: 2 flash floods in 13 Years
Events: 2009, 2015
Magnitude: County Wide

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Tornadoes

Lowndes County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2012, 2017
Magnitude: EF0 to EF2

Macon County
Frequency: 10 Tornadoes in 13 Years
Events: 2007, 2009, 2011, 2013, 2014, 2017, 2019
Magnitude: EF0 to EF3



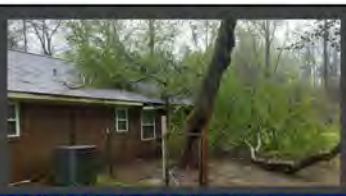
10

Drought

Lowndes County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

Macon County
Frequency: 65 Months in 13 Years
Events: 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2016, 2017, 2018, 2019
Magnitude: County Wide

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High Winds and Thunderstorms

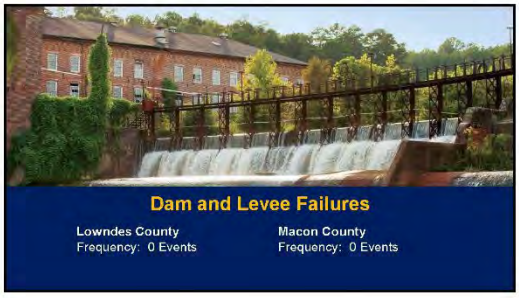
Lowndes County
Frequency: 301 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

Macon County
Frequency: 300 Events in 13 Years
Events: Multiple events every year
Magnitude: County Wide

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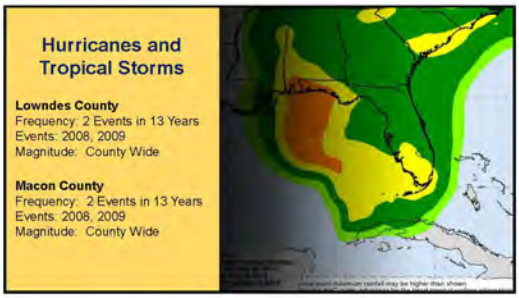
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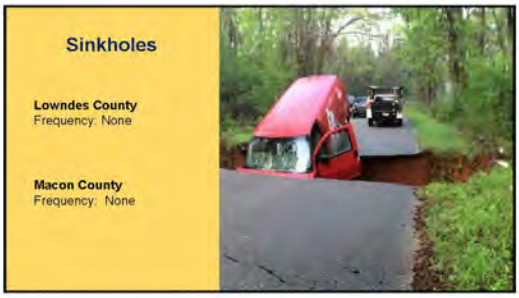
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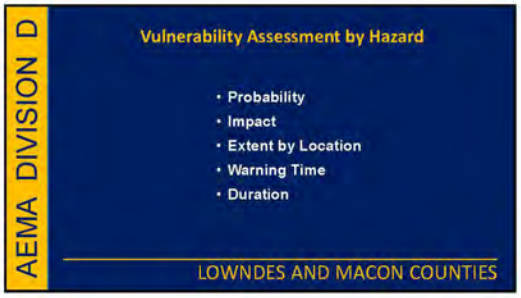
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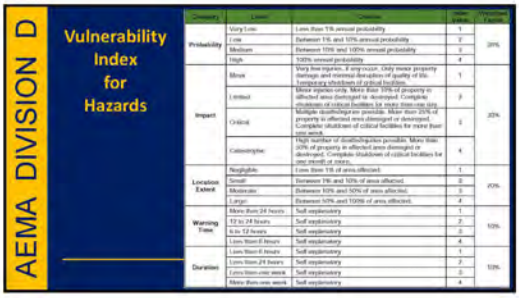
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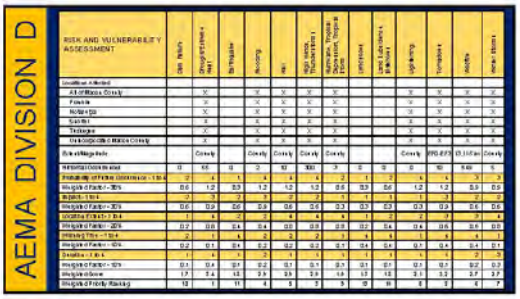


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AEMA DIVISION D



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AEMA DIVISION D

Hazards by Priority

(determined by risk and vulnerability assessment during Meeting 2)

PLEASE REVIEW CAREFULLY

1. Drought / Extreme Heat
2. Tornadoes
3. High Winds, Thunderstorms
4. Flooding, Flash Flooding
5. Hail
6. Wildfire
7. Winter Storms
8. Lightening
9. Hurricane, Tropical Depression, Tropical Storms
10. Land Subsidence, Sinkholes
11. Earthquakes
12. Dam Failure
13. Landslides

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Mitigation Goals and Strategies

Each adopting jurisdiction must have at least two strategies per hazard

MACON COUNTY

- Macon County
- Town of Franklin
- Town of Notasulga
- Town of Shorter
- City of Tuskegee
- Macon County Schools/ Board of Education
- Tuskegee University

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

- **PREVENTION:** Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.
- **PROPERTY PROTECTION:** Protect structures and their occupants and contents from the damaging effects of hazard events.
- **NATURAL RESOURCE PROTECTION:** Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
- **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
- **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
- **PUBLIC EDUCATION AND AWARENESS:** Educate and foster public awareness of hazards and techniques available for mitigation.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment or development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program (NFIP) (Flooding)
7. Capital improvements planning (All Hazards)

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

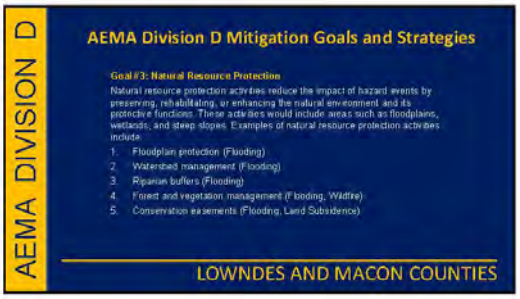
Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

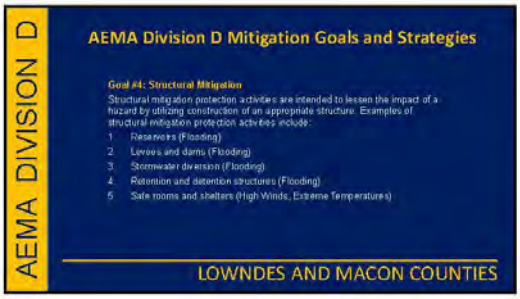
1. Acquisition of floodprone properties (Flooding)
2. Relocation of floodprone structures (Flooding)
3. Elevation of floodprone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

LOWNDES AND MACON COUNTIES

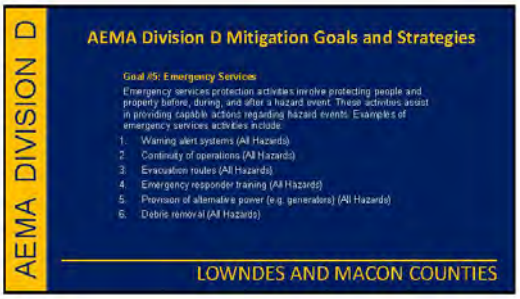
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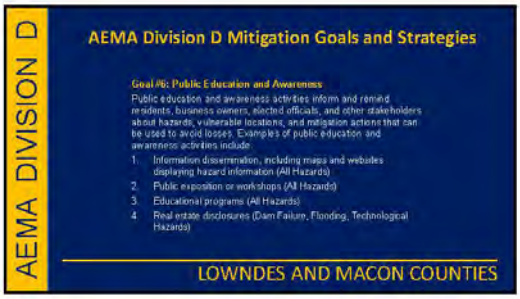
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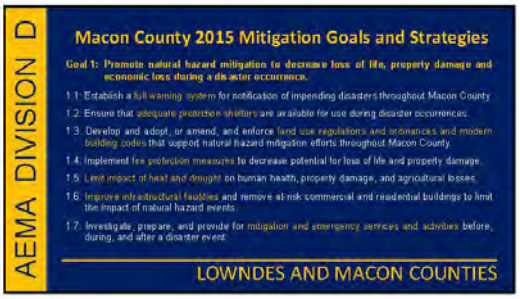
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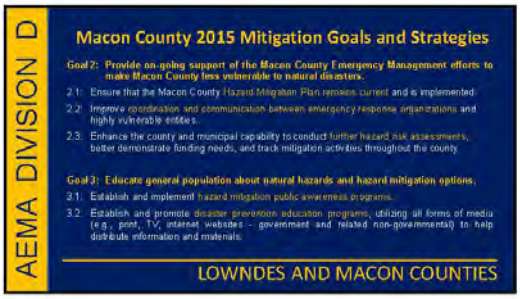
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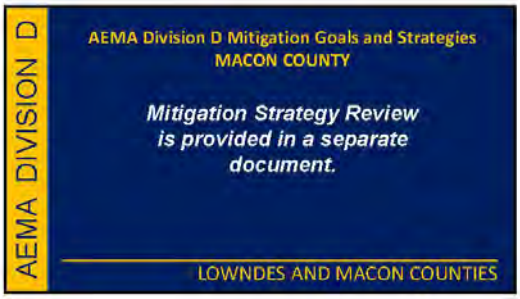
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AEMA DIVISION D
AEMA Division D Mitigation Goals and Strategies
AEMA DIV D
MACON COUNTY
1. PREVENTION
Goal 1: 1.1 – Land Use Regulations, Ordinances and Building Codes
2. PROPERTY PROTECTION
3. NATURAL RESOURCE PROTECTION
Goal 1: 1.4 – Fire Protection Measures
Goal 1: 1.5 – Limit Impact of Heat and Drought
4. STRUCTURAL MITIGATION
Goal 1: 1.2 – Protection Shelters
Goal 1: 1.6 – Improve Infrastructural Facilities
5. EMERGENCY SERVICES
Goal 1: 1.1 – Warning System
Goal 1: 1.7 – Prepare/Provide for Emergency Services Before, During and After Event
Goal 2: 2.1 – Hazard Mitigation Plan Remains Current
Goal 2: 2.2 – Coordination/Communication Between Emergency Responders
Goal 2: 2.3 – Additional Hazard Risk Assessment
6. PUBLIC EDUCATION AND AWARENESS
Goal 3: 3.1 – Hazard Mitigation Awareness Programs
Goal 3: 3.2 – Disaster Prevention Education Programs
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
AEMA Division D Mitigation Goals and Strategies
MACON COUNTY
Mitigation Strategy Review is provided in a separate document.
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
Division D Hazard Mitigation Plan Update
Next Meeting – February 10, 2021
Lowndes and Macon County
at 10:00 AM
Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS
Macon County Community Survey: https://www.surveymonkey.com/r/MaconHMPCS
LOWNDES AND MACON COUNTIES

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MACON COUNTY HAZARD MITIGATION STRATEGY
DRAFT: 2/3/21

Status Abbreviations: C = Complete, O = Ongoing, N = Not Started

Status	2021 Validity			Goal Addressed	Mitigation Strategy	Hazards Addressed													Funding Sources	Lead Agency	Priority/Status	Benefit/Cost Score	Macon County	Franklin	Notasulga	Shorter	Tuskegee	Macon County Schools	Tuskegee University
	Y	N	N/A			Dam Failure	Drought/Heat	Earthquake	Flooding	Hail	Tstorms, Winds	Hurricanes	Landslides	Sinkholes	Lightening	Tornadoes	Wildfire	Winter Storm											
O	X			5	Develop a **warning plan to install approximately 10 additional sirens** at targeted sites to adequately cover population pockets in rural Macon County.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP, ADECA	Macon County EMA	H	M	X	X	X	X	X		
O	X			1	Continue to participate in the **NFIP**				X										Flood Plain Manager	HMGP	H	H	X	X	X	X	X		
O	X			5	Designate a **central emergency coordinator** in each municipality and community to better facilitate communications with the Macon County Emergency Management Agency. Coordinate with 10 Volunteer Fire Departments.	X	X	X	X	X	X	X	X	X	X	X	X	X	N/A	Macon County EMA	M	H	X	X	X	X	X		
N	X			4	**Construct warning signage** for limited visibility due to **forest fires on major roads in targeted areas.**														Local, HMGP, Fire	Macon County FD/VFDs	M	M	X						
O	X			5	**Investigate use of phone messaging system** to provide warning of all impending hazardous conditions; consider "reverse" 911 systems.	X	X	X	X	X	X	X	X	X	X	X	X	X		E911	H	M	X	X	X	X	X		
O	X			4	**Maintain and expand existing shelter facilities** to provide adequate pre-disaster care and space, as needed, expand Red Cross facilities.					X	X					X			Local, Red Cross, MGMC MCCA	Macon County EMA	M	L	X	X	X	X	X		
O	X			4	Purchase **emergency generators** for post-disaster mitigation, as needed.	X	X	X	X	X	X	X	X	X	X	X	X	X	HMGP, ADECA	EMA	H	M	X	X	X	X	X		
O	X			4	Designate and upgrade/retrofit, as necessary, 11 **existing public facilities to provide shelter** in areas of Macon County where there currently are no shelters - primarily targeting schools and community centers, at a rate of one site every two years; Coordinate with critical facilities, include provisions for evacuation shelters.					X	X					X			Local, HMGP, ARC	EMA	H	L	X	X	X	X	X		
O	X			4	Investigate **construction of new public shelter facilities** in those areas of the county with no shelter facilities as long-term and low-priority task; Give priority to southeast part of the county; Possibly a School; Consider in conjunction with senior center with ADECA funding.					X	X					X			HMGP, Private	EMA	H	L	X	X	X	X	X		
O	X			4	Secure funds to continue efforts to **assist citizens in** constructing/installing private shelters on their land at a rate of seven shelters per year.					X	X					X			HMGP, Private	EMA	H	L	X	X	X	X	X		
O	X			4	Work with developer, home builders and contractors to promote **construction of a safe room** in all new residential development.					X	X					X			N/A	EMA	L	H	X						
O	X			6	Publicize information on **locations of existing public safe rooms** and when to use them; Coordinate with first responders; Utilize radio stations; Announce safe room openings in advance of events; Permanent evacuation and relocation procedures, to include evacuations from safe rooms.					X	X					X			Local, HMGP, Local ARC	EMA	M	H	X						
O	X			1	Incorporate and enforce **flood management ordinances** in all county and municipal zoning ordinances.				X										Local, HMGP	County Engineer, Local Flood Plain Manager	M	M	X	X	X	X	X		

Status	2021 Validity			Goal Addressed	Mitigation Strategy	Hazards Addressed												Funding Sources	Lead Agency	Priority/Status	Benefit/Cost Score	Macon County	Franklin	Notasulga	Shorter	Tuskegee	Macon County Schools	Tuskegee University
	Y	N	N/A			Dam Failure	Drought/Heat	Earthquake	Flooding	Hail	Storms, Winds	Hurricanes	Landslides	Sinkholes	Lightening	Tornadoes	Wildfire	Winter Storm											
O	X			1	Ensure that future land use and **growth plans do not extend into flood plain area**; Coordinate with updating of flood plain maps.				X										N/A	County Engineer, Local Flood Plain Manager	M	H	X	X	X	X	X		
O	X			1	Develop long-range growth and development plan for Macon County to **address permitting and construction** process in unincorporated areas.												X		Local, HMGP, Regional Planning	County Engineer	M	M	X						
O	X			1	Promote **updated comprehensive plans** for Tuskegee, Notasulga, Shorter and Franklin with planning jurisdictions.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP, Regional Planning	Macon County EMA, Macon County Planning Commission, Regional Planning Commission	M	M	X	X	X	X	X	X	
N	X			1	Ensure Macon County EMA is involved in the **review of all local future growth and development plans**.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP, Regional Planning	EMA	H	M	X	X	X	X	X	X	
N	X			2	Utilize AEMA **Flood Relocation Program** to remove commercial and residential structures from flood prone areas, if necessary in the future.				X										Local, HMGP, CDGP	Macon County EMA, Local Flood Plain Manager	M	L	X	X	X	X	X	X	
O	X			1	Develop and utilize **zoning ordinance to manage development** in urban fringed areas.												X		Local, HMGP	Macon County Commission, County Engineer	L	M	X	X	X	X	X	X	
O	X			3	Establish **educational programs to provide information on methods to construct buffers and fire breaks** on private property in urban interface areas.												X		Local, HMGP	EMA	L	H	X	X	X	X	X	X	
O	X			6	Support Alabama Forestry Commission efforts to **help educate private landowners to protect their own and others property through construction of fire lanes and fire breaks** on forested property; making landowners aware of both their responsibility and liability.												X		Local, HMGP, Fire	Macon County EMA, Local FDs and VFDs	L	H	X	X	X	X	X	X	
O	X			6	Work with Lower Tallapoosa River Watershed Management Committee to implement **public awareness and education efforts about water conservation and water quality**; Include in LEPC and coordinate notice of citizens of conservation, especially in drought conditions; Coordinate with watershed management planning.		X												Local, HMGP, Fire	Macon County EMA, Local FDs and VFDs	L	H	X	X	X	X	X	X	
O	X			4	Promote **interconnected water resource mapping** and planning process; Increase capacity of water systems for fire service and fire hydrants.		X												Local, HMGP, Fire	Macon County GIS	L	L	X	X	X	X	X	X	
O	X			6	Work with Macon County medical providers to **develop emergency supplies.**	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP, Fire, Medical	EMS, EMA	L	H	X	X	X	X	X	X	
O	X			6	Work with Macon County Farm Service Agency and County Extension Service to establish drought information.		X												Local, HMGP, Fire	EMA	L	H	X	X	X	X	X	X	

Status	2021 Validity			Goal Addressed	Mitigation Strategy	Hazards Addressed												Funding Sources	Lead Agency	Priority/Status	Benefit/Cost Score	Macon County	Franklin	Notasulga	Shorter	Tuskegee	Macon County Schools	Tuskegee University
	Y	N	N/A			Dam Failure	Drought/Heat	Earthquake	Flooding	Hail	T'storms, Winds	Hurricanes	Landslides	Sinkholes	Lightening	Tornadoes	Wildfire	Winter Storm										
?				3	Develop a drought and heat indicator plan and a warning system that includes a response strategy.		X												Local, HMGP	EMA	L	M	X	X	X	X	X	X	
N	X			6	Develop **print public service announcements**	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	L	M	X						
O	X			4	**Elevate and pave county roads that have high potential for flooding and/or washing during flood/flash flood events** to provide access and limit erosion and sedimentation. ~~This includes 2 miles of St. Marks Road ($205,000); .75 miles of Pecola Road ($80,000); 2.10 miles of a County Road from Highway 80 to Hardaway County Road 67 ($2,004,999); 7 miles of County Road 73 ($795,000) and 3.5 miles ($355,000)~~ **Include repetitive loss roads**				X									Local, HMGP, DOT	Macon County Road Department, County Engineer	M	L	X	X	X	X	X	X	
O	X			4	**Continue bridge inspection and improvement effor**ts to prevent washing and/or failure during floods/flash floods.				X									Local, HMGP, DOT	Macon County Road Department, County Engineer	M	L	X	X	X	X	X	X	
O	X			4	**Maintain all roads to allow constant access for emergency response**, recovery and repair and continual delivery of services to residents. This will be completed at 8 roads per year. **Possibly identify specific roads.**				X									Local, HMGP, DOT	Macon County Road Department, County Engineer	M	L	X	X	X	X	X	X	
O	X			5	Investigate need for and coordination of emergency water supply during disasters.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	L	H	X	X	X	X	X	X	
O	X			5	Update the **Macon County Hazard Mitigation Plan every five years** as required by regulations.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X						
O	X			5	Municipalities should **provide local human resources** or other resources, such as materials and supplies, to assist in implementation of the Macon County Hazard Mitigation Plan and its regular update.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X	X	X	X	X	X	
O	X			5	~~Designate a **central emergency coordinator in each** municipality and community to better facilitate communications with the Macon County EMA.~~ DUPLICATE	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X	X	X	X	X	X	
O	X			5	Provide for **incident command training** for the local emergency coordinators and other responders. Give priorities to police and fire; meet all FEMA training requirements.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X						
O	X			6	Develop an **ongoing cycle to promote regular EMA update**s to Macon County Commission, municipal councils, Fire Chiefs Association, utility boards, other emergency responders and elected officials	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X	X	X	X	X	X	
O	X			6	Cooperate and coordinate with various agencies and entities to assist with **distribution of information and materials**, including the Tuskegee Area Chamber of Commerce, Tuskegee University, DHR, Macon County Community Action, churches, municipalities, schools, etc.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	H	H	X	X	X	X	X	X	
C	X			6	Develop a **portable information booth** for display at local fairs and public events to distribute materials.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X						

Status	2021 Validity			Goal Addressed	Mitigation Strategy	Hazards Addressed												Funding Sources	Lead Agency	Priority/Status	Benefit/Cost Score	Macon County	Franklin	Notasulga	Shorter	Tuskegee	Macon County Schools	Tuskegee University
	Y	N	N/A			Dam Failure	Drought/Heat	Earthquake	Flooding	Hail	T-storms, Winds	Hurricanes	Landslides	Sinkholes	Lightening	Tornadoes	Wildfire	Winter Storm										
N	X			6	Work with Macon County Extension Service to develop **adult training/certification courses on land management** (best management practices) to decrease property damage during natural disaster events.				X				X	X			X		Local, HMGP	Macon County EMA, Local Flood Plain Manager, County Engineer	M	H	X							
O	X			**6**	**Educate general population** about natural hazards and hazard mitigation options.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X							
O	X			6	Develop **print public service announcements** for publication in local newspaper, agency newsletters, **and on social media sites.**	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X							
O	X			6	Develop **information website and social media sites with links** from Macon County Commission and municipal websites; Incorporate a comprehensive educational preparedness program; Coordinate with Health Department, including Pandemic.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X							
O	X			**6**	**Incorporate hazard awareness and mitigation into the curricula of local schools.**	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X							
N	X			**6**	**Develop coloring and activity books** at four appropriate age levels for widespread annual distribution.	X	X	X	X	X	X	X	X	X	X	X	X	X	Local, HMGP	EMA	M	H	X							
N	X			**4**	**Construct storm retrofits to educational buildings**					X	X					X			HMGP, ADECA, Governor's Emergency Relief Fund, Local	Macon County BOE	L	L						X	X
N	X			**4**	**Construct/install community safe rooms to education buildings to include generators**					X	X					X			HMGP, ADECA, Governor's Emergency Relief Fund, Local	Macon County BOE	H	L						X	
N	X			**4**	**Construct/install individual storm shelters to educational buildings**					X	X					X			HMGP, ADECA, Governor's Emergency Relief Fund, Local	Macon County BOE	L	L						X	X
N	X			**5**	**Provide generators for educational buildings**														HMGP, ADECA, Local	Macon County BOE	H	L						X	X
N	X			5	**Pursue federal, state, HMGP, and other grants, for mitigation improvements to the full extent possible**	X	X	X	X	X	X	X	X	X	X	X	X	X	Federal, State, HMGP,	EMA	H	H							

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Friday, February 5, 2021 1:52 PM
To: dcs@roadrunner.com
Subject: FW: Macon County Hazard Mitigation
Attachments: Risk And Vulnerability Assessment changes.jpg

Hello Everyone,

Simona Miller, with the Town of Notasulga, has reviewed the Macon County Risk and Vulnerability Assessment and suggested some changes. She asked that I send the message below to everyone for further review and consideration. We will discuss this again at next week's meeting.

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, Al 36117
P: 334-475-4161
C: 334-590-0655
dcs@roadrunner.com

From: Simona Miller <SWomack@TownOfNotasulga.com>
Sent: Friday, February 5, 2021 11:26 AM
To: 'Tracy Delaney' <dcs@roadrunner.com>
Subject: RE: Macon County Hazard Mitigation

Tracy,

Can you share this with the rest of the people who had participated in the Macon County meeting? These figures look more accurate to me, based on the natural disasters from previous history. I'm not originally from Alabama, but these Natural Disaster . Attached is the chart you did with my changes in red.

This is the order of the Weighted Priority Ranking from highest to lowest

1 Drought/Extreme Heat
2. High Winds, Thunderstorms
3. Wildfires (Wildfire and Tornadoes tie with Weighted Priority Ranking)
4. Tornadoes
5. Lightening
6. Flooding (flooding and hailing ties with weighted priority ranking)
7. Hailing
8. Hurricane, Tropical Depression, Tropical Storm
9. Winter Storm
10. Landslide
11. Dam Failure

1

12. Earthquake
13. Landslides

Simona L. Miller
Municipal Court Clerk/ Magistrate/ Assistant Town Clerk
Town of Notasulga
P.O. Box 207/ 76 W Main Street
Notasulga, Alabama 36866
Email: swomack@townofnotasulga.com
Ph: 334-257-1454
Fx: 334-257-4645

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From: Tracy Delaney <dcs@roadrunner.com>
Sent: Friday, February 05, 2021 6:02 AM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation

Hello Everyone!

Please take 5 to 7 minutes to complete the survey at the link below:
Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS

Also, I have attached the following:

1. A PDF file of the PowerPoint presentation from Meeting 2. Please be sure to review the Risk and Vulnerability Assessment and Hazard Priority List on pages 25 and 26.
2. A draft Macon County Mitigation Strategy. Please review the Priority/Status and Benefit/Cost Score for each mitigation strategy for your jurisdiction.

Finally, please plan to attend the next meetings as listed below. I will send the Zoom Meeting Invitations out by Monday, February 8th..

Hazard Mitigation Plan Update Meeting Schedule
Meeting 3: Wednesday, February 10th -- 10:00 AM to 12:00 PM – Joint County Meeting

If you have any questions or comments, or are unable to participate in a virtual meeting, please contact me by email, at dcs@roadrunner.com; or, you may contact David Butts, Lowndes County EMA Director, at lcenar@htcnet.net. I will attempt to gather your participation in a different manner, if possible.

Thank you in advance for your time and participation!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
C: 334-590-0655
dcs@roadrunner.com

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Friday, February 5, 2021 6:06 AM
To: dcs@roadrunner.com
Subject: Macon County Hazard Mitigation Community Survey

Please forward this email to family, friends, and co-workers, asking them to **take less than TWO minutes** to complete the Macon County Hazard Mitigation Community Survey at the link below:

https://www.surveymonkey.com/r/MaconHMPCS

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
dcs@roadrunner.com

7.2.3.4 Meeting 3: Lowndes County and Macon County LEPC

Lowndes County Meeting 3 Flyer



PLANNING FOR NATURAL DISASTERS

The Lowndes County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Lowndes County.

The third Hazard Mitigation Plan meeting will be
Wednesday, February 10, 2021
10:00 AM to 12:00 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, February 9th to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Lowndes County EMA office, at 334-548-5375 or lcengr@htcnet.net.

Macon County Meeting 3 Flyer



PLANNING FOR NATURAL DISASTERS

The Macon County Emergency Management Agency (EMA) is updating the county's hazard mitigation plan to further establish proactive hazard mitigation policies and actions that will help reduce risk and create a safer, more disaster resistant environment in Macon County.

The third Hazard Mitigation Plan meeting will be
Wednesday, February 10, 2021
10:00 AM to 12:00 PM

All Hazard Mitigation Planning meetings are open to the public and interested citizens are encouraged to attend; however, due to COVID-19, ***hazard mitigation meetings will be virtual meetings.*** If you would like to attend the meeting, please send an email by Tuesday, February 9th to dcs@roadrunner.com to be emailed a link to join the virtual meeting. If you need special accommodations, please contact the Macon County EMA office, at 334-724-2626 or frankhlee79@gmail.com.

Lowndes County Email Meeting 3 Notification

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Monday, February 8, 2021 11:52 AM
To: dcs@roadrunner.com
Subject: Lowndes and Macon Counties Hazard Mitigation Meeting 3

Hello!

Please join the third and last **virtual meeting** for the Lowndes and Macon Counties Hazard Mitigation Plan Update by clicking on the Zoom link below. You may also join by telephone if you do not have access to video.

The meeting is scheduled for **Wednesday, February 10, 2021 from 10:00 AM to 12:00 PM.**

It is very important for at least one representative from each jurisdiction join these meeting. Please contact me if you have any questions, comments, or issues – see contact information below.

Topic: Lowndes-Macon Hazard Mitigation Plan Updates - Meeting 3
Time: Feb 10, 2021 10:00 AM Central Time (US and Canada)

Join Zoom Meeting
https://us02web.zoom.us/j/85188105982?pwd=SnBNN2IvdXF0WFkyN1RsbGJTYlRrZz09

Meeting ID: 851 8810 5982
Passcode: 852224
One tap mobile
+16465588656,,85188105982#,,,,*852224# US (New York)
+13017158592,,85188105982#,,,,*852224# US (Washington DC)

Dial by your location
+1 646 558 8656 US (New York)
+1 301 715 8592 US (Washington DC)
+1 312 626 6799 US (Chicago)
+1 669 900 9128 US (San Jose)
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)
Meeting ID: 851 8810 5982
Passcode: 852224
Find your local number: https://us02web.zoom.us/u/k272dt2t

Thank you,
Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4181
C: 334-590-0655
dcs@roadrunner.com

Lowndes County and Macon County Meeting 3 Summary and Attendance List

The second meeting of the Lowndes County Local Emergency Planning Committees was conducted virtually via Zoom on Wednesday, February 10, 2021 from 10:00 AM to 12:00 PM. The purpose of the meeting was to review survey results, available tools and capacity of each jurisdiction, review the risk assessment and hazard priorities for each county, and to review mitigation strategies for each county. Because of the virtual meeting setting, there is no signed attendance roster. There were 16 persons participating on the Zoom Meeting, including the following:

Lasundra Battle
Delmartre Bethel
Mayor Jacqulyn Boone
David's Butts
Jason Christian
Mack Crockett
George Davis
Tracy Delaney
Kenneth Fair
Coty Madden-Huguley
Mia Hutcherson
Mayor Orbuty Ozier
Tucson Roberts
Micha Segrest
Valerie Smith
Anne Spooner

Mrs. Delaney briefly reviewed information presented at the previous meetings. She then reviewed 17 national disaster declarations that included Lowndes County and the 23 national disaster declarations that included Macon County, as well as the type of hazard, years of disaster and months that disaster events occurred. A hazard event summary for each county was presented that included information on the number of events, extent and damages.

The risk and vulnerability assessment and hazard priorities for each county were then reviewed to ensure consensus among committee members. And finally the mitigation strategies for each county were reviewed to ensure that each jurisdiction would be in compliance with FEMA requirements and that all necessary mitigation strategies were included in the AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

To conclude the meeting, Mrs. Delaney asked that committee members review the draft mitigation strategies and stated that she would be emailing a comment form if anyone wanted to suggest changes. She also reminded committee members to take the stakeholder survey and distribute the community survey by Wednesday, February 17, 2021.

Lowndes County and Macon County Meeting 3 Slide Presentation

AEMA DIVISION D

Lowndes County and Macon County
Hazard Mitigation Plan Update

Meeting 3
February 10, 2021

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

February 10, 2021

Participation Documentation

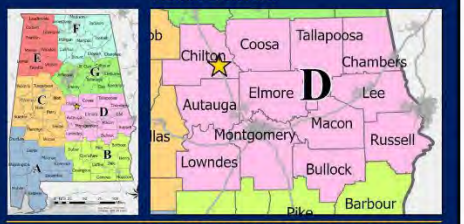
In Chat Box, please provide
Name, Title, Organization

LOWNDES AND MACON COUNTIES

2

AEMA DIVISION D

AEMA Divisions



LOWNDES AND MACON COUNTIES

3

AEMA DIVISION D

Division B Hazard Mitigation Plan Update

Today's Meeting:

- Surveys Submitted
- Available Tools and Capacity
- Disaster Declarations
- Hazard Summary Review
- Review Risk Assessment
- Review Hazard Priorities
- Review Mitigation Strategies

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Risk Assessment – Hazard Profiles

- Avalanche
- Coastal Erosion
- Dam Failure
- Drought / Extreme Heat
- Earthquake
- Flooding
- Hail
- High Winds and Thunderstorms
- Hurricane, Tropical Depression, Tropical Storm
- Landslides
- Land Subsidence / Sinkholes
- Lightening
- Tornadoes
- Tsunami
- Volcano
- Wildfire
- Winter Storms

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Division D Hazard Mitigation Plan Update

	Lowndes County	Macon County
Stakeholder Surveys Submitted	6	9
Community Surveys Submitted	40	125

Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS
Lowndes County Community Survey: https://www.surveymonkey.com/r/LowndesHMPCS

Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS
Macon County Community Survey: https://www.surveymonkey.com/r/MaconHMPCS

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Planning and Regulatory Tools by Jurisdiction

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Zoning Ordinance	Building Codes	Flood Plain Regulations
Lowndes County					X
Benton			X	X	
Fort Deposit			X	X	
Gordonville			X	X	
Hayneville	X		X		
Lowndesboro	X		X		
Mosses	X		X		
White Hall					
Unincorp County					X

Notes:
1. A Comprehensive Plan is a current and active plan for managing existing and future growth and development throughout the jurisdiction.
2. A Capital Improvement Plan is a five- to six-year plan for capital facilities improvements that directly to the comprehensive plan.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Planning and Regulatory Tools by Jurisdiction

Jurisdiction	Comprehensive Plan	Capital Improvement Plan	Zoning Ordinance	Building Codes	Flood Plain Regulations
Macon County	X				X
Franklin					
Notasulga	X		X	X	X
Shorter	X		X	X	X
Tuskegee	X		X	X	X
Unincorp County					X

Notes:
1. A Comprehensive Plan is a current and active plan for managing existing and future growth and development throughout the jurisdiction.
2. A Capital Improvement Plan is a five- to six-year plan for capital facilities improvements that directly to the comprehensive plan.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

National Flood Insurance Program Participation

CID	Name	County	Initial FIRM Identified	Initial FIRM Identified	Current Effective Map Date	Ref-Emer Date	Tribal
Participating Communities							
010272#	Lowndes County	Lowndes	11/29/1974	6/15/1984	9/29/2014	9/15/1984	No
010002#	Benton	Lowndes	4/5/1973	7/1/1974	9/5/2014	4/5/1973	No
010394#	Fort Deposit	Lowndes	9/29/1978	11/4/2009	11/04/2009(M)	6/13/2012	No
010481#	Hayneville	Lowndes		11/4/2009	11/04/2009(M)	4/16/2016	No
010509#	Mosses	Lowndes		11/4/2009	11/04/2009(M)	9/1/2013	No
010507#	Whitehall	Lowndes		11/4/2009	9/5/2014	9/5/2010	No
Non Participating Communities							
010506#	Orrigonville	Lowndes		11/4/2009	11/4/2009	11/4/2010	No

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

National Flood Insurance Program Participation

CID	Name	County	Initial FIRM Identified	Initial FIRM Identified	Current Effective Map Date	Ref-Emer Date	Tribal
Participating Communities							
010148#	Macon County	Macon	1/6/1978	4/1/1982	11/18/2009	4/1/1982	No
010149#	Notasulga	Macon	10/25/1974	11/24/1978	11/18/09(M)	1/24/1978	No
010512#	Shorter	Macon		11/18/2009	11/18/09 (M)	3/2/2011	No
010150#	Tuskegee	Macon	8/16/1974	1/6/1982	1/18/2009	1/6/1982	No
Non Participating Communities							
010386#	Franklin	Macon		11/18/2009	11/18/2009	11/18/2010	No

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Lowndes County and Macon County Disaster Declarations

Year	Event Type	Disaster Number	Lowndes	Macon
1975	Severe Storms and Flooding	469	X	X
1975	Severe Storms, Tornadoes and Flooding	488		X
1975	Tornadoes	3007		X
1977	Drought	3046	X	X
1990	Severe Storms, Tornadoes and Flooding	861	X	X
1993	Severe Snowfall, Winter Storm	3096	X	X
1995	Hurricane Opal	1070	X	X
1998	Severe Storms, Tornadoes and Flooding	1159		X
1998	Hurricane Georges (09/15/1998)	1250	X	
2000	Severe Storms and Tornadoes	1352		X
2003	Severe Storms, Tornadoes and Flooding	1489		X
2004	Hurricane Ivan	1546	X	X
2005	Hurricane Dennis	1593	X	X
2005	Hurricane Katrina Evacuation	3227	X	X
2009	Hurricane Ike/Ike	3292	X	X
2011	Severe Storms, Tornadoes and Straight Line Winds	3310	X	X
2011	Severe Storms, Tornadoes, Straight Line Winds and Flooding	4071	X	X
2015	Severe Storms, Tornadoes, Straight Line Winds and Flooding	4251	X	X
2017	Hurricane Irma	3382	X	X
2017	Hurricane Nate	3384	X	X
2020	Covid-19	3472	X	X
2020	Covid-19 Pandemic	4502	X	X
2020	Severe Storms and Flooding	4546		X

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AEMA DIVISION D

Lowndes County Disaster Declarations

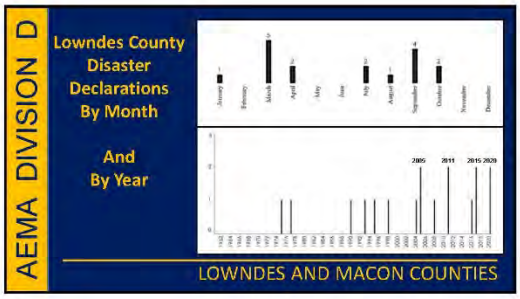
17 National Disaster Declarations



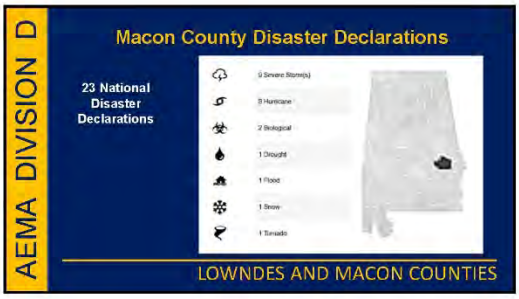
LOWNDES AND MACON COUNTIES

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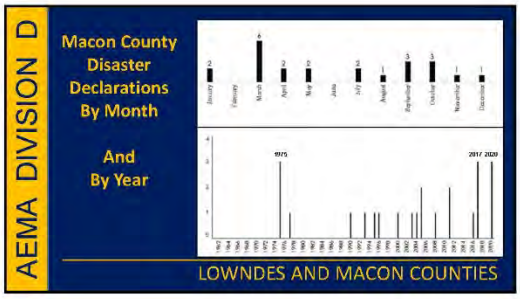
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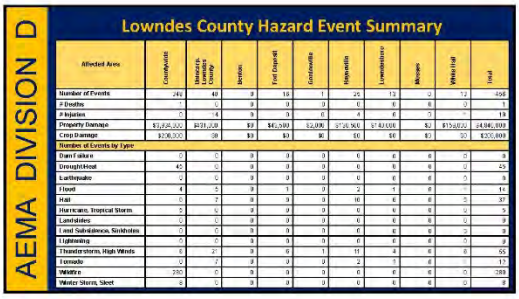
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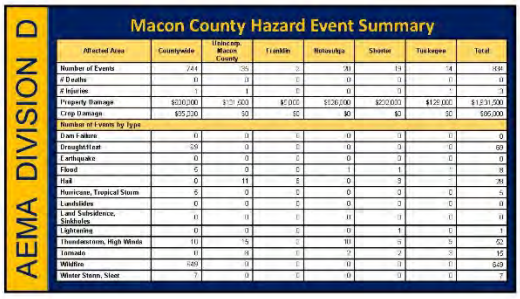


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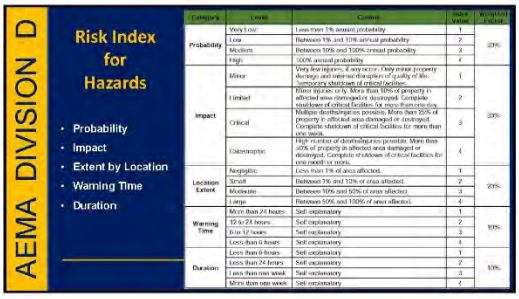
Affected Area	Countywide	Hayneville	Benton	Fort Deposit	Collirene	Hayneville	Lowndesboro	Mosses	White Hall	Total
Number of Events	249	49	9	18	1	25	13	0	12	498
# Deaths	1	0	0	0	0	0	0	0	0	1
# Injuries	0	14	0	0	0	4	0	0	1	19
Property Damage	$3,628,000	$431,000	$0	$45,000	$2,000	$745,000	$7,000	$0	$150,000	$4,046,000
Crop Damage	$200,000	$0	$0	$0	$0	$0	$0	$0	$0	$200,000
Number of Events by Type										
Dam Failure	0	0	0	0	0	0	0	0	0	0
Drought/Heat	45	0	0	0	0	0	0	0	0	45
Earthquake	0	0	0	0	0	0	0	0	0	0
Flood	4	5	0	1	0	2	1	0	1	14
Hail	0	7	0	0	0	18	0	0	0	37
Hurricane, Tropical Storm	3	0	0	0	0	0	0	0	0	3
Landslides	0	0	0	0	0	0	0	0	0	0
Land Subsidence, Sinkholes	0	0	0	0	0	0	0	0	0	0
Lightening	0	0	0	0	0	0	0	0	0	0
Thunderstorm, High Winds	0	27	0	0	1	11	4	0	0	55
Tornado	0	7	0	0	0	2	1	0	0	10
Wildfire	200	0	0	0	0	0	0	0	0	200
Winter Storm, Sleet	0	1	0	0	0	0	0	0	0	0

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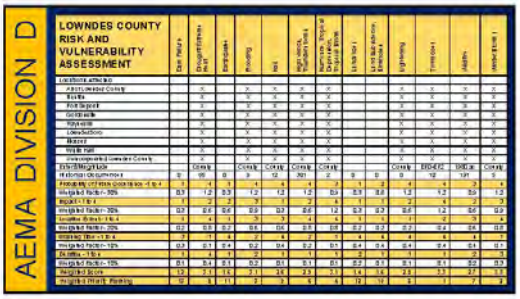
Affected Area	Countywide	Unincorp. Macon County	Franklin	Notasulga	Shorter	Tuskegee	Total
Number of Events	244	36	0	30	11	14	335
# Deaths	0	0	0	0	0	0	0
# Injuries	1	1	0	0	0	1	3
Property Damage	$600,000	$10,000	$0.00	$126,000	$20,000	$125,000	$1,031,500
Crop Damage	$95,000	$0	$0	$0	$0	$0	$95,000
Number of Events by type							
Dam Failure	0	0	0	0	0	0	0
Drought/Heat	59	0	0	0	0	0	59
Earthquake	0	0	0	0	0	0	0
Flood	6	0	0	1	1	1	9
Hail	0	11	5	0	9	4	29
Hurricane, Tropical Storm	5	0	0	0	0	0	5
Landslides	0	0	0	0	0	0	0
Land Subsidence, Sinkholes	0	0	0	0	0	0	0
Lightening	0	0	0	0	1	0	1
Thunderstorm, High Winds	10	15	0	10	5	5	52
Tornado	0	9	0	2	2	3	16
Wildfire	169	0	0	0	0	0	169
Winter Storm, Sleet	7	0	0	0	0	0	7

17

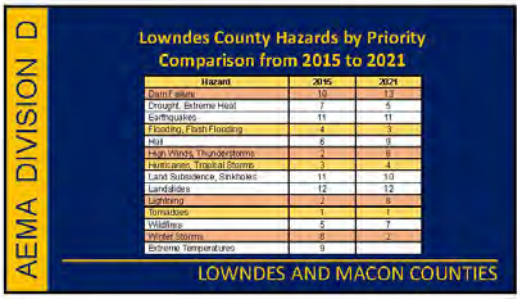


Category	Level	Context	Index Value	Weighted Factor
Probability	Very Low	Less than 1% annual probability	1	25%
	Low	Between 1% and 10% annual probability	2	
	Medium	Between 10% and 100% annual probability	3	
	High	100% annual probability	4	
Impact	Minor	Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.	1	30%
	Limited	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.	2	
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one week.	3	
	Catastrophic	High number of deaths/injuries possible. More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for one month or more.	4	
Location Extent	Negligible	Less than 1% of area affected.	1	25%
	Small	Between 1% and 10% of area affected.	2	
	Moderate	Between 10% and 50% of area affected.	3	
	Large	Between 50% and 100% of area affected.	4	
Warning Time	More than 24 hours	Self-explanatory	1	10%
	12 to 24 hours	Self-explanatory	2	
	6 to 12 hours	Self-explanatory	3	
	Less than 6 hours	Self-explanatory	4	
Duration	Less than 6 hours	Self-explanatory	1	10%
	Less than 24 hours	Self-explanatory	2	
	Less than one week	Self-explanatory	3	
	More than one week	Self-explanatory	4	

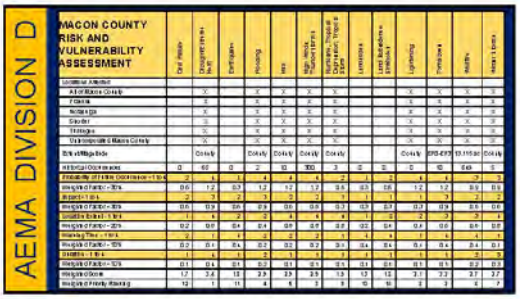
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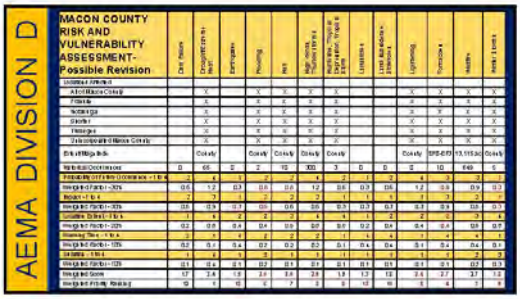
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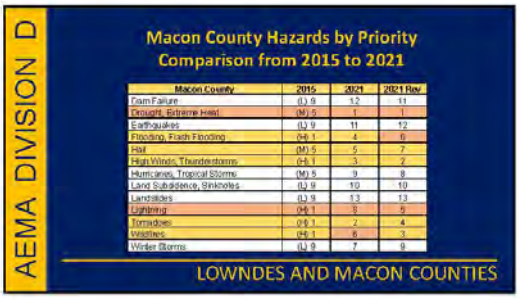
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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

- **PREVENTION:** Manage the development of land and buildings to minimize risk of life and property loss due to hazard events.
- **PROPERTY PROTECTION:** Protect structures and their occupants and contents from the damaging effects of hazard events.
- **NATURAL RESOURCE PROTECTION:** Preserve, rehabilitate, and enhance the beneficial functions of the natural environment to promote a balance between natural systems and social and economic demands.
- **STRUCTURAL MITIGATION:** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of hazards, where those modifications are feasible and environmentally suitable.
- **EMERGENCY SERVICES:** Improve the efficiency, timing, and effectiveness of response and recovery efforts for hazard events.
- **PUBLIC EDUCATION AND AWARENESS:** Educate and foster public awareness of hazards and techniques available for mitigation.

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Lowndes County And Macon County Hazard Mitigation Plan Update



Comment Form

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

Lowndes County And Macon County Hazard Mitigation Plan Update

What's Next

- ***Complete Survey by Friday, Feb 17th!***
- ***Submit any recommendations and comments by Friday, Feb. 19th to include in first draft***
- ***Review draft and submit comments***

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

Goal #1: Prevention

Prevention activities are primarily intended to address future development and to keep hazard effects from increasing. Prevention activities are often administered through government programs or regulatory actions that influence the built environment. These activities are particularly effective in hazard mitigation for areas with little current capital investment or development. Examples of prevention activities include:

1. Land use planning and zoning administration (All Hazards, primarily Flooding)
2. Building code enforcement program (Flooding, High Winds)
3. Open space preservation (Flooding)
4. Floodplain management regulations (Flooding)
5. Stormwater management regulations (Flooding)
6. Participation in National Flood Insurance Program (NFIP) (Flooding)
7. Capital improvements planning (All Hazards)

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

Goal #2: Property Protection

Property protection activities primarily concentrate on the modification of existing buildings and adjacent areas to strengthen their ability to withstand hazard events, or to remove an at-risk structure from hazardous locations. Examples of property protection activities include:

1. Acquisition of floodprone properties (Flooding)
2. Relocation of floodprone structures (Flooding)
3. Elevation of floodprone structures (Flooding)
4. Retrofitting of critical facilities and other structures (All Hazards)

LOWNDES AND MACON COUNTIES

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AEMA DIVISION D

AEMA Division D Mitigation Goals and Strategies

Goal #3: Natural Resource Protection

Natural resource protection activities reduce the impact of hazard events by preserving, rehabilitating, or enhancing the natural environment and its protective functions. These activities would include areas such as floodplains, wetlands, and steep slopes. Examples of natural resource protection activities include:

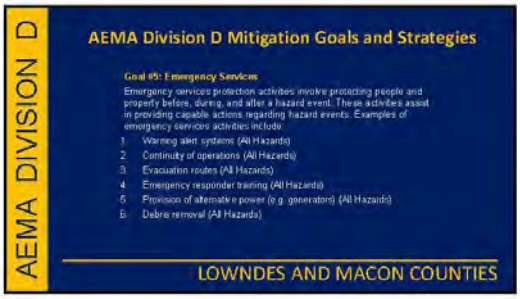
1. Floodplain protection (Flooding)
2. Watershed management (Flooding)
3. Riparian buffers (Flooding)
4. Forest and vegetation management (Flooding, Wildfire)
5. Conservation easements (Flooding, Land Subsidence)

LOWNDES AND MACON COUNTIES

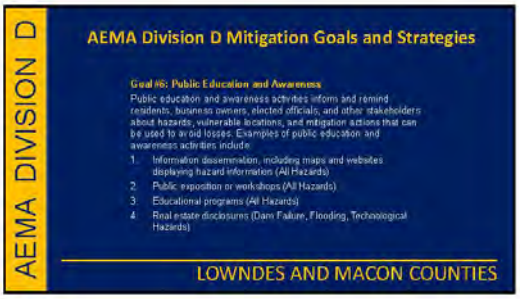
30


AEMA DIVISION D
AEMA Division D Mitigation Goals and Strategies
Goal #4: Structural Mitigation
Structural mitigation protection activities are intended to lessen the impact of a hazard by utilizing construction of an appropriate structure. Examples of structural mitigation protection activities include:
1. Reservoirs (Flooding)
2. Levees and dams (Flooding)
3. Stormwater diversion (Flooding)
4. Retention and detention structures (Flooding)
5. Safe rooms and shelters (High Winds, Extreme Temperatures)
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
AEMA Division D Mitigation Goals and Strategies
Goal #5: Emergency Services
Emergency services protection activities involve protecting people and property before, during, and after a hazard event. These activities assist in providing capable actions regarding hazard events. Examples of emergency services activities include:
1. Warning alert systems (All Hazards)
2. Continuity of operations (All Hazards)
3. Evacuation routes (All Hazards)
4. Emergency responder training (All Hazards)
5. Provision of alternative power (e.g. generators) (All Hazards)
6. Debris removal (All Hazards)
LOWNDES AND MACON COUNTIES

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AEMA DIVISION D
AEMA Division D Mitigation Goals and Strategies
Goal #6: Public Education and Awareness
Public education and awareness activities inform and remind residents, business owners, elected officials, and other stakeholders about hazards, vulnerable locations, and mitigation actions that can be used to avoid losses. Examples of public education and awareness activities include:
1. Information dissemination, including maps and websites displaying hazard information (All Hazards)
2. Public exposition or workshops (All Hazards)
3. Educational programs (All Hazards)
4. Real estate disclosures (Dam Failure, Flooding, Technological Hazards)
LOWNDES AND MACON COUNTIES

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Lowndes County Meeting 3 Follow Up Email

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, February 10, 2021 4:15 PM
To: dcs@roadrunner.com
Subject: Lowndes and Macon Counties Hazard Mitigation Plan Update Meeting 3
Attachments: Lowndes Macon Meeting 3 - 021021.pdf; Hazard Mitigation Update 2021 Draft Review Comment Form.pdf

Everyone,

Below are the links for the Lowndes County Stakeholder Survey and the Lowndes County Community Survey.

Lowndes County Stakeholder Survey: https://www.surveymonkey.com/r/LowndesHMPSS

Lowndes County Community Survey: https://www.surveymonkey.com/r/LowndesHMPCS

Please take a few minutes to complete the stakeholder survey by next Wednesday, February 17th. Send the Community Survey out to friends, family and coworkers, asking them to complete the survey by February 17th also.

The PowerPoint presentation from today's meeting is attached, along with a comment form regarding the hazard risk assessment and priority status. Please complete the comment form and email it back to me.

The revised mitigation strategies will be emailed in the next few days.

Thank you again for your time and participation in this process!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4181
C: 334-590-0655
dcs@roadrunner.com

dcs@roadrunner.com

From: Tracy Delaney <dcs@roadrunner.com>
Sent: Wednesday, February 10, 2021 4:19 PM
To: dcs@roadrunner.com
Subject: Lowndes and Macon Counties Hazard Mitigation Plan Update Meeting 3
Attachments: Lowndes Macon Meeting 3 - 021021.pdf; Hazard Mitigation Update 2021 Draft Review Comment Form.pdf

Everyone,

Below are the links for the Lowndes County Stakeholder Survey and the Lowndes County Community Survey.

Macon County Stakeholder Survey: https://www.surveymonkey.com/r/MaconHMPSS

Macon County Community Survey: https://www.surveymonkey.com/r/MaconHMPCS

Please take a few minutes to complete the stakeholder survey by next Wednesday, February 17th. Send the Community Survey out to friends, family and coworkers, asking them to complete the survey by February 17th also.

The PowerPoint presentation from today's meeting is attached, along with a comment form regarding the hazard risk assessment and priority status. Please complete the comment form and email it back to me.

The revised mitigation strategies will be emailed in the next few days.

Thank you again for your time and participation in this process!

Tracy Delaney
South Central Alabama
Development Commission
5900 Carmichael Place
Montgomery, AL 36117
P: 334-475-4181
C: 334-590-0655
dcs@roadrunner.com

AEMA Division D Regional Hazard Mitigation Plan
Lowndes/Macon County
Draft Review Comment Form

Name:_____County:_____

Organization:_____

Daytime Phone:_____Email:_____

1. Do you agree with the Natural Hazard Risk Assessment and Hazard Probability Status as presented?_____Yes_____No
   If no, why not?_____
   _____
   _____

2. Do you agree with the natural hazard priority status as presented? _____Yes_____No
   If no, why not?_____
   _____
   _____

3. Please list any additional natural hazard mitigation strategies that you feel need to be included in the Lowndes and Macon Counties Hazard Mitigation Plan.

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7.2.3 Memorandum for Review of Final Draft

Following the completion of revisions for the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan for Lowndes and Macon Counties, the memorandum shown below, along with a comment form, was emailed to Lowndes County LEPC Members, Macon County LEPC Members, local officials, emergency management agencies in surrounding counties, and applicable state and federal agencies, along with a comment form. Concurrently, the draft plan was submitted to AEMA and FEMA for final approval. To date, no responses from the survey have been received. When responses are received, they will be included in this section of the appendix.

MEMORANDUM

TO: Lowndes County Hazard Mitigation Local Emergency Planning Committee
Lowndes County Hazard Mitigation Stakeholders
Macon County Hazard Mitigation Local Emergency Planning Committee
Macon County Hazard Mitigation Stakeholders

FROM: Tracy Delaney, South Central Alabama Development Commission

DATE: November 1, 2021

SUBJECT: Review of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan (Lowndes County and Macon County)

Please find below a link to the final draft of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan (Lowndes County and Macon County). Please take time to review the plan and provide any comments or suggestions for this document prior to approval and adoption and the attached comment form. The comment form can be completed and returned electronically. ***Please submit comment form responses by November 24, 2021.***

Comment forms may be emailed directly to me at dcs@roadrunner.com. If you have any questions, you may contact me at the same email address.

Thank you in advance for your time and consideration!

AEMA Division D Regional Hazard Mitigation Plan
Lowndes/Macon County
Draft Review Comment Form

Name:_____ Title:_____

Organization:_____

Daytime Phone:_____ Email:_____

Please check one: _____Lowndes County _____Macon County

1. Do you agree with the Natural Hazard Risk Assessment and Hazard Probability Status as presented?
   _____ Yes _____No If no, explain below?

2. Do you agree with the natural hazard priority status as presented?
   _____ Yes _____No If no, explain below?

3. Please list any additional natural hazard mitigation strategies that you feel need to be included in the Lowndes and Macon Counties Hazard Mitigation Plan.

7.3 Hazard Mitigation Plan Local Approval

The planning participation process and approval of the Hazard Mitigation Plan was outlined in Section 2 of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan. The plan was submitted to AEMA and FEMA for approval. Following any revisions required by FEMA, the plan will be considered for review and approval by resolution by each of the participating jurisdictions in Lowndes County and Macon County. The following resolutions are included as templates for adoption by the jurisdictions included in the plan. After consideration by the local governments, executed resolutions will be forwarded to AEMA and FEMA.

Lowndes County, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Lowndes County Commission was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of Lowndes County.

NOW THEREFORE BE IT RESOLVED that the County Commission of Lowndes County, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Charlie King, Chairman

ATTEST:

_____
Jacquelyn J. Thomas, County Administrator

Town of Benton, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Benton was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Benton.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Benton, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Donny Cooper, Mayor

ATTEST:

_____
Edie Hornsby, Town Clerk

Town of Fort Deposit, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Fort Deposit was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Fort Deposit.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Fort Deposit, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Jacqulyn Davison-Boone, Mayor

ATTEST:

_____
Cynthia Jones, Town Clerk

Town of Gordonville, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Gordonville was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Gordonville.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Gordonville, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Orbuty Ozier, Mayor

ATTEST:

_____
Katrina Smith, Town Clerk

Town of Hayneville, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Hayneville was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Hayneville.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Hayneville, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Jimmie Davis, Mayor

ATTEST:

_____
Susie Smith, Town Clerk

Town of Lowndesboro, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Lowndesboro was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Lowndesboro.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Lowndesboro, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Anne Spooner, Mayor

ATTEST:

_____
Julia Benton, Town Clerk

Town of Mosses, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Mosses was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Mosses.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Mosses, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Harold Bell, Mayor

ATTEST:

_____
Lucille Smith, Town Clerk

Town of White Hall, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of White Hall was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of White Hall.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of White Hall, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Dematre Bethel, Mayor

ATTEST:

_____
Bertha White, Town Clerk

Lowndes County Board of Education
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Lowndes County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Lowndes County; and

WHEREAS, the Lowndes County Emergency Management Agency, with guidance from the Lowndes County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, Lowndes County Schools was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Lowndes County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Lowndes County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens and students of the Lowndes County.

NOW THEREFORE BE IT RESOLVED that the Lowndes County, Alabama Board of Education does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Travis Rogers, President

ATTEST:

_____
Jason Burroughs, Superintendent

Macon County, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Macon County Commission was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of Macon County.

NOW THEREFORE BE IT RESOLVED that the County Commission of Macon County, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Louis Maxwell, Chairman

ATTEST:

_____
Susan B. Thomas, County Administrator

Town of Franklin, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Franklin was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Franklin.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Franklin, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Henry Peavy, Mayor

ATTEST:

_____
Micha Segrest, Town Clerk

Town of Notasulga, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Notasulga was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Notasulga.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Notasulga, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Tommy Miller, Mayor

ATTEST:

_____
Barbara Inman, Town Clerk

Town of Shorter, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Town of Shorter was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the Town of Shorter.

NOW THEREFORE BE IT RESOLVED that the Town Council of the Town of Shorter, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Willie Mae Powell, Mayor

ATTEST:

_____
George Davis, Town Clerk

City of Tuskegee, Alabama
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the City of Tuskegee was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens of the City of Tuskegee.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of Tuskegee, Alabama does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Lawrence F. (Tony)O Haygood, Mayor

ATTEST:

_____
Derrick Swanson, Town Clerk

Macon County Board of Education
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, the Macon County Board of Education was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the citizens and students of Macon County.

NOW THEREFORE BE IT RESOLVED that the Macon County, Alabama Board of Education does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Mary Hooks, President

ATTEST:

_____
Dr Jacqueline Brooks, Superintendent

Tuskegee University
DRAFT RESOLUTION NO._____

ADOPT THE 2021 AEMA DIVISION D PHASE IIIC
MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN
(LOWNDES COUNTY AND MACON COUNTY)

WHEREAS, the Macon County Emergency Management Agency has engaged in extensive studies of the hazards facing all of Macon County; and

WHEREAS, the Macon County Emergency Management Agency, with guidance from the Macon County Local Emergency Planning Committee and as required by the Federal Emergency Management Agency, has participated in the preparation of 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan which will supersede the existing county hazard mitigation plan that was approved in 2015; and

WHEREAS, Tuskegee University was provided with adequate opportunity to participate in the hazard mitigation planning process and is represented on the Macon County Local Emergency Planning Committee; and

WHEREAS, the primary goals of this plan are to reduce the loss of life, property damage, and economic loss; make Macon County less vulnerable to natural disasters; and to provide education about hazards and hazard mitigation options; and,

WHEREAS, the strategies of this plan are to identify and characterize hazards, assess risk, prioritize and implement mitigation measures; and,

WHEREAS, adoption and implementation of the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan would be in the best interest and protection of the students, faculty and staff of Tuskegee University.

NOW THEREFORE BE IT RESOLVED that the Board of Trustees of Tuskegee University does hereby adopt the document entitled the 2021 AEMA Division D Phase IIIc Multi-Jurisdictional Hazard Mitigation Plan.

ADOPTED this _____ day of_____, 2021.

_____
Norma B. Clayton, Chair
Tuskegee University Board of Trustees

ATTEST:

_____
Carla C. Whitlock, Secretary
Tuskegee University Board of Trustees