

Clarke County Multi-Jurisdictional Hazard Mitigation Plan 2026



Table of Contents

Section 1. Background and Purposes of the Plan

1.1 Plan Scope	1
1.2 Authority	1
1.3 Funding	1
1.4 Purpose	1

Section 2. County Profile

2.1 Background	3
2.2 Demographics	6
2.3 Economy	9
2.4 Infrastructure	9
2.5 Land Use and Development Trends	10

Section 3. Planning Process

3.1 Multi-Jurisdictional Plan Adoption	12
3.2 Multi-Jurisdictional Plan Participation	12
3.3 Hazard Mitigation Planning Process	12
3.4 Public and Other Stakeholder Involvement	15
3.5 Integration with Existing Plans	16

Section 4. Risk Assessment

4.1 Hazard Profiles	18
4.2 Vulnerability Overview	65
4.3 Probability of Future Occurrence	68
4.4 Critical Facilities /Infrastructure by Jurisdiction	70
4.5 Hazard Impacts	71

Section 5 Mitigation Strategies

5.1 Mitigation Planning Process	79
5.2 Mitigation Goals	79
5.3 Mitigation Strategies	79
5.4 Capabilities Assessment for Local Jurisdictions	82
5.5 Jurisdictional Mitigation Action Plans	87

5.5.1 Clarke County Mitigation Action Plan	88
5.5.2 Town of Coffeeville Action Plan	92
5.5.3 Town of Fulton Action Plan	94
5.5.4 Town of Grove Hill Action Plan	96
5.5.5 City of Jackson Action Plan	99
5.5.6 City of Thomasville Action Plan	102
5.5.7 Clarke County Board of Education	105
5.5.8 Thomasville City Schools	106

Section 6. Plan Maintenance

6.1 Hazard Mitigation Plan Monitoring, Evaluation, and Update Process	108
6.2 Hazard Mitigation Plan Incorporation	109
6.3 Public Awareness/Participation	110

Section 1. Background and Purposes of the Plan

What has been updated in this section - This plan provides guidance for local mitigation activities over the next five-year planning cycle. It encourages activities that are most effective and appropriate for mitigating the effects of all natural hazards. The first section of the plan gives a basic overview of the need and purpose of a Hazard Mitigation Plan. For the update, only a minimal amount changes were needed.

Section 1. Background and Purposes of the Plan

1.1 Plan Scope

The Clarke County Multi-Jurisdictional Hazard Mitigation Plan is intended to identify and detail the hazards that affect Clarke County. Clarke County includes the following jurisdictions: Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville. The Clarke County Multi-Jurisdictional Natural Hazards Mitigation Plan is an updated mitigation plan covering Clarke County. Clarke County was included in the Division A Regional Multi-Jurisdictional Hazard Mitigation Plan previously approved by FEMA in 2021.

1.2 Authority

Hazard mitigation plans are a requirement of 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. All state and local governments must develop a Hazard Mitigation Plan as a condition of receiving nonemergency federal disaster assistance including hazard mitigation grant program (HMGP), pre-disaster mitigation (PDM), and flood mitigation assistance (FMA) program funds.

1.3 Funding

This update to the Clarke County plan was funded by the Clarke County Commission.

1.4 Purpose

The purpose of the Clarke County Multi-Jurisdictional Hazard Mitigation Plan is to evaluate and identify all prioritized hazards which may affect the county. Mitigation strategies that address each of the identified hazards are presented. This plan is only one of many steps Clarke County will take to achieve a safer, more hazard resistant environment for its residents.

Section 2. County Profile

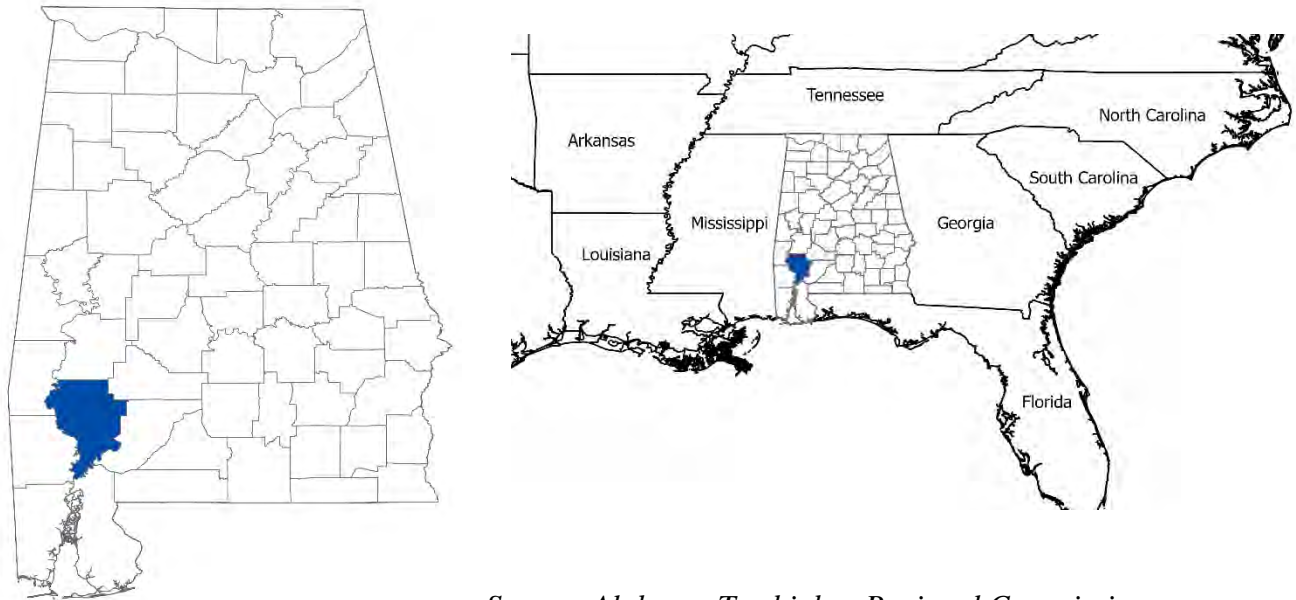
What has been updated in this section – Updated data was used to update the County profile. These data sets include the 2020 Census, current land use maps, and recent economic data.

Section 2. County Profile

2.1 Background

Clarke County was established on December 10, 1812. It was named in honor of General John Clarke of Georgia. The county is bordered by Choctaw and Washington Counties to the West, Marengo County to the North, Monroe and Wilcox Counties to the East, and Baldwin County to the South (Figure 2.1). The county spans an area of 1,230 square miles. It is the third largest county, with regards to area, in Alabama.

Figure 2.1 Location Map of Clarke County, Alabama



Source: Alabama-Tombigbee Regional Commission

County government is in the form of a representative five-member commission presided over by the Chairman. The Chairman rotates approximately every nine months. All the municipalities have a mayor/city council form of government.

Physical Features

Clarke County is located in the East Gulf Coastal Plain, a region known for a mix of gently rolling land and hilly terrain. The landscape ranges from low, flat flood plains along the Tombigbee and Alabama Rivers in the southern part of the county, only about 10 feet above sea level to higher ground near Grove Hill in the central area, where elevations reach nearly 500 feet. The county's soils formed from layers of sand, clay, silt, and gravel that were deposited over long periods of time. In the northern part of Clarke County, harder rock layers have resisted erosion and created long, narrow ridges known as cuestas. Farther south, the steeper hills are mainly the result of erosion acting on uplifted rock layers.

Clarke County includes four main landscape areas: the Southern Red Hills, the Lime Hills, the Southern Pine Hills, and the Alluvial Plain. The Southern Red Hills are found in the northern

part of the county and consist of several bands of high hills that run from west to east. This area includes some of the most rugged land in the county, especially in the Buhrstone Hills, where hilltops can rise hundreds of feet above nearby streams. In contrast, areas farther south within this region tend to have more gently rolling terrain.

South of the Red Hills are the Lime Hills, which also contain steep and uneven land. The rough terrain here is influenced by underlying limestone and natural breaks in the rock layers. Elevation changes of up to 200 feet are common, and the soils are formed from weathered limestone and related materials.

The Southern Pine Hills cover much of the central and southern part of the county. This area is made up of sandy sediments and forms a broad, sloping landscape that gradually descends toward the south. The Alluvial Plain includes the low-lying flood plains and terraces along the Alabama and Tombigbee Rivers, where recent river deposits have created flat, fertile land. Clarke County is bordered by the Tombigbee River on the west and the Alabama River on the east. These two rivers meet just south of the county to form the Mobile River. A high ridge known as Indian Ridge runs through the eastern part of the county and separates the drainage areas of the two rivers.

Climate

Clarke County has long, hot summers because moist tropical air from the Gulf of Mexico persistently covers the area. Winters are cool and short. Cold waves are rare and generally moderate in 1 or 2 days. Precipitation is heavy throughout the year and prolonged droughts are rare. Severe local storms, including tornadoes, strike occasionally in or near the area. They are short duration and cause variable and spotty damage. Every few years, in summer or autumn, a tropical depression or a remnant of a hurricane that has moved inland causes extremely heavy rains for 1 to 3 days.

In winter, the average temperature is 48 degrees F, and the average daily minimum temperature is 36 degrees. The lowest temperature on record, which occurred on January 21, 1985, is -1 degree. In summer, the average temperature is 80 degrees, and the average daily maximum temperature is 91 degrees. The highest recorded temperature, which occurred on June 26, 1930, is 108 degrees.

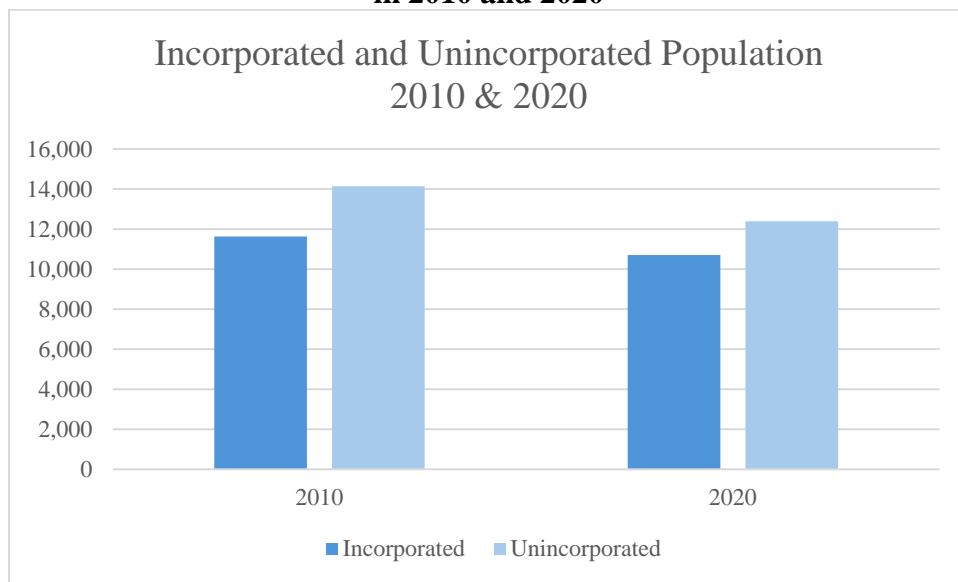
The average annual total precipitation is 59.6 inches. Of this, about 43 inches, or 72 percent, usually falls in March through November. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall from March through November is less than 20.6 inches. Thunderstorms occur on about 75 days each year. They occur in all months but most frequently between June and August.

The average seasonal snowfall is 0.6 inch. The greatest snow depth at any one time during the period of record was 12 inches recorded on March 13, 1993. On an average, less than one day per year has at least 1 inch of snow on the ground. The heaviest 1-day snowfall on record was 12.0 inches recorded on March 13, 1993.

2.2 Demographics

The total population of Clarke County, Alabama is 23,087 according to the 2020 Census. This amount decreased by 10% from the 2010 Census. Table 2.1 depicts the county’s population broken down by incorporated versus unincorporated areas.

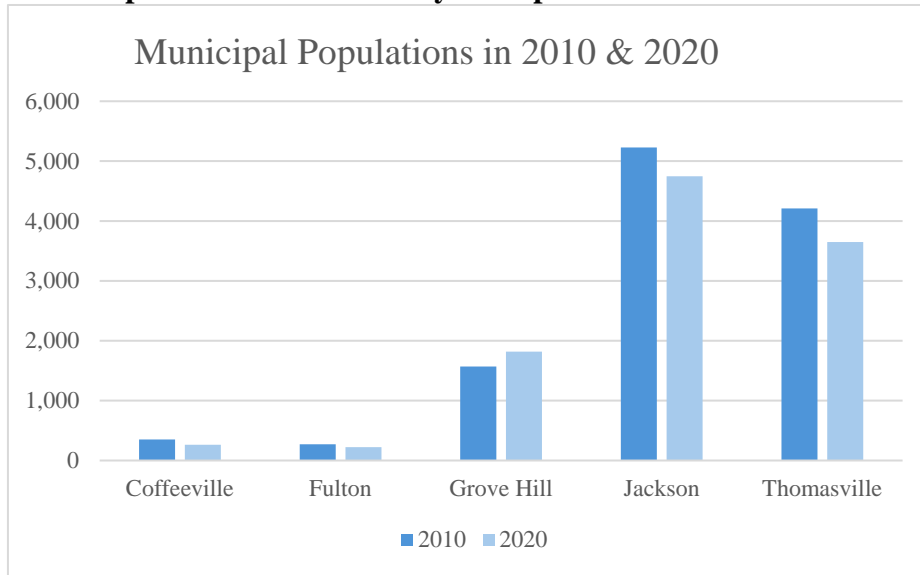
Table 2.1 Population of Clarke County Incorporated vs. Unincorporated Areas in 2010 and 2020



Source: U.S. Census Data www.census.gov

There are five municipalities located in Clarke County. Table 2.2 depicts the 2010 and 2020 Census data for the population of each of the municipalities. Grove Hill was the only municipality with an increase in population between 2010 and 2020.

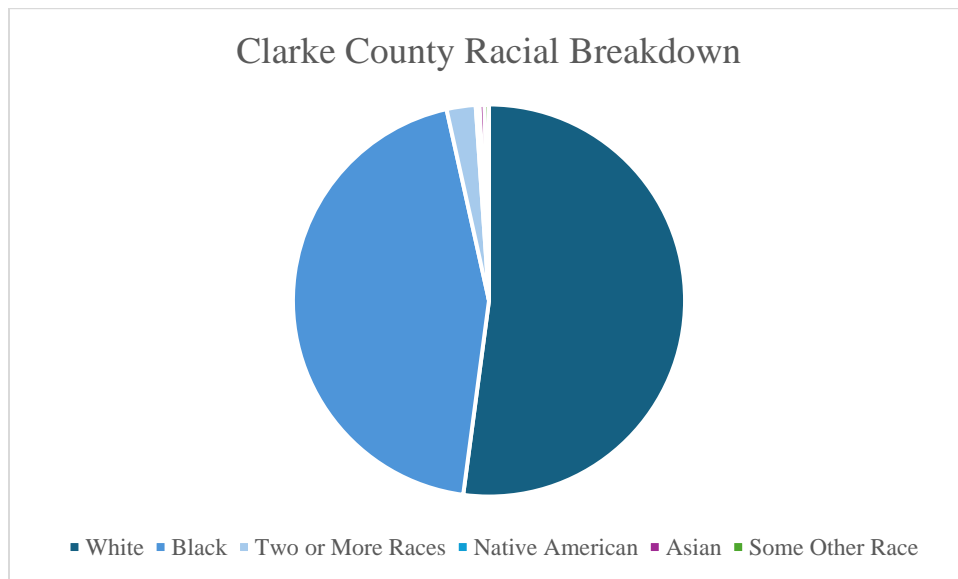
Table 2.2 Population Clarke County Incorporated Areas in 2010 and 2020



Source: U.S. Census Data www.census.gov

Table 2.3 depicts the racial characteristics of Clarke County. The population is made of 52% White population, 44% African American, and the other 4% is made of other races including Asian, American Indian, Alaska Native, Native Hawaiian, Pacific Islander or other.

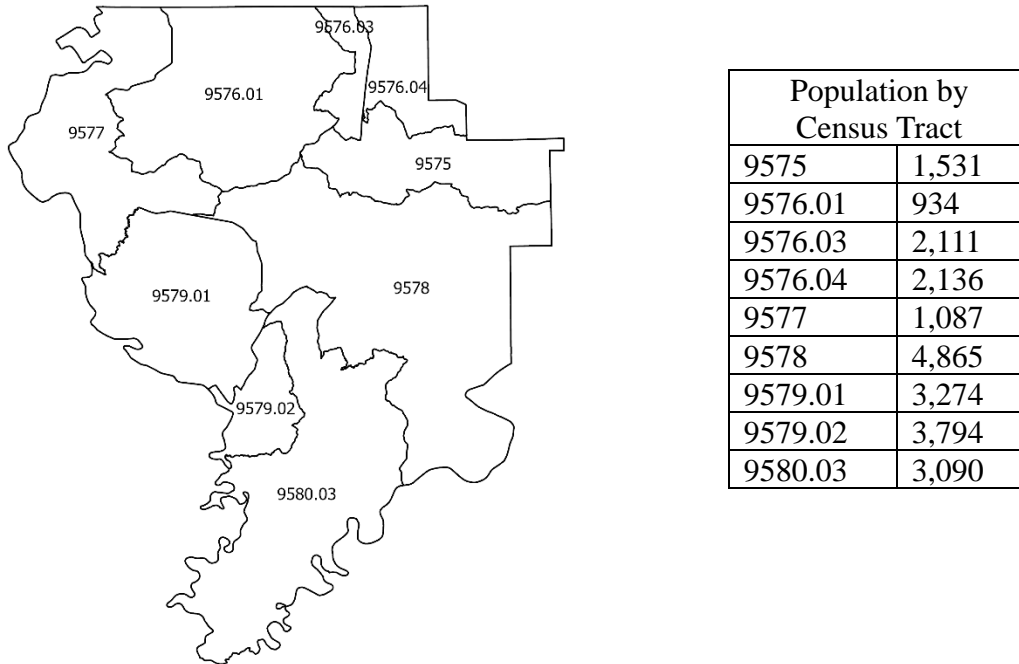
Table 2.3 2020 Clarke County Race Data



Source: U.S. Census Data www.census.gov

The county is divided into four principal Census Tracts. Figure 2.2 depicts the highest population in the areas around Jackson and Thomasville. The area of Clarke County with the lowest population is located the northwestern section.

Figure 2.2 2010 Population by Census Tract in Clarke County, Alabama



According to the 2020 U.S. Census, 54% of Clarke County’s population lives in unincorporated areas. The percentage of the population that has finished high school or better (86.1%) is lower than the state average (89.2%). Clarke County also has below average median and per capita incomes. The median annual income in Clarke County is \$49,249.00, lower than the state median income (\$66,659.00). A significantly higher percentage of individuals live below the poverty line (20.1%) when compared to the state average (15.2%). Table 2.4 summarizes economic data of Clarke County using data from the U.S. Census.

Table 2.4. Summary of Economic Data for Clarke County.

Median Household Income	\$49,249.00
Bachelor’s Degree or Higher	15%
Employment Rate	46%
Total Housing Units	11,749
Individuals without Healthcare Coverage	7.5%

Source: U.S. Census 2020

Section 2.3 Economy

Clarke County's economy moved from agriculture in its early years to a strong timber and forestry identity after the Civil War, a trend that continued into the 20th and 21st centuries. With abundant stands of yellow pine and hardwood forests, timber became a key economic driver from the late 19th century onward. The arrival of railroads in the 1880s helped expand logging, sawmill development, and timber transport. Throughout the 20th century and continuing today, forestry and wood products have been central to the county's economy. Large mills and forest products companies have operated here, and the industry remains among the region's largest.

Section 2.4 Infrastructure

Transportation

Two US Highways bisect Clarke County. U.S. Highway 43 (US 43) runs north–south through the county, connecting Grove Hill and other towns to Mobile in the south and Tuscaloosa to the north. It's a key trucking and regional route and is undergoing safety and capacity improvements. U.S. Highway 84 (US 84) runs east–west, linking Clarke County to Mississippi on the west and continuing across southern Alabama toward Georgia on the east. Additionally state routes such as AL 154, AL 69, AL 295, and AL178 serve the county. There is also an extensive system of county-maintained roads. The Clarke County Road & Bridge Department maintains hundreds of miles of county roads — about 298 miles paved and 505 miles unpaved — linking rural areas and small towns to the major highways.

Norfolk Southern Railroad runs through much of Clarke County and provides freight rail service, including daily and “piggyback” (intermodal) services that support industry and commerce in the region. Clarke County has access to the Tennessee Tombigbee Waterway, which offers commercial barge transport to national and international markets. The city of Jackson has a port facility on the waterway, supporting freight movement.

Utilities

Electric power is provided by the Alabama Power Company, Black Warrior, and Clarke-Washington Electric Cooperative. Water service is provided by the City of Jackson, City of Grove Hill, City of Thomasville, Town of Coffeetown, Salitpa Water System, North Clarke Water Authority, West Clark Water System, Old Suggsville Water System, Mid Clarke Water System, McVay Water System, Old Line Water System, Clarke County, Mid Central Water, CWM Water Authority. There are sanitary sewer services offered in the Town of Coffeetown, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville. The Clarke County Democrat, Thomasville Times, and South Alabamian are the newspapers of general circulation. They are published on Thursday of each week and are the major media outlets in Clarke County.

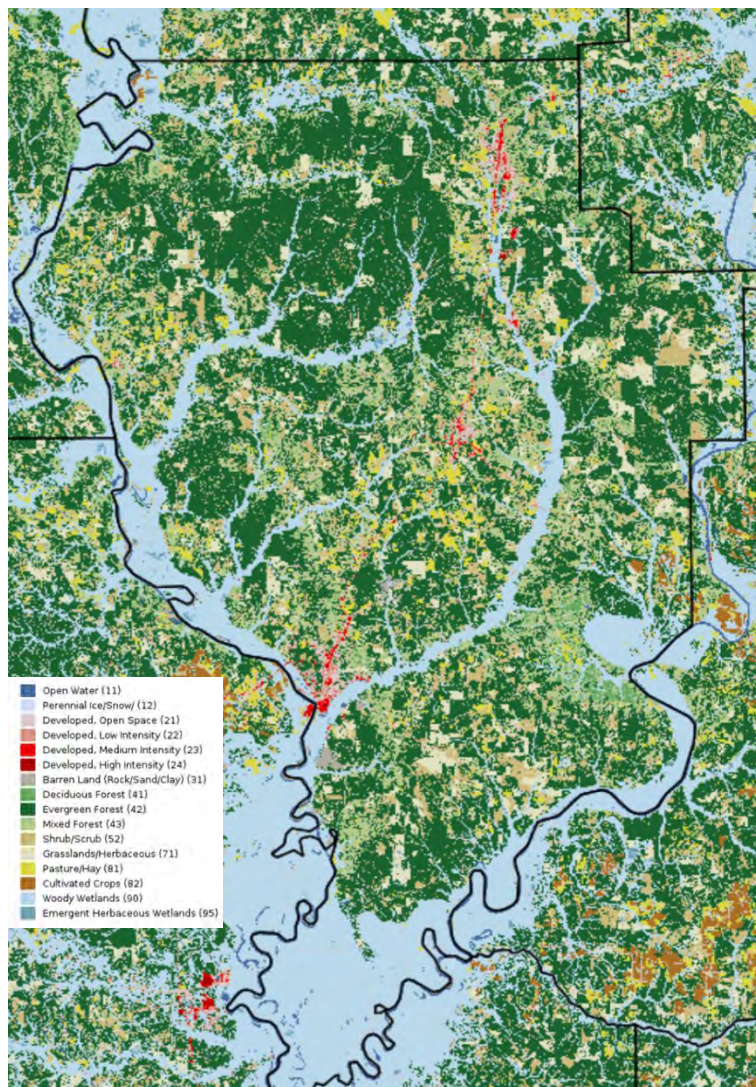
2.5 Land Use and Development Trends

Clarke County is primarily rural (Figure 2.3). The county consists of numerous small towns, extensive agricultural land, and abundant livestock. Silviculture is strongly present within the county. Significant growth is not anticipated. The county is projected to have a decrease in population over the next twenty years.

Table 2.5 Clarke County Population Projections 2025-2050

2025	2030	2035	2040	2045	2050
21,585	20,483	20,277	19,944	20,280	19,862
<i>Source: U.S. Census Bureau and Center for Business and Economic Research, The University of Alabama, October 2024</i>					

Figure 2.3 Clarke County Land Use/Land Cover Map



Source: Multi-Resolution Land Characteristics (MRLC) Consortium, 2024 Land Cover

Section 3. Planning Process

What has been updated in this section - This section contains a variety of organizational and basic information that deals with the update process. This information had to be revised to document the update process. The revised areas include an outlined Natural Hazards Steering Committee's involvement in the update process, outlined public involvement process in plan update, updated Interagency and Intergovernmental Coordination Section, updated participated jurisdictions, and updated reports and information sources that were consulted.

Section 3. Planning Process

3.1 Multi-Jurisdictional Plan Adoption

Each of the participating jurisdictions will adopt the plan once it is deemed “approvable pending adoption” by the Federal Emergency Management Agency (FEMA). Eligible jurisdictions include local governing bodies including municipal councils, county commissions and local school districts.

3.2 Multi-Jurisdictional Planning Participation

Table 3.1 provides a list of entities that will adopt the mitigation plan.

Table 3.1 Participating Jurisdictions

Continuing Jurisdictions
Clarke County Commission
Town of Coffeerville
Town of Fulton
Town of Grove Hill
City of Jackson
City of Thomasville
Clarke County Board of Education
Thomasville City Schools
New Participating Jurisdictions
None
Jurisdictions that are No Longer Participating
None

3.3 Hazard Mitigation Planning Process

The Clarke County Commission with the help of the Alabama Tombigbee Regional Commission facilitated the plan update process. During the winter of 2026, the Clarke County Hazard Mitigation Committee held two meetings. Agendas and sign-in sheets from those meetings are contained in Appendix 1. Committee members unable to attend a meeting received agendas and information requests via email, telephone, or personal meetings with the planning team.

Hazard Mitigation Planning Committee

In January of 2026, under the leadership of the Clarke County Emergency Management Director Roy Waite, the Hazard Mitigation Planning Committee was assembled. Table 3.2 provides a list of entities that participated in the process along with how they participated.

Table 3.2 Hazard Mitigation Planning Participants by Jurisdiction/Agency

Clarke County (Committee Members in BOLD)				
Jurisdiction	Primary Contact/Title	Attended Meetings	Provided Written Comments	In-Person or Phone Consultation
Clarke County	Roy Waite/EMA Director	X	X	X
Town of Coffeeville	Dwight Pugh/Mayor		X	X
Town of Fulton	Danny Bedwell/Mayor	X	X	
Town of Grove Hill	Daniel Gibson/Police Chief	X	X	X
City of Jackson	Audra Raybon/ Mayor	X	X	
City of Thomasville	Sheldon Day/Mayor		X	X
Clarke County Board of Education	Ashley Flowers/Superintendent		X	X
Thomasville City Schools	Vickie Morris, Superintendent		X	
Michelle McAndrews	Alabama Power Company/Program Manager	X		
Bradley Cooper	Alabama Department of Public Health/Public Health Environmentalist	X		
Laura Newton	CWM Water System/Board Member	X		

The first meeting was held on January 28, 2025. Table 3.3. lists the agencies invited to the Clarke County Hazard Mitigation Planning meetings. EMA officials, volunteer fire fighters, police officers, elected officials, school representatives, industry representative, interested citizens, and others were invited to both meetings. A copy of the email invitation is included in Appendix 1.

The meeting notice was also posted on Facebook and announced at the Clarke County Volunteer Fire Association Meeting. In addition, some of these agencies were contacted by phone regarding the meeting.

Table 3.3 Entities Invited to Participate

Alabama Cooperative Extension Service
Alabama Department of Environmental Management
Alabama Emergency Management Agency
Alabama Forestry Commission
Alabama National Guard
Alabama Power Corporation
Coastal Alabama Community College
Alabama-Tombigbee Regional Planning Commission
American Red Cross

Town of Coffeerville
Town of Fulton
Town of Grove Hill
City of Jackson
City of Thomasville
Alma VFD
Antioch VFD
Coffeerville VFD
Fulton VFD
Grove Hill VFD
Helwestern VFD
Jackson VFD
Opine-Tallahatta VFD
Salitpa VFD
Scyrene-Chance VFD
Thomasville VFD
Tri-Community VFD
West Bend-Bethel VFD
Winn VFD
Alabama Cooperative Extension Service
Alabama Department of Environmental Management
Alabama National Guard
Coastal Alabama Community College
Economic Development Administration
Choctaw County Commission
Clarke County Commission
Marengo County Commission
Washington County Commission
Wilcox County Commission
Mississippi Emergency Management Agency
Natural Resources Conservation Service
Federal Emergency Management Agency
Clarke County Board of Education
Thomasville City Schools
Clarke County Health Department
Clarke County Sherriff's Department
Clarke County Volunteer Fire Departments
Black Warrior Power Company
South Alabama Gas
US Fish and Wildlife Service

USDA Farm Service Center
USGS, Office of Water Resources

Entities in bold participated.

The Hazard Mitigation Planning Committee’s (HMPC) adopted mission statement is:

- To oversee and establish comprehensive hazard mitigation planning process that:
- Engages public participation and support.
- Facilitates Federal, state, regional, and local coordination.
- Constantly monitors and evaluates the potential risks of hazards to life and property.
- Actively mobilizes all available community resources and measures to mitigate the threats of hazards.
- Results in programmed actions with specific results.

At this meeting, the topics included an introduction to mitigation planning, a review of the 2020 plan, and a preview of the plan update process. Each member was given a summary of the 2020 plan and asked to provide any changes. The summary included a risk assessment, critical facility information, capabilities, and mitigation strategy information.

Invitees that did not attend were contacted and were asked to participate in the HMPC at the next meeting or by providing the requested information. Representatives from each of the participating jurisdictions were invited and/or represented during the planning process. Table 3.4 provides a listing of entities that chose not to participate.

A second meeting was held in April 2026. This meeting allowed everyone to review the draft mitigation plan. ATRC developed the draft plan, and it was reviewed by EMA Director Roy Waite. Attendees of the second meeting had the opportunity to comment on the draft.

3.4 Public and Other Stakeholder Involvement

Opportunity for public comment was provided in multiple ways. All county stakeholder meetings were open to the public and advertised on social media and by postings in each jurisdiction. An additional public hearing will be held by each adopting jurisdiction prior to adoption of the approvable plan. Plan drafts were available for review online at www.atrcregion6.com.

The public was informed of the hazard mitigation planning process and invited and encouraged to attend meetings through various media announcements, including but not limited to social media, community events, and local postings.

Documentation of public participation, though limited, is included in Appendix A. Future updates will work to incorporate additional public involvement.

The Alabama-Tombigbee Regional Commission along with the Clarke County EMA director consulted with multiple stakeholders in formation of the plan including fire associations, utilities, medical facilities, and boards of education. These stakeholders were contacted via phone, mail, or email and invited to participate or provide information. Most of the stakeholders listed attended meetings. The U.S. Army Corps of Engineers provided information concerning dam failure and mitigation. The Alabama Forestry Commission provided information pertaining to wildfire information. The Geological Survey of Alabama (GSA) was consulted for landslide and land subsidence hazard information. The plan update was discussed with regional partners, including EMA offices and surrounding counties.

3.5 Integration with Existing Plans

This document will be incorporated into the Clarke County Emergency Operations Plan administered through the Emergency Management Agency office. Numerous other plans were identified throughout the planning process; however, no plans have regulatory jurisdiction over any area countywide throughout Clarke County. For example, there are no building codes enforced in unincorporated Clarke County nor any comprehensive zoning ordinances. However, there are many plans that indirectly coordinate with the Clarke County Hazard Mitigation Plan. These plans were checked to make sure none of the proposed policies in the Clarke County Hazard Mitigation Plan conflict with these existing plans.

These plans include:

Alabama State Hazard Mitigation Plan (2023 Update):

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 Tombigbee Regional Commission Comprehensive Economic Development Strategy (CEDS) (2022 Update): The ATRC CEDS was consulted to ensure the Hazard Mitigation Plan is consistent with the economic development strategy for the region.

Emergency Operations Plans

Clarke County has an Emergency Operations Plan (EOP) that is utilized in an emergency. The plans summarize various hazards and provide direction for emergency personnel in disaster situations. This plan complements the hazard mitigation plan, but do not necessarily cover the same material.

Alabama Drought Management Plan (2024 Update)

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

Clarke County Alabama Threat and Hazard Identification Index (THIRA)- Used as a reference for information on potential natural threats, their potential impacts, and capabilities

Other sources utilized for data incorporation are listed in the Section 4 – Risk Assessment.

4. Risk Assessment

4.1 Hazard Profiles

Multiple natural hazards affect Clarke County. These hazards were identified and evaluated through a process that included studying historical events, reviewing previous mitigation plans, identifying susceptible locations, and gathering input from local stakeholders. For each hazard addressed in the risk assessment, a general description of the hazard and its extent are included.

Clarke County is vulnerable to hazards that can disrupt life at any time throughout the year. There are numerous hazard types not applicable to the county. These hazards include avalanche, coastal erosion, tsunami, and volcanoes. No other mention of these hazards will be made. Table 4.1 presents all potential hazards and indicates if they present risk to the planning area. In addition, information sources and the association of the hazard to a specific area of the county is indicated.

Table 4.1 Potential Hazards and Data Sources

Hazard	Risk	Source	Correlation with Region
Avalanche	No	US Forest Service National Avalanche Center (http://www.fsavalanche.org/)	No risk of avalanche events in Alabama
Coastal Erosion	No	FEMA Coastal Erosion Hazards Report (http://www.fema.gov/media-library/assets/documents/8397)	No risk of coastal erosion in Clarke County
Dam Failure	Yes	USACE National Inventory of Dams (http://geo.usace.army.mil/pgis/f?p=397:12:)	Population downstream from dams/ flooding concerns; no state regulation of dam safety
Drought / Extreme Heat	Yes	United States Drought Monitor (http://droughtmonitor.unl.edu/) NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/stormevents/)	Historic incidents with damage
Earthquake	Yes	USGS Earthquake Hazards Program (http://earthquake.usgs.gov/earthquakes/)	Proximity to Southeast US seismic zones; previous occurrences
Flooding	Yes	NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/stormevents/)	Historic incidents with damage / identified flood hazard areas
High Winds (Hurricanes, Tornadoes, Windstorms)	Yes	National Weather Service (NWS) Storm Data (http://www.srh.noaa.gov/bmx/?n=stormdata_main) NWS Tornado Database (http://www.srh.noaa.gov/bmx/?n=tornadodb_main) National Hurricane Center Data Archive (http://www.nhc.noaa.gov/data/#tcr)	Historic incidents with damage

Hazard	Risk	Source	Correlation with Region
Landslides	Yes	USGS Landslides Hazard Program (http://landslides.usgs.gov/hazards/nationalmap/) Geological Survey of Alabama, Landslides (http://gsa.state.al.us/gsa/geologichazards/Landslides.htm)	Susceptible areas to landslides/historic occurrences
Land Subsidence/ Sinkholes	Yes	Geological Survey of Alabama, Sinkholes in Alabama (http://gsa.state.al.us/gsa/geologichazards/Sinkholes_AL.htm)	Susceptible areas to land subsidence / sinkholes
Tsunami	No	FEMA, Tsunami (http://m.fema.gov/tsunamis)	No risk: inland area
Volcano	No	FEMA, Volcanoes (http://m.fema.gov/volcanoes)	No risk: county is not near an active volcanic area
Wildfire	Yes	Southern Wildfire Risk Assessment (www.southernwildfirerisk.com)	Historic incidents with damage / identified susceptible areas
Winter / Ice Storms	Yes	NOAA National Climatic Data Center (http://www.ncdc.noaa.gov/stormevents/)	Historic incidents with damage

Federally Declared Disasters

Clarke County has been included in a total of twenty-one federal disaster declarations from 1973 to date. Table 4.2 summarizes the federal disaster declarations that have taken place in Clarke County since the 1970's.

Table 4.2 Summary of Federal Disasters in Clarke County, Alabama

Disaster Number	Type	Date of Declaration
369	Tornado	4/5/1973
458	Flood	3/14/1975
3045	Drought	8/16/1977
3074	Flood	3/17/1979
578	Flood	4/18/1979
598	Hurricane Frederik	9/13/1979
861	Severe Storms	4/7/1990
1466	Severe Storms, Tornadoes and Flooding	5/12/2003
3096	Snowstorm	3/15/1993
1185	Severe Storm	7/25/1997
1250	Hurricane Georges	10/13/1998
1549	Hurricane Ivan	9/15/2004
1605	Hurricane Katrina	8/25/2005
1971	Tornadoes	4/29/2011

4349	Hurricane Nate	10/8/2017
3472	COVID-19	3/13/2020
4503	COVID-19	3/20/2020
4546	Severe Storm	5/21/2020
4563	Hurricane Sally	9/14/2020
4573	Hurricane Zeta	12/10/2020

Source: www.fema.gov/disaster/declarations

LEVEE/DAM FAILURES

Hazard Description-Dam failure usually occurs when spillway capacity is inadequate, and water overtops the dam or when internal erosion through a dam’s foundation occurs (also known as piping). If internal erosion or overtopping cause a full structural breach, a high-velocity, debris-laden wall of water is released and rushes downstream, damaging or destroying whatever is in its path.

Dam failures may result from one or more the following:

- Prolonged periods of rainfall and flooding (the cause of most failures);
- Inadequate spillway capacity which causes excess overtopping flows;
- Internal erosion due to embankment or foundation leakage or piping;
- Improper maintenance;
- Improper design;
- Negligent operation;
- Failure of upstream dams;
- Landslides into reservoirs;
- High winds;
- Earthquakes.

The State of Alabama is the only state without a dam safety program. Numerous attempts have been made over the years to pass dam safety legislation in the state, but all have failed. A statewide dam safety program is needed to protect lives and property, assist local officials in planning and responding to emergency situations, and to help dam owners control their liability.

Hazard History- There are no sources of reliable records for dam failure in the planning area. There are no documented occurrences of dam failures within Clarke County.

Community Impact - For most of the dams in Clarke County, dam failure would result in flooding of several feet. Mainly agricultural areas, infrastructure, and isolated structures would be impacted. The extent would vary based on the storage of the affected dam and its proximity to infrastructure and structures. For larger dams or dams with High hazard potential, the extent of damage could be much greater and lead to loss of life along with

economic, environmental, and lifeline losses. Again, without historical occurrences it is difficult to accurately predict extent.

Location and Extent -Federal Guidelines for Dam Safety presents three classifications for “hazard potential.” Currently, this classification is the best indicator of the potential extent of dam failure. Table 4.3 provides details of the classification.

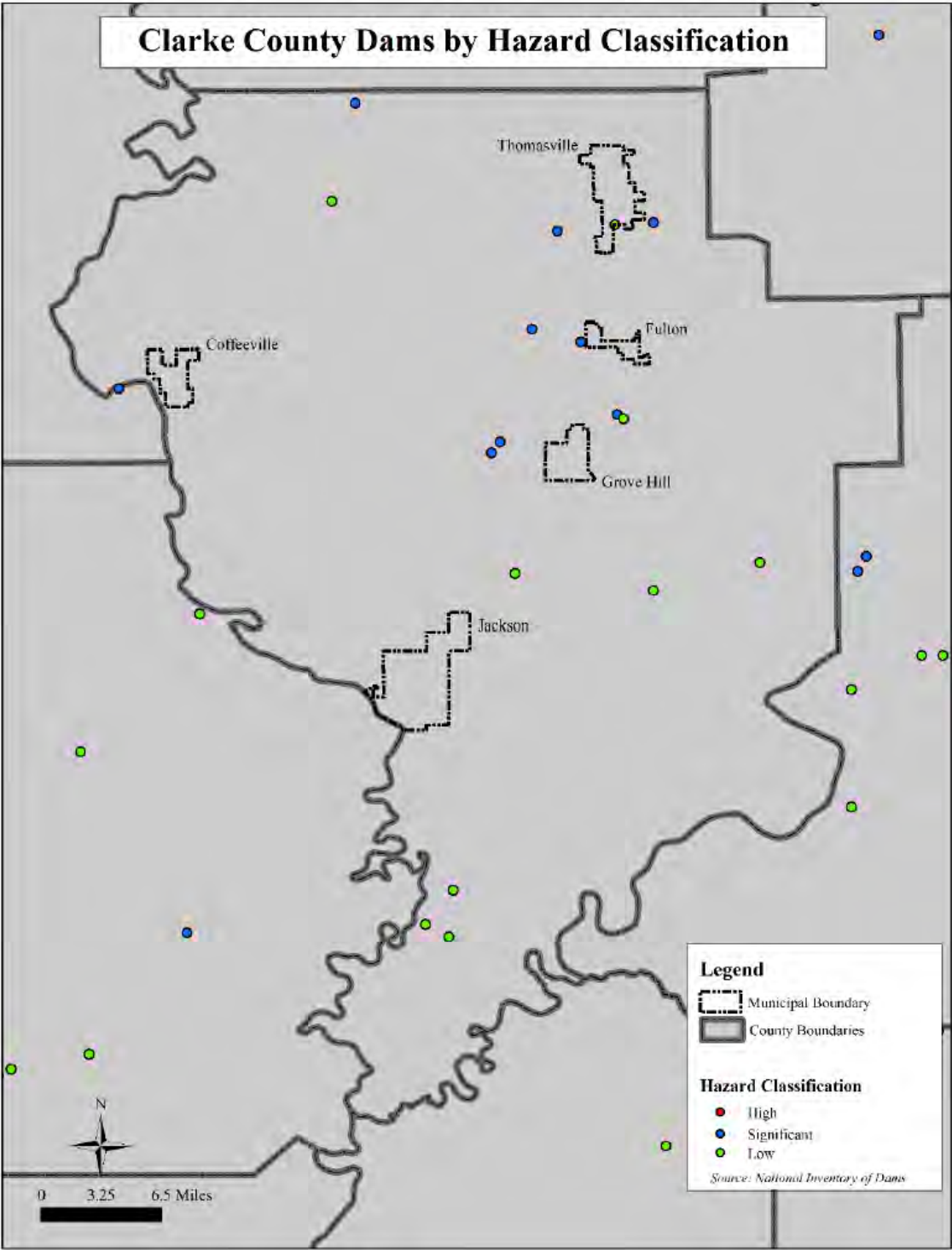
Table 4.3 Dam Hazard Classification

Hazard Potential Classification	Loss of Human Life	Economic, Environmental, Lifeline Losses
Low	None expected	Low-generally limited to owner
Significant	None expected	Yes
High	Probable-one or more expected	Yes

Source: Federal Guidelines for Dam Safety (Published April 2004)

Locations Affected-Figures 4.1 provides a map of Clarke County indicating dam locations and hazard classifications. Of these, one is classified as a high hazard dam and twenty are classified as significant risk. This information should be used with caution; it is considered outdated due to the lack of regulatory authority over dams in Alabama.

Figure 4.1 Clarke County Dams by Hazard Classification



Source: National Inventory of Dams

Probability of Future Occurrence- There are no documented occurrences of dam failures within the planning area. Due to outdated and unreliable information, predicting the probability and estimated losses resulting from dam failure accurately is impossible.

DROUGHT/HEAT WAVES

Hazard Description – Extreme summer heat is the combination of very high temperatures and exceptionally humid conditions. If such conditions persist for an extended period of time, it is called a heat wave. Heat stress can be indexed by combining the effects of temperature and humidity. Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground. The combined high temperatures and humid conditions increase the level of discomfort and the potential for danger to humans. Droughts occur when a long period passes without any substantial rainfall. A heat wave combined with drought is very dangerous to human life and the environment.

Hazard History - Although there are no extreme heat events recorded for Clarke County since 2015, these events occur almost annually during the summer months. It is estimated since 2015 that about 9–10 Excessive Heat Warning events have affected Clarke County.

The Alabama Department of Water Resources issues drought reports for the state. Table is a recap of Clarke County’s drought activity since 2015.

Table 4.4 Drought Advisory–Level Events Affecting Clarke County (2015–2025)	
Year	Event affecting Clarke County
2016	Statewide drought emergency and burn ban extended to all counties, including Clarke.
2019	Fall drought across Alabama (flash drought conditions reported statewide).
2020–2021	Mild–moderate drought conditions persisted across parts of southwest Alabama.
2023	Clarke County included in drought Watch/Warning declarations during late-year drought.
2024	Clarke County listed under Advisory drought declaration in early 2024.
2025	Region including Clarke upgraded to Warning during worsening drought conditions.
<i>Source: Alabama Department of Water Resources</i>	

Community Impact – The human risks associated with extreme heat include heatstroke, heat exhaustion, heat syncope, and heat cramps. A description of each of these conditions is as follows:

- Heatstroke is considered a medical emergency and is often fatal. It exists when the rectal temperature rises above 105°F because of environmental temperatures. Patients may be delirious or comatose. The death-to-care ratio in reported cases averages about 15%.
- 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 because of the 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. Like heat exhaustion it is thought to be a result of a mild imbalance of fluids and electrolytes.

Risks associated with drought include effects on the water supply, impact on agriculture, increase in wildfires, negative impact on hydroelectric power, and other activities dependent on water such as recreation and navigation

Probability of Future Occurrences – Due to a lack of data, average annual occurrences and damage estimates cannot be made. Historically these events do not pose severe risk as the residents in these areas are well-adapted to heat and dry conditions. There is not a summary of the impact of costs as no data was collected during previous events, however losses are expected to be minimal. Damage from droughts can be associated with lost timber and crops. Severe droughts led to increased fire risks.

Location and Extent - All of Clarke County is susceptible to droughts equally. There were severe droughts in 2017. During these times the County was in exceptional drought and severe drought due to very dry summers.

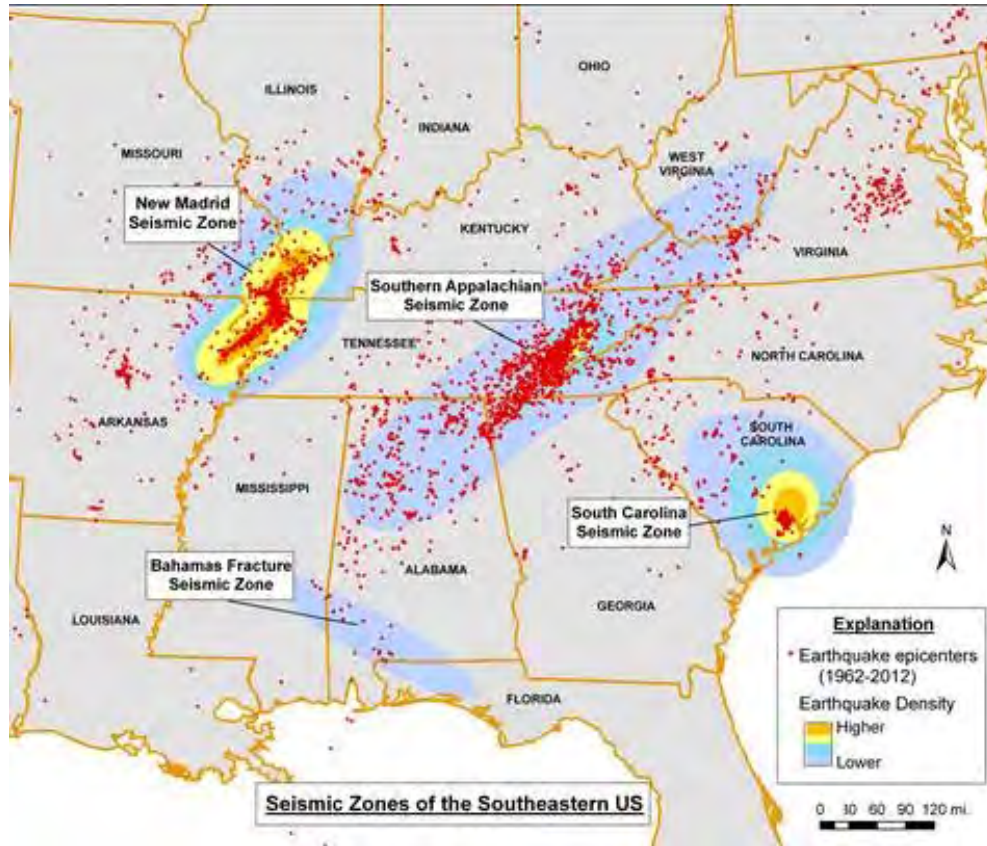
EARTHQUAKE

Hazard Description - The USGS defines an earthquake as a sudden slip on a fault. The Earth's tectonic plates are always moving relative to each other, but they can get stuck at their edges due to friction. When the stress on the edge of a plate overcomes friction, there is an earthquake that releases energy in waves that travel through the earth's crust and causes the shaking that we feel. The hazards associated with earthquakes include anything that can affect the lives of humans, including surface faulting, ground shaking, landslides, liquefaction, tectonic deformation, tsunamis, and seiches. Earthquake risk is defined as the probability of damage and loss that would result if an earthquake were to occur.

Although many areas of the United States are better known for their susceptibility, earthquakes do occur in Alabama. There are four seismic zones that affect the state; these zones are the New Madrid Seismic Zone, Southern Appalachian Seismic Zone, Bahamas Fracture Seismic Zone,

and the South Carolina Seismic Zone (SCSZ) (Figure 3.5). Portions of Clarke County are within the Bahamas Fracture Seismic Zone.

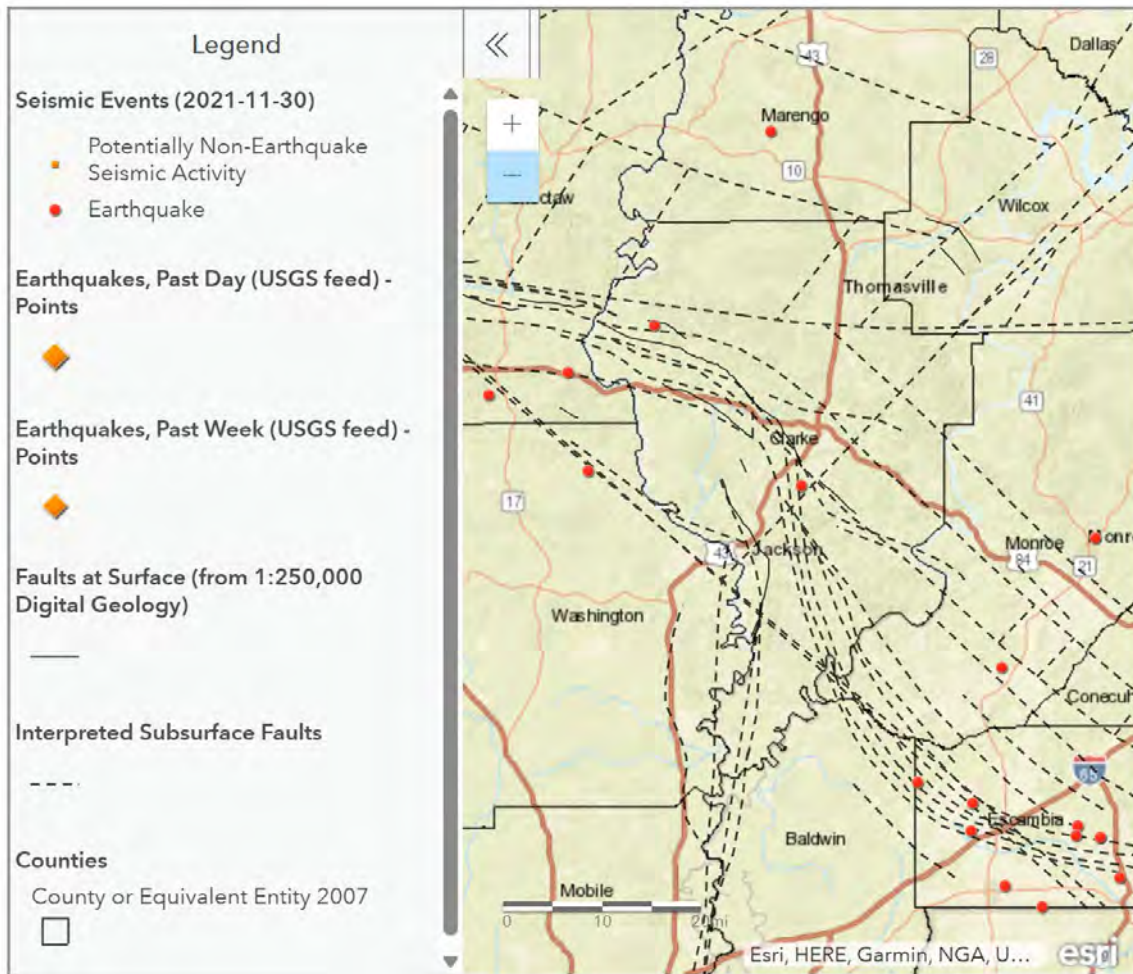
Figure 4.2 Seismic Zones of the Southeastern United States



Source: <https://gsa.state.al.us/Scripts/GSAOGB/gsa/geologic/hazards/earthquakes/alquakes.html>

Hazard History – There are only two incidents of an earthquake in Clarke County. Figure 4.3 depicts historical earthquake occurrences in Clarke County.

Figure 4.3 Historical Incidence of Earthquakes in Clarke County



Source: <https://www.gsa.state.al.us/gsa/geologic/hazards/earthquakes/alquakes>

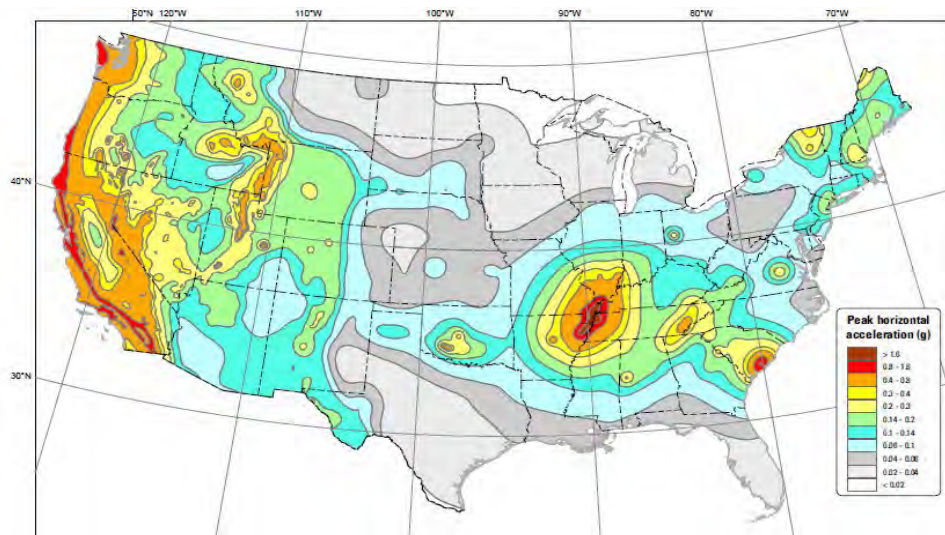
Community Impact - If small to moderate earthquake (around magnitude 3–4) occurred in Clarke County, the impacts might include: shaking of homes and buildings, items falling from shelves, cracks in walls or foundations, and minor damage to older or poorly built structures.

Location and Extent - All the jurisdictions within Clarke County including unincorporated Clarke County and Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville have the same extent. The effects would be localized, short-term, and relatively minor, affecting nearby communities more than the entire county.

Probability of Future Occurrences - The risk of a significant damage causing earthquake in the Clarke County is very small. Below is a USGS map with ground motion for an earthquake with 2% chance in 50 years. The peak horizontal acceleration ranges from .06g to .14g for Clarke County. Figure 4.4 shows the peak horizontal acceleration ranges in the

United States.

Figure 4.4 2018 Seismic Model for the Conterminous United States



2018 National Seismic Hazard Model for the conterminous United States
Peak horizontal acceleration
with a 2% probability of exceedance in 50 years
NEHRP site class B/C ($V_{30} = 760$ m/s)

Source: <https://www.usgs.gov/media/images/2018-long-term-national-seismic-hazard-map>

FLOOD

Hazard description - Flooding is 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. Clarke County is at slight risk to moderate risk of flooding. Flooding in large rivers usually results from large-scale weather systems that generate prolonged rainfall over wide areas. Small rivers and streams are susceptible to flooding from more localized weather systems that cause intense rainfall over small areas.

Local drainage floods may occur outside of recognized drainage channels or delineated floodplains for a variety of reasons, including concentrated local precipitation, a lack of infiltration, inadequate facilities for drainage and storm water conveyance, and/or increased surface runoff. Such events often occur in flat areas, particularly during winter and spring in areas with frozen ground, and in urbanized areas with large impermeable surfaces. High groundwater flooding is a seasonal occurrence in some areas but may occur in other areas after prolonged periods of above-average precipitation.

Hazard History - Since 2015, there have been twenty-four flash flooding events in Clarke County according to the National Climate Data Center. Table 4.5 lists each of these events. The NCDC Storm Events Database provides the following details on a flood event in

"Flash flood" is a term widely used by flood experts and the general population. However, there is no single definition and method to distinguish flash flooding from riverine and other floods. For the purpose of this plan, we will define flash flooding as flooding that occurs due to localized drainage and is outside the boundaries of the FIRM floodplain.

Table 4.5 Flash Flooding Events in Clarke County, Alabama 2015-2025

Location	Date	Deaths	Injuries	Property Damage	Crop Damage
Jackson	1/2/2017	0	0	\$750,000.00	\$0.00
Bashi	6/22/2017	0	0	\$0.00	\$0.00
West Bend	6/23/2017	0	0	\$50,000.00	\$0.00
Fulton	6/23/2017	0	0	\$0.00	\$0.00
Tallahatta Springs	4/14/2018	0	1	\$1,200,000.00	\$0.00
Grove Hill	9/5/2018	0	0	\$0.00	\$0.00
Morvin	9/5/2018	0	0	\$25,000.00	\$0.00
Grove Hill	9/5/2018	0	0	\$10,000.00	\$0.00
Jackson	9/5/2018	0	0	\$25,000.00	\$0.00
Jackson	9/5/2018	0	0	\$0.00	\$0.00
Atkinson	9/6/2018	0	0	\$0.00	\$0.00
Whatley	12/27/2018	0	0	\$100,000.00	\$0.00
Coffeerville	1/23/2019	0	0	\$0.00	\$0.00
Atkinson	1/23/2019	0	0	\$0.00	\$0.00
Tallahatta Springs	1/23/2019	0	0	\$50,000.00	\$0.00
Rural	1/23/2019	0	0	\$25,000.00	\$0.00
Thomasville	3/16/2021	0	0	\$0.00	\$0.00
Rural	4/24/2021	0	0	\$0.00	\$0.00
Rural	2/3/2022	0	0	\$0.00	\$0.00
Rural	2/3/2022	0	0	\$0.00	\$0.00
Grove Hill	2/3/2022	0	0	\$0.00	\$0.00
Fulton	8/24/2022	0	0	\$0.00	\$0.00
Whatley	8/24/2022	0	0	\$0.00	\$0.00
Grove Hill	8/24/2022	0	0	\$0.00	\$0.00
Totals:		0	1	\$2,235,000.00	\$0.00

Source: www.ncdc.gov

In 2018 a significant flash flooding event occurred in the county, five to nine inches of rain fell in a short duration along and east and west of the Highway 43 corridor from Thomasville to southwest of Grove Hill. At the height of the flash flood event, Highway 43 near Bassett Creek was covered in 6 feet of water. Several other roads in this area were also submerged in several feet of water, including Butler Drive in Thomasville. Multiple vehicles were submerged across the area. Approximately 20 water rescues had to be made from houses and residences with rescues reported 5 miles southwest of Grove Hill up toward Fulton. One injury was reported. Twenty-five homes experienced significant flooding. The flash flooding also resulted in significant infrastructure damage to roads,

water lines, and drainage. The Clarke County Emergency Management Director reported 9.2 inches of rainfall.

2018 Flash Flood in Fulton



Pictures courtesy of Clarke County Emergency Management

Since 2015, there has been one riverine flooding event in Clarke County.

Table 4.6 Riverine Flooding Events in Clarke County, Alabama 2015-2025

Year	Description
2020	River flooding near Coffeerville Lock & Dam when the Tombigbee River crested around 46.85 ft, near major flood stage.

Source: www.ncdc.gov

Community Impact - Flooding caused by rainfall occurs to some extent almost every year in almost every part of Clarke County. Flooding occurs most frequently between November and April, with a peak from February through April. Alabama receives more annual rainfall than any other state, creating a high potential for riverine and flash flooding in Clarke County. The measurement used to determine the limits of the floodplain was developed with the enactment of the National Flood Insurance Act of 1968 (NFIP). Under the NFIP it was determined that the base standard was the 100-year or "base flood". This means that the limits of the flood plain are set by the limits of a rain event that has a 1% annual chance of occurrence. There are established techniques for determining the base flood limits. These techniques have been used to develop Flood Insurance Rate Maps or FIRMs. FIRMs illustrate elevation of the base flood and the 500- year event (0.2% annual chance of occurrence) in areas where a model has been developed.

The risks associated with flash flooding are the same as riverine flooding. One clear distinction is the element of surprise. Flash flooding, as the name implies, occurs quickly and without much warning. In riverine flooding, the time and height of the crest can be accurately predicted, and warnings can be issued several hours in advance. The National

Flood Insurance Program’s Flood Insurance Rate Maps (FIRMs) for the county were consulted to determine if there was a flood risk. The risks associated with flash flooding are the same as riverine flooding. There are no repetitive loss properties in Clarke County or in any of the municipal jurisdictions.

Location and Extent

Flash Flooding

Flash flooding can occur at any location due to the nature of the hazard. Flash flooding generally affects a much smaller area than riverine flooding and has a much more rapid onset. In the planning area, there are many areas prone to flash flooding. The lack of drainage infrastructure, undersized drainage infrastructure, and damaged drainage infrastructure exacerbates flash flooding in many areas. Property damage and damage to roadways are the two primary concerns relating to flash flooding.

Riverine Flooding

The magnitude of riverine flooding events is influenced by how much water enters the waterway upstream and the rate at which it does. The frequency of riverine flooding events largely depends on the frequency of weather events. 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, as described in the Historical Occurrences below.

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 up to almost two feet above flood stage as noted by the highest recorded floods described at multiple points in the region. The Tombigbee River near the Coffeerville Lock and Dam recorded a flood crest of 52.5 feet, which is 23.5 feet above flood stage.

Table 4.7 provides extent by jurisdiction.

Table 4.7 Flood Extent by Jurisdiction

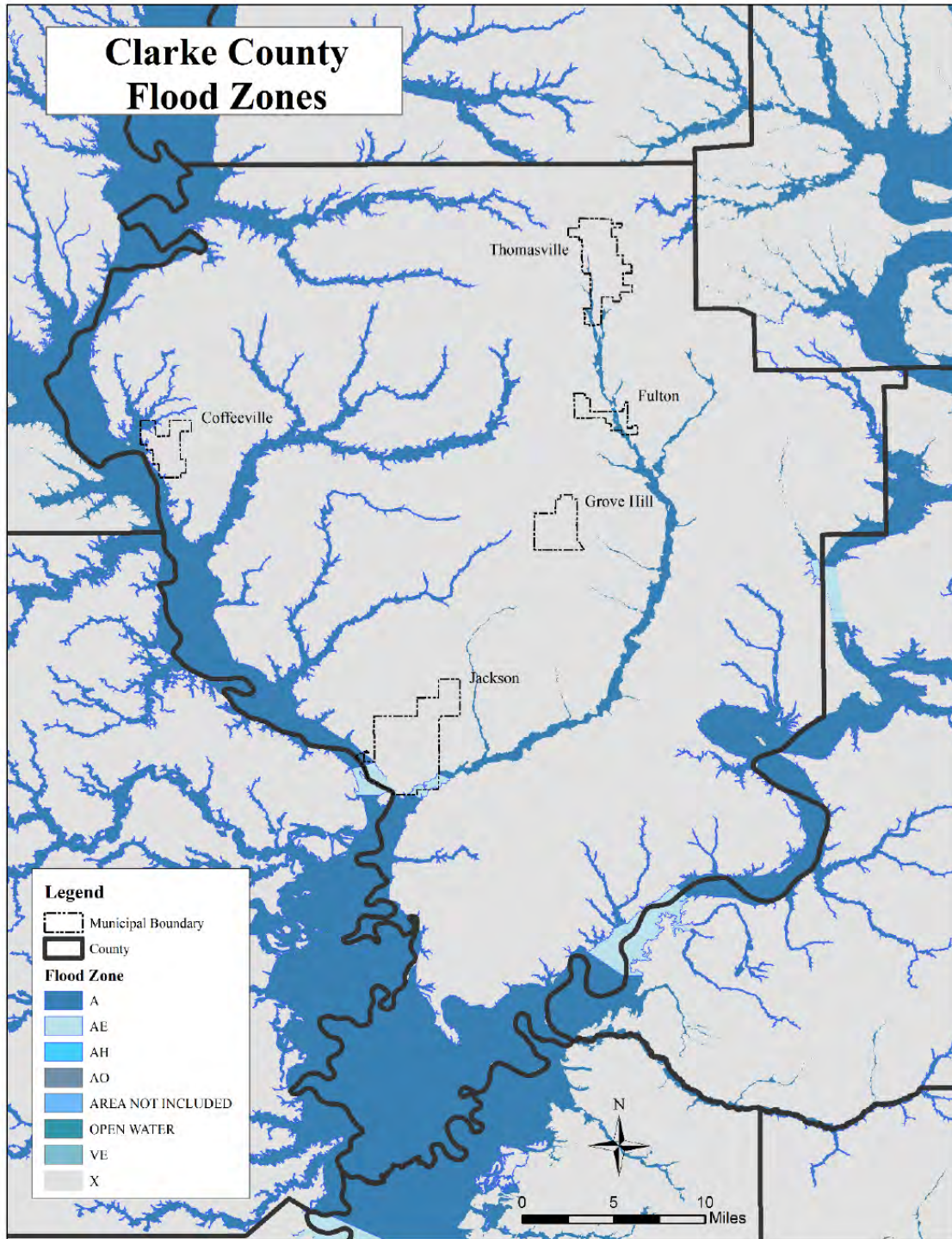
Clarke County (unincorporated)	Riverine flooding depths from 1±25 feet affecting agricultural lands, persons, structures, and infrastructure; Flash flooding depths from less than 1 foot to 3 feet.
Town of Coffeerville	Riverine flooding depths from 1±25 feet affecting agricultural lands, persons, structures, and infrastructure; Localized flooding to depths from less than 1 foot – 3 feet; minimal impact on

	persons, structures, and infrastructure
Town of Fulton	No riverine threat; Localized flooding to depths from less than 1 feet to 5 feet +; moderate-severe impacts on persons, structures, and infrastructure
Town of Grove Hill	No riverine threat; Localized flooding to depths from less than 1 feet – 3 feet; minimal impact on persons, structures, and infrastructure
City of Jackson	Riverine flooding depths from 1±25 feet affecting agricultural lands, persons, structures, and infrastructure; Localized flooding to depths from less than 1 feet – 3 feet; minimal impact on persons, structures, and infrastructure; moderate impact on persons, structures, and infrastructure
City of Thomasville	No riverine threat; Localized flooding to depths from less than 1 feet- 3 feet; moderate impact on persons, structures, and infrastructure

Source: Local information and historic occurrences

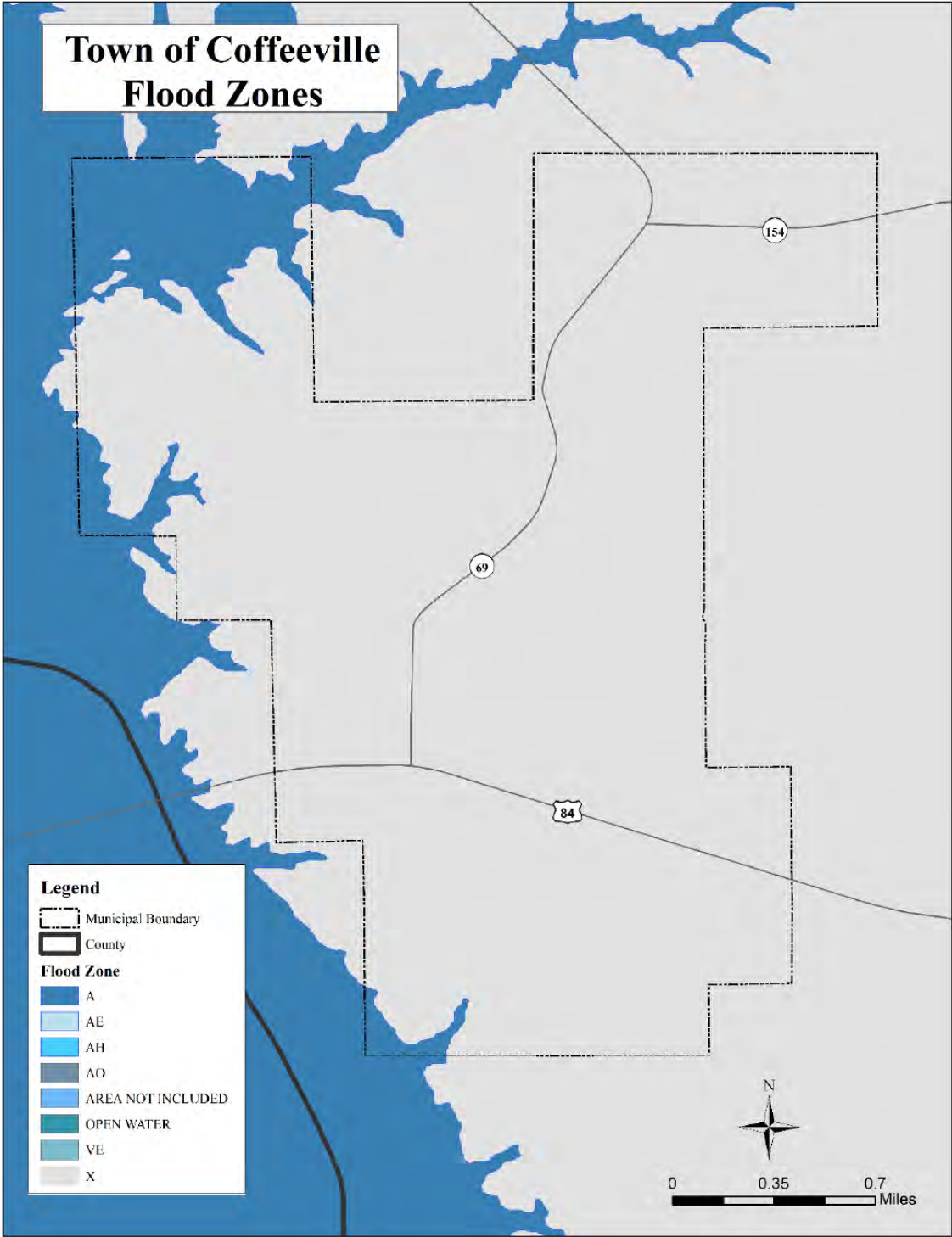
The location of flood-prone areas are located within the 100-year floodplain as determined by the FEMA flood maps. Figures 4.5-4.10 are the most recent 100-year floodplain data including maps of each specific jurisdiction. There is one repetitive loss structure located in the Town of Fulton. Is it a residential property.

Figure 4.5 Clarke County Special Flood Hazard Area (100-year floodplain)



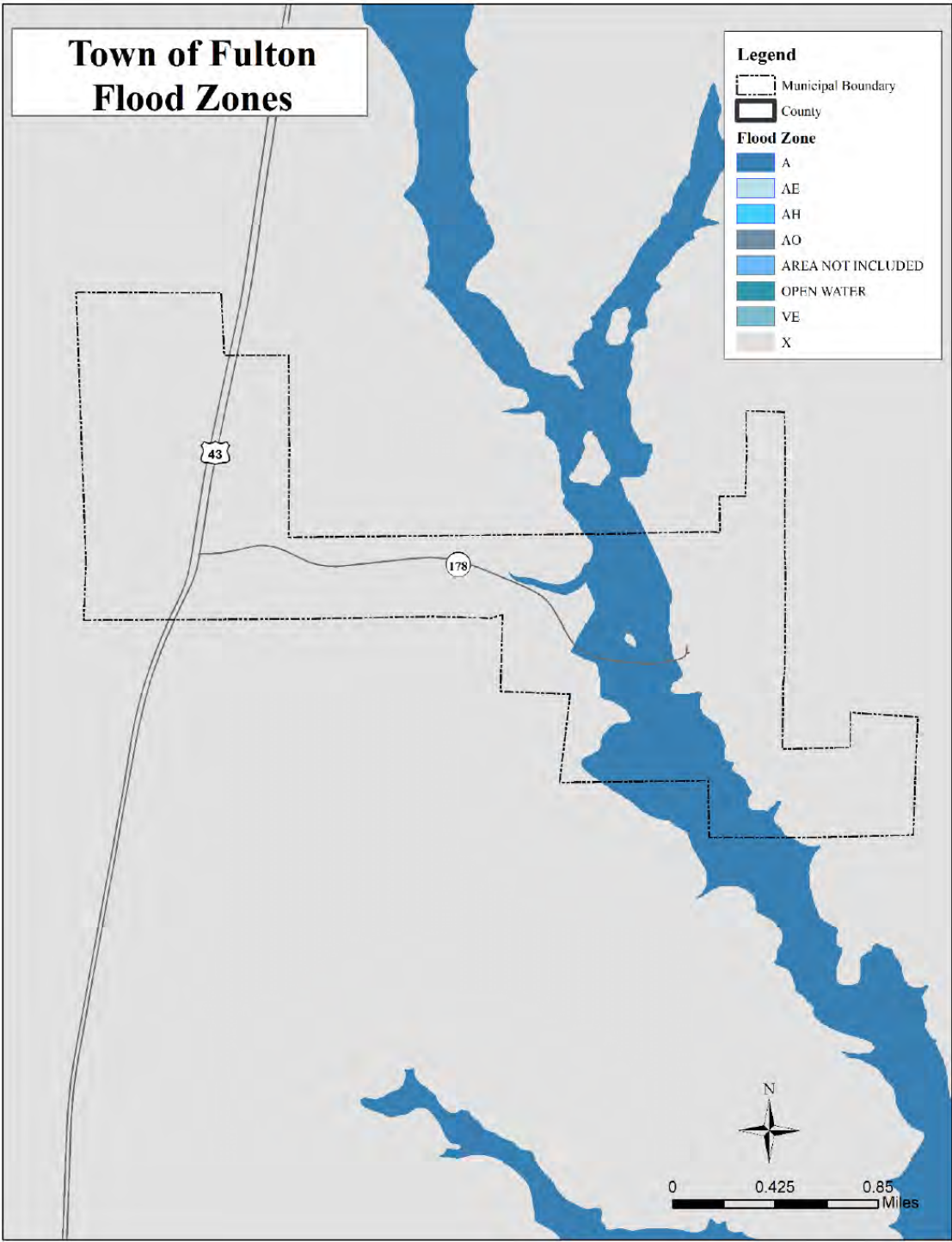
Source: National Flood Hazard Layer

Figure 4.6 Town of Coffeerville Flood Zones



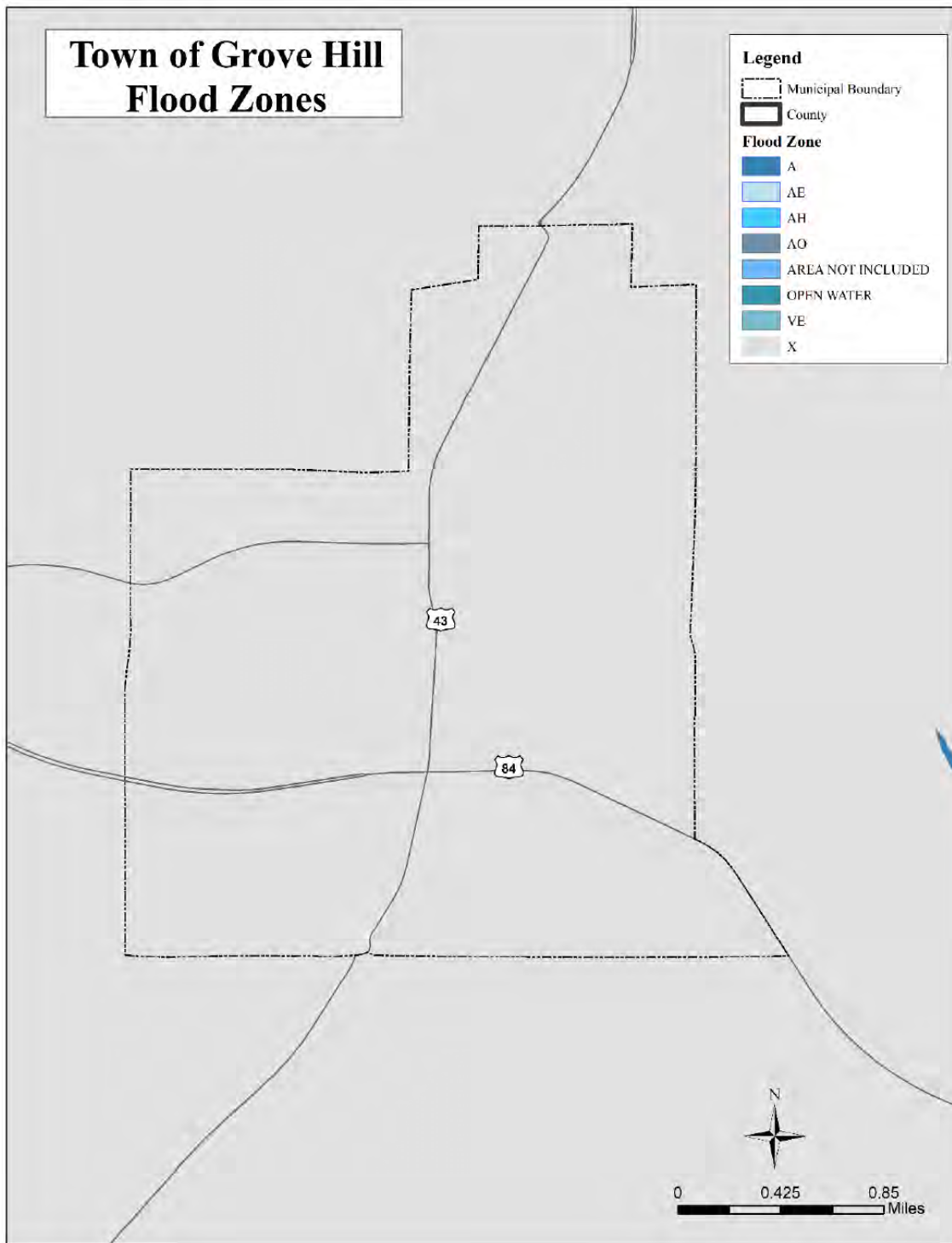
Source: National Flood Hazard Layer

Figure 4.7 Town of Fulton Flood Zones



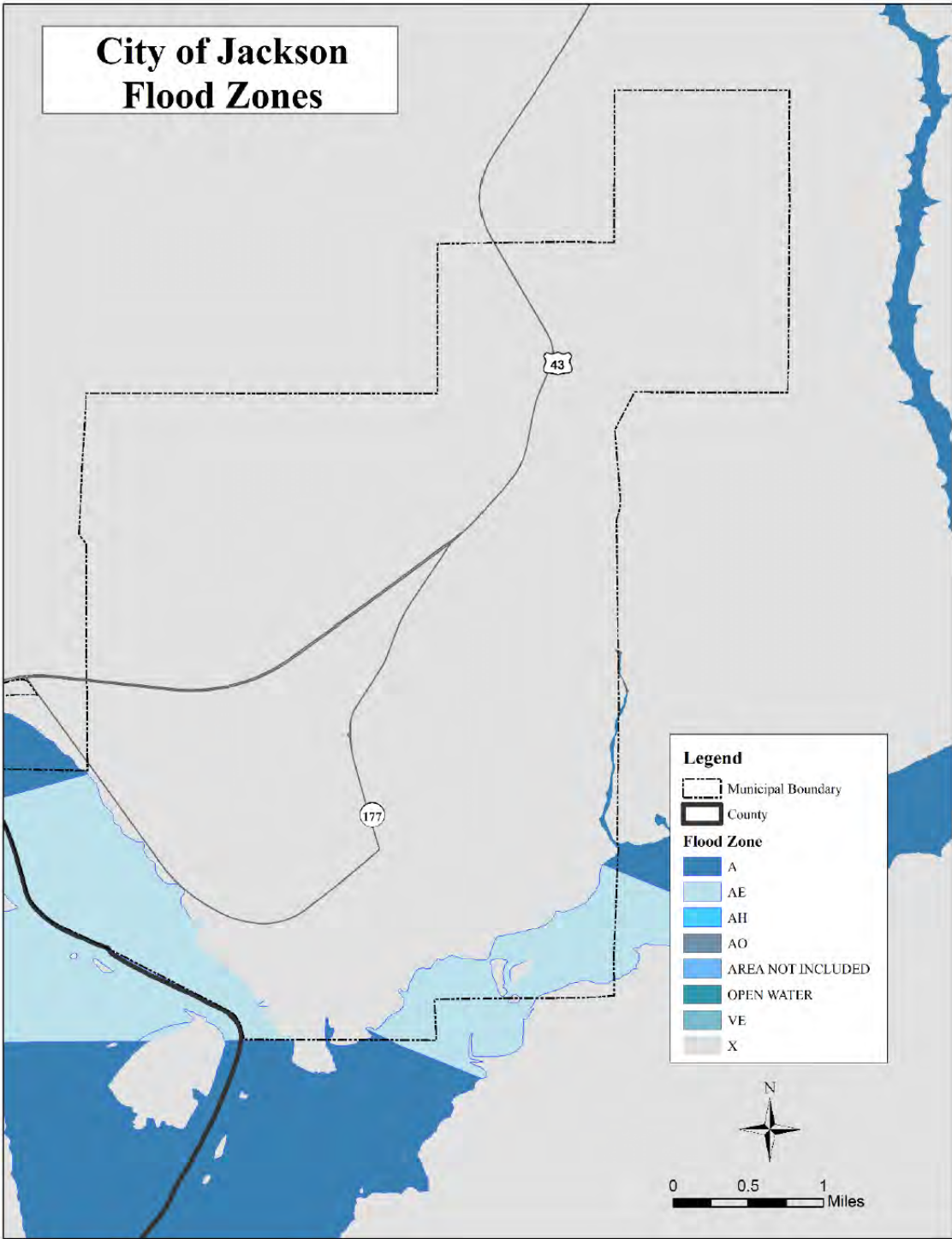
Source: National Flood Hazard Layer

Figure 4.8 Town of Grove Hill Flood Zones



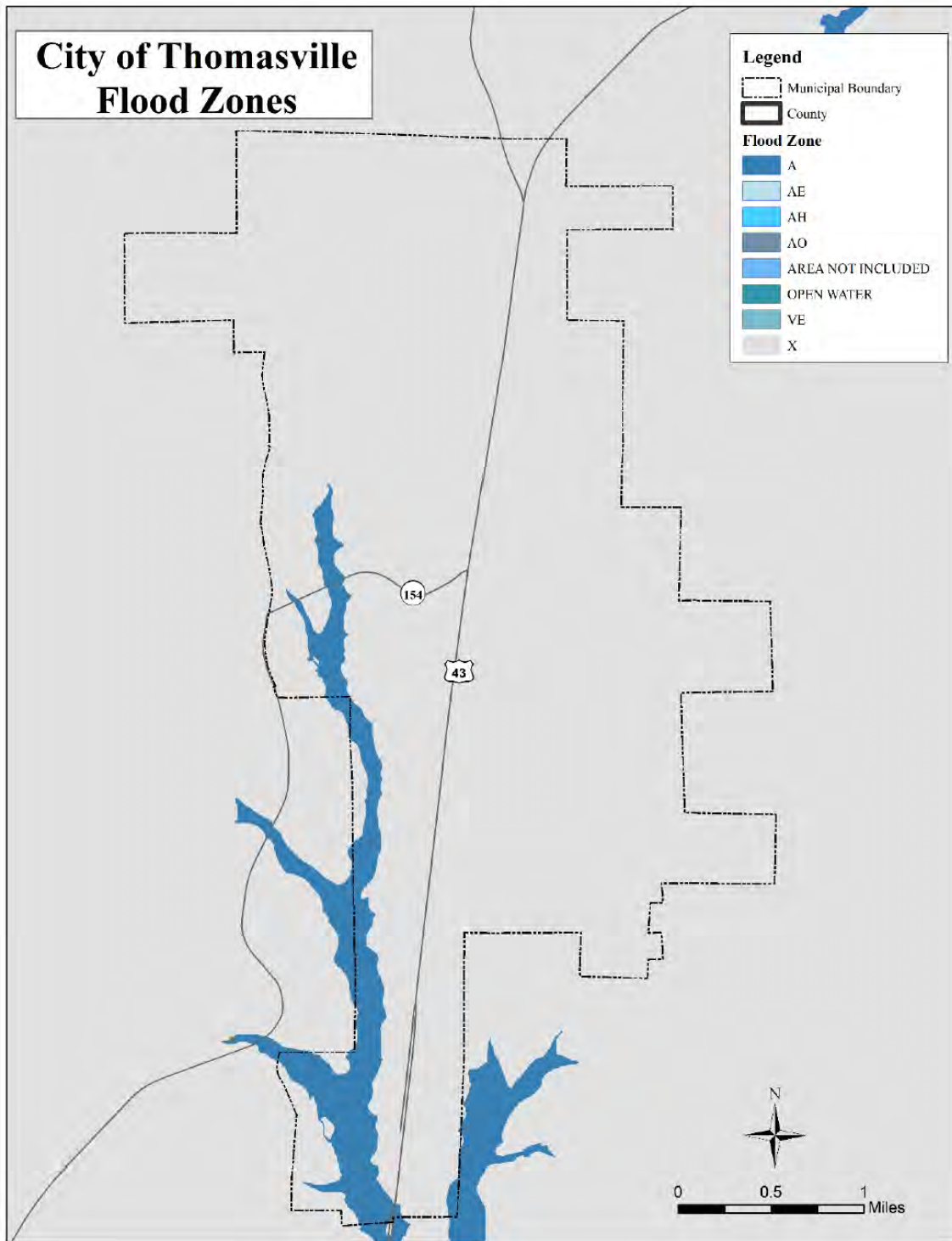
Source: National Flood Hazard Layer

Figure 4.9 City of Jackson Flood Zones



Source: National Flood Hazard Layer

Figure 4.10 City of Thomasville Flood Zones



Source: National Flood Hazard Layer

Probability of Future Occurrences - Clarke County experienced twenty-four flood events over a 10-year period. This results in a probability of a flooding event twice every year. Although we can extract data and probability of occurrence from historical information, they do not necessarily predict future occurrences.

HURRICANE/TROPICAL STORM

Hazard Description - A "tropical cyclone" is a generic term for a cyclonic, low-pressure system over tropical or sub-tropical waters. Tropical cyclones with maximum sustained winds of less than 39 mph are called tropical depressions. A tropical storm is a cyclone with maximum sustained winds greater than 39 mph but less than 74 mph, and a tropical storm with winds that have reached a constant speed of 74 miles per hour or more is considered a hurricane. Coastal Alabama borders a part of the northern Gulf of Mexico that has a high incidence of hurricanes causing wind and water damage in Clarke County.

Hazard History- Though the center of Clarke County is located approximately 120 miles from the Gulf of Mexico, hurricanes and tropical storms sometimes bring high winds and heavy rains to the area as they move north. Table 4.8 lists the major hurricanes/tropical storms that have impacted Clarke County over the past 10 years.

Table 4.8 Major Hurricanes/Tropical Storms that have Impacted Clarke County Since 2020

Date	Type	Deaths	Injuries	Property Damage	Crop Damage
10/7/2017	Hurricane Nate	0	0	\$0	\$0
9/14/2020	Hurricane Sally	0	0	\$312,513.00	\$0
12/10/2020	Hurricane Zeta	0	0	\$15,500,000.00	\$0
Totals:				\$15,812,513.00	\$0

Source: NCDC database

Hurricane Nate caused mainly wind damage in Clarke County—downed trees, power outages affecting thousands of homes, and minor property damage—but no major destruction or fatalities.

Hurricane Sally in September 2020 brought tropical-storm-force winds resulting in trees down. One tree fell on a home in Grove Hill resulting in significant damage. The estimated total damage cost attributed to Hurricane Sally (recovery categories eligible for FEMA Public Assistance) was about \$312,513. This local estimate reflects infrastructure and public works repairs (debris removal, protective measures, utility repairs, etc.), not the full economic damage value (like private property loss or uninsured residential/business damage).

In October 2020 Hurricane Zeta brought sustained strong tropical storm force winds with frequent gusts of 80-90 mph which resulted in widespread tree and power line damage throughout the county. Total estimated cost of eligible public assistance impacts was ~\$15.53 million. This includes roads, bridges, utilities, public buildings, debris removal, and protective measures. Power

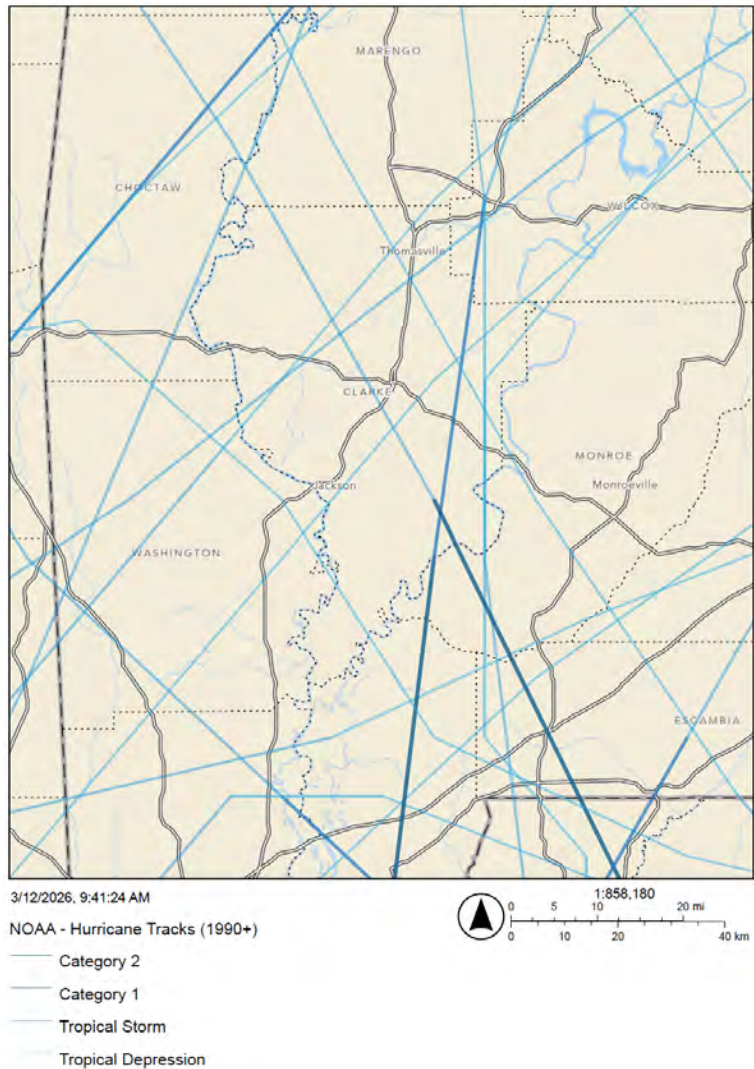
outages were near or at 100%. Over 250 power poles and 150 transformers had to be replaced. Numerous homes suffered damage, mainly to roofs. Over a thousand homes were damaged, with approximately 25 suffering major damage or being destroyed, due primarily to downed trees. One death was attributed to the storm in Clarke County.

Community Impacts - Risks associated with coastal storms include storm tide, inland flooding, water force, wind velocity and coastal erosion. A tropical storm can also produce numerous thunderstorms and tornadoes. Clarke County is susceptible to the effects of coastal storms. Since Clarke County is inland, the primary risk is the impact of high winds, the formation of tornadoes and flooding. Ten percent of deaths in the United States associated with hurricanes are due to the tornadoes.

Location and Extent - All of Clarke County is vulnerable to impacts from Hurricanes and Tropical Storms. Although it is located inland, it is estimated the large Hurricanes that reach the coast can cause damage with wind speeds around 50-60 miles per hour. All the jurisdictions within Clarke County including unincorporated Clarke County and Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville have the same chances of being hit by a hurricane as usually the wind field is at least 50-100 miles wide.

Probability of Future Occurrences - Clarke County is highly susceptible to hurricanes and tropical storms. Based on historical data, Clarke County can expect a hurricane once every three years. Figure 4.11 shows the paths of hurricanes and tropical storms that have affected the county since 1990 (FEMA RAPT).

Figure 4.11 Tropical Systems Affecting Clarke County Since 1990



SEVERE STORMS

Hazard Description - A severe thunderstorm is a storm containing damaging winds of at least 58 miles per hour or hail that measures a minimum of three-fourths of an inch in diameter. All severe thunderstorms contain intense lightning and straight-line or downburst winds that can be extremely strong and concentrated. Falling rain and sinking air create these winds that can reach speeds as high as 125 mph.

Hazard History – The storm events database contains listings of storms with hail, thunderstorm wind, and lightning. Since 2015 there have been numerous reports of these types of storms. Table 4.9, Table 4.10 and Table 4.11 include summaries of these events in Clarke County.

Table 4.9 Hailstorms in Clarke County, Alabama Since 2015

Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Jackson	5/20/2015	0.88 in.	0	0	\$0.00	\$0.00
Jackson	2/15/2016	1.00 in.	0	0	\$0.00	\$0.00
Gainestown	2/15/2016	1.00 in.	0	0	\$0.00	\$0.00
Tallahatta Springs	7/22/2018	1.00 in.	0	0	\$0.00	\$0.00
Chilton	7/22/2018	1.50 in.	0	0	\$0.00	\$0.00
Grove Hill	7/22/2018	1.00 in.	0	0	\$0.00	\$0.00
Grove Hill	3/25/2019	1.00 in.	0	0	\$0.00	\$0.00
Grove Hill	6/23/2020	1.00 in.	0	0	\$0.00	\$0.00
Coffeetown	4/9/2021	2.50 in.	0	0	\$0.00	\$0.00
Bashi	4/9/2021	1.75 in.	0	0	\$0.00	\$0.00
Bashi	4/9/2021	2.50 in.	0	0	\$0.00	\$0.00
Barlow Bend	4/24/2021	1.00 in.	0	0	\$0.00	\$0.00
Rural	4/24/2021	2.75 in.	0	0	\$0.00	\$0.00
Rural	4/24/2021	1.75 in.	0	0	\$0.00	\$0.00
Thomasville	4/24/2021	1.00 in.	0	0	\$0.00	\$0.00
Scyrene	4/24/2021	1.00 in.	0	0	\$0.00	\$0.00
Jackson	4/24/2021	1.25 in.	0	0	\$0.00	\$0.00
Glendon	4/24/2021	1.25 in.	0	0	\$0.00	\$0.00
Jackson	1/9/2022	1.00 in.	0	0	\$0.00	\$0.00
Thomasville	3/26/2023	1.00 in.	0	0	\$0.00	\$0.00
West Bend	3/26/2023	1.00 in.	0	0	\$0.00	\$0.00
Tallahatta Springs	3/26/2023	1.00 in.	0	0	\$0.00	\$0.00
Fulton	3/26/2023	1.00 in.	0	0	\$0.00	\$0.00
Grove Hill	6/16/2023	2.00 in.	0	0	\$0.00	\$0.00
Grove Hill	6/16/2023	1.00 in.	0	0	\$0.00	\$0.00
Choctaw Bluff	5/13/2024	1.75 in.	0	0	\$0.00	\$0.00
Totals:			0	0	\$0.00	\$0.00

Source: NCDC Database

**Table 4.10 High Wind Events from Thunderstorms in Clarke County, Alabama
Since 2015**

Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
West Bend	6/13/2015	52 kts. EG	0	0	\$2,000.00	\$0.00
Thomasville	7/4/2015	52 kts. EG	0	0	\$2,000.00	\$0.00
Coffeeville	7/9/2015	52 kts. EG	0	0	\$10,000.00	\$0.00
Coffeeville	7/21/2015	52 kts. EG	0	0	\$5,000.00	\$0.00
Coffeeville	12/28/2015	50 kts. EG	0	0	\$0.00	\$0.00
Jackson	2/15/2016	52 kts. EG	0	0	\$5,000.00	\$0.00
Grove Hill	2/15/2016	52 kts. EG	0	0	\$5,000.00	\$0.00
Jackson	2/15/2016	52 kts. EG	0	0	\$5,000.00	\$0.00
Jackson	2/15/2016	52 kts. EG	0	0	\$2,000.00	\$0.00
Thomasville	2/15/2016	52 kts. EG	0	0	\$3,000.00	\$0.00
Choctaw Bluff	2/15/2016	52 kts. EG	0	0	\$3,000.00	\$0.00
Jackson	2/23/2016	52 kts. EG	0	0	\$25,000.00	\$0.00
Coffeeville	2/23/2016	52 kts. EG	0	0	\$2,000.00	\$0.00
Coffeeville	2/23/2016	52 kts. EG	0	0	\$2,000.00	\$0.00
Bashi	3/31/2016	61 kts. EG	0	0	\$30,000.00	\$0.00
Thomasville	3/31/2016	61 kts. EG	0	0	\$30,000.00	\$0.00
Thomasville	3/31/2016	61 kts. EG	0	0	\$30,000.00	\$0.00
Nettlesboro	5/20/2016	52 kts. EG	0	0	\$3,000.00	\$0.00
Thomasville	6/17/2016	52 kts. EG	0	0	\$10,000.00	\$0.00
Coffeeville	6/17/2016	61 kts. EG	0	0	\$10,000.00	\$0.00
Grove Hill	6/17/2016	61 kts. EG	0	0	\$10,000.00	\$0.00
Dickinson	6/17/2016	61 kts. EG	0	0	\$5,000.00	\$0.00
Coffeeville	7/5/2016	52 kts. EG	0	0	\$3,000.00	\$0.00
Jackson	1/2/2017	52 kts. EG	0	0	\$15,000.00	\$0.00
Jackson	1/2/2017	61 kts. EG	0	0	\$5,000.00	\$0.00
Alama	1/2/2017	61 kts. EG	0	0	\$20,000.00	\$0.00
Marvin	1/21/2017	52 kts. EG	0	0	\$2,000.00	\$0.00
Glendon	1/22/2017	52 kts. EG	0	0	\$3,000.00	\$0.00
Morvin	3/1/2017	52 kts. EG	0	0	\$5,000.00	\$0.00
Thomasville	4/3/2017	52 kts. EG	0	0	\$2,000.00	\$0.00
Whatley	4/3/2017	61 kts. EG	0	0	\$5,000.00	\$0.00
Manila	4/3/2017	61 kts. EG	0	0	\$5,000.00	\$0.00
Gainestown	4/3/2017	61 kts. EG	0	0	\$10,000.00	\$0.00
Dickinson	4/5/2017	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	6/16/2017	52 kts. EG	0	0	\$5,000.00	\$0.00
Opine	6/10/2018	52 kts. EG	0	0	\$5,000.00	\$0.00
Alma	6/10/2018	52 kts. EG	0	0	\$5,000.00	\$0.00
Jackson	6/10/2018	52 kts. EG	0	0	\$5,000.00	\$0.00
Thomasville	6/28/2018	61 kts. EG	0	0	\$5,000.00	\$0.00
Grove Hill	6/28/2018	61 kts. EG	0	0	\$5,000.00	\$0.00

Thomasville	12/27/2018	52 kts. EG	0	0	\$10,000.00	\$0.00
Gainestown	3/3/2019	52 kts. EG	0	0	\$5,000.00	\$0.00
Coffeeville	4/18/2019	52 kts. EG	0	0	\$5,000.00	\$0.00
Coffeeville	6/27/2019	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	10/5/2019	52 kts. EG	0	0	\$0.00	\$0.00
Opine	10/5/2019	52 kts. EG	0	0	\$0.00	\$0.00
Winn	11/27/2019	61 kts. EG	0	0	\$0.00	\$0.00
Gosport	11/27/2019	87 kts. EG	0	0	\$0.00	\$0.00
West Bend	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Salitpa	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Walker Springs	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Barlow Bend	1/11/2020	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	2/6/2020	52 kts. EG	0	0	\$0.00	\$0.00
Peacock	2/10/2020	52 kts. EG	0	0	\$0.00	\$0.00
Allen	2/10/2020	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	2/10/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	3/4/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	3/4/2020	52 kts. EG	0	0	\$0.00	\$0.00
Chilton	3/4/2020	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	3/31/2020	61 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	4/23/2020	52 kts. EG	0	0	\$0.00	\$0.00
Chilton	4/23/2020	52 kts. EG	0	0	\$0.00	\$0.00
Chilton	4/23/2020	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	5/17/2020	52 kts. EG	0	0	\$0.00	\$0.00
Opine	5/27/2020	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	3/31/2021	52 kts. EG	0	0	\$0.00	\$0.00
Rural	4/9/2021	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	4/9/2021	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	4/24/2021	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	4/24/2021	52 kts. EG	0	0	\$0.00	\$0.00
Morivn	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Bashi	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	5/4/2021	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	5/4/2021	58 kts. MG	0	0	\$0.00	\$0.00
Winn	5/4/2021	52 kts. MG	0	0	\$0.00	\$0.00
Jackson	5/4/2021	52 kts. MG	0	0	\$0.00	\$0.00

Choctaw Bluff	5/4/2021	52 kts. MG	0	0	\$0.00	\$0.00
Thomasville	2/3/2022	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	2/3/2022	52 kts. EG	0	0	\$0.00	\$0.00
Morvin	3/18/2022	52 kts. EG	0	0	\$0.00	\$0.00
Walker Springs	3/30/2022	83 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	4/5/2022	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	4/13/2022	61 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	4/13/2022	61 kts. EG	0	0	\$0.00	\$0.00
Winn	6/10/2022	52 kts. EG	0	0	\$0.00	\$0.00
Winn	6/10/2022	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	6/10/2022	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	6/10/2022	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	6/17/2022	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	6/23/2022	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	6/23/2022	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	6/25/2022	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	8/30/2022	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	8/30/2022	52 kts. EG	0	0	\$0.00	\$0.00
Walker Springs	9/7/2022	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	11/30/2022	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	1/3/2023	52 kts. EG	0	0	\$0.00	\$0.00
Peacock	1/3/2023	52 kts. EG	0	0	\$0.00	\$0.00
Peacock	1/3/2023	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	1/4/2023	52 kts. EG	0	0	\$0.00	\$0.00
Roundhill	3/26/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	4/3/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Scyrene	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Winn	5/17/2023	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	6/10/2023	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	6/14/2023	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	6/14/2023	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	6/14/2023	52 kts. EG	0	0	\$0.00	\$0.00
Thomasville	6/15/2023	52 kts. EG	0	0	\$0.00	\$0.00
Peacock	6/16/2023	56 kts. EG	0	0	\$0.00	\$0.00
Whatley	6/16/2023	61 kts. EG	0	0	\$0.00	\$0.00
Carlton	6/16/2023	61 kts. EG	0	0	\$0.00	\$0.00
West Bend	6/16/2023	52 kts. EG	0	0	\$0.00	\$0.00

Peacock	6/16/2023	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Coffeeville	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Gosport	6/18/2023	52 kts. EG	0	0	\$0.00	\$0.00
Tallahatta Springs	6/26/2023	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	1/9/2024	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	5/10/2024	61 kts. EG	0	0	\$0.00	\$0.00
Thomasville	8/18/2024	52 kts. EG	0	0	\$0.00	\$0.00
Fulton	8/18/2024	52 kts. EG	0	0	\$0.00	\$0.00
Whatley	8/18/2024	52 kts. EG	0	0	\$0.00	\$0.00
Grove Hill	12/28/2024	56 kts. MG	0	0	\$0.00	\$0.00
Grove Hill	2/16/2025	52 kts. EG	0	0	\$0.00	\$0.00
Gainestown	3/15/2025	52 kts. EG	0	0	\$0.00	\$0.00
Roundhill	5/24/2025	52 kts. EG	0	0	\$0.00	\$0.00
Winn	5/24/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/24/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/24/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/24/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. MG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Jackson	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Fulton	5/25/2025	52 kts. EG	0	0	\$0.00	\$0.00
Totals:			0	0	\$324,000.00	\$0.00

Source: NCDC Database

Table 4.11 Lightning Events in Clarke County Since 2015

Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Thomasville	7/26/2016		0	0	\$60,000.00	\$0.00
Gosport	8/2/2016		0	0	\$5,000.00	\$0.00
Thomasville	4/3/2017		0	0	\$30,000.00	\$0.00
Whatley	7/7/2018		0	0	\$2,000.00	\$0.00
Grove Hill	7/1/2020		0	0	\$22,000.00	\$0.00
Alma	11/30/2022		0	0	\$20,000.00	\$0.00
Totals:			0	0	\$139,000.00	\$0.00

Source: NCDC Database

Community Impact - Since 2015 Clarke County has experienced 183 severe storm events. Large hail, though very rare, can cause injury or loss of life. Normally it only causes damage to automobiles, trees and crops. Both lightning and high winds frequently cause loss of life and considerable property damage. The power of lightning's electrical charge and intense heat can electrocute on contact, split trees, ignite fires, and cause electrical failures.

Location and Extent – All of Clarke County is vulnerable to severe storms with strong winds, hail and/or lightning. All the jurisdictions within Clarke County including unincorporated Clarke County and Town of Coffeerville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville have the same chances of being hit by severe storms.

Probability of Future Occurrences- The historical occurrence and expected future occurrences of these events has led the county to rank severe storms as a high risk. The probability of a severe thunderstorm occurring depends on certain atmospheric and climatic conditions. Based on the number of damage-causing severe storms since 2015 contained in the Storm Events Database, Clarke County can expect 10+ instances of lightning, straight-line wind, or hail induced damage per year. Average annual damages from severe storm events are estimated at \$46,000. Although we can extract data and probability of occurrence from historical information, the risk of a thunderstorm occurring and the location of damage appears to be a random event.

TORNADOES

Hazard Description - A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm or hurricane and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornado season is generally March through August, although tornadoes can occur at any time of year. They tend to occur in the afternoons and evenings: over 80 percent of all tornadoes strike between noon and midnight. The National Weather Service defines a tornado as, “A violently rotating column of air in contact with the ground and extending from the base of a thunderstorm.”

Hazard History – There have been several tornadoes that have occurred in Clarke County. The earliest damage-causing event on record occurred in 1956 and the most recent occurred in 2025. Tornado magnitudes are measured on the enhanced Fujita Scale. Figure 4.13 is a depiction of the original and enhanced Fujita scale.

Figure 4.13 Original and Enhanced Fujita Scale for U.S. Tornadoes

ORIGINAL FUJITA SCALE		ENHANCED FUJITA SCALE	
F5	261-318 mph	EF5	+200 mph
F4	207-260 mph	EF4	166-200 mph
F3	158-206 mph	EF3	136-165 mph
F2	113-157 mph	EF2	111-135 mph
F1	73-112 mph	EF1	86-110 mph
F0	<73 mph	EF0	65-85 mph

Source: FEMA

Table 4.12 Includes a list of all tornadoes that have occurred in Clarke County since 2015. There are twelve events.

Table 4.12 Tornadoes in Clarke County, Alabama

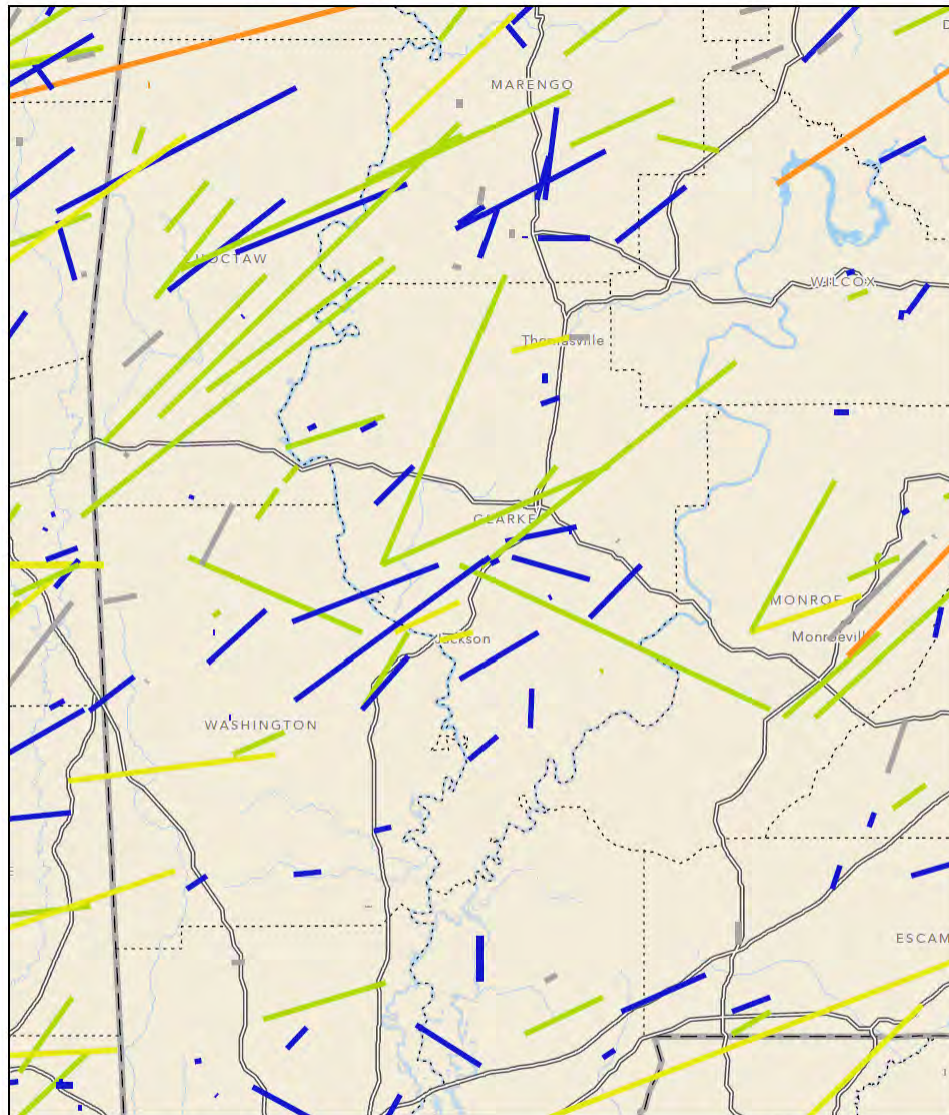
Location	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Whatley	6/21/2017	EF0	0	0	\$25,000.00	\$0.00
Rural	10/25/2019	EF1	0	0	\$0.00	\$0.00
West Bend	4/12/2020	EF1	0	0	\$0.00	\$0.00
West Bend	3/17/2021	EF2	0	2	\$0.00	\$0.00
Choctaw Bluff	8/30/2021	EF1	0	0	\$0.00	\$0.00
Whatley	3/30/2022	EF1	0	0	\$0.00	\$0.00
Coffeeville	4/5/2022	EF2	0	0	\$0.00	\$0.00
Coffeeville	4/5/2022	EF1	0	0	\$0.00	\$0.00
Rural	3/26/2023	EF1	0	0	\$0.00	\$0.00
Coffeeville	2/12/2025	EF2	0	0	\$0.00	\$0.00
Carlton	3/15/2025	EF1	0	0	\$0.00	\$0.00
Barlow Bend	3/15/2025	EF0	0	0	\$0.00	\$0.00
Totals:			0	2	\$25,000.00	\$0.00

Source: NCDC Database

According to the database, a total of 12 tornado events have caused 2 injuries since 2015. Figure 4.9 depicts Clarke County historical tornado tracks between 1950-2022.

Figure 4.14 Clarke County Tornado Tracks 1950-2022

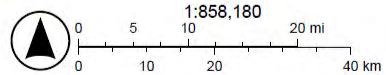
Clarke County Tornado Tracks 1950-2022



3/12/2026, 11:07:57 AM

NOAA - Historical Tornado Tracks: 1950-2022

- EF-4
- EF-3
- EF-2
- EF-1
- EF-0

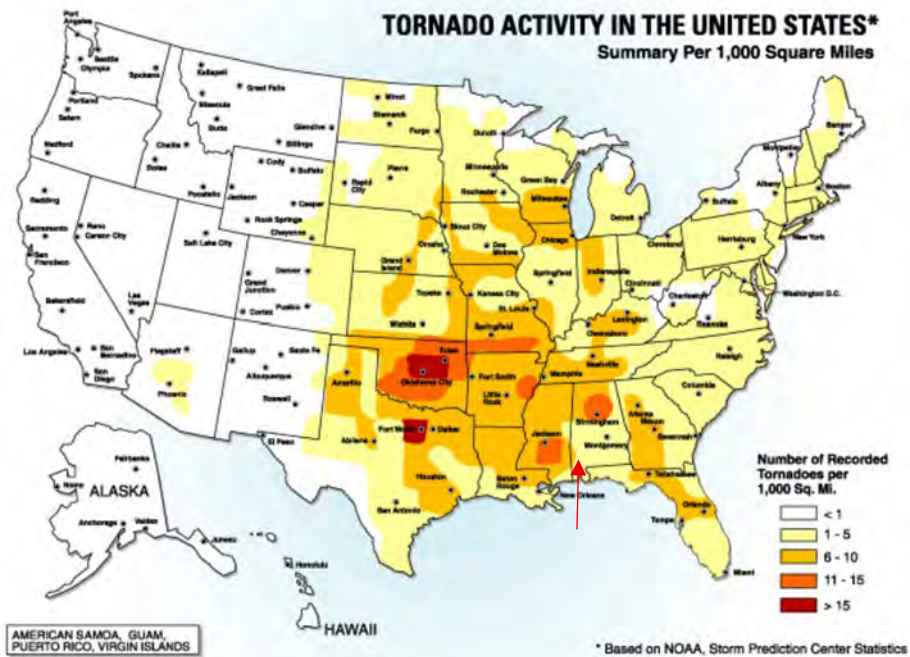


Community Impact - The damage from a tornado is a result of the high wind velocity and wind-blown debris. Tornado winds can approach speeds as high as 300 miles per hour, travel distances over 100 miles and reach heights over 60,000 feet above ground.

Location and Extent - Paths of tornadoes within a 20-mile radius of the center of Clarke County since 1950 have originated in the west and moved toward the east. The entire county is equally susceptible to damage from tornadoes. All the jurisdictions within Clarke County including unincorporated Clarke County and Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville have the same chances of being hit by a tornado.

Probability of Future Occurrences - The occurrence of tornadoes cannot be predicted, but past occurrences and basic weather patterns can be used to identify areas that are more susceptible. Based on the information available from the Storm Events Database, it appears the county may expect a damage-causing tornado once every 5.5 years. A death- or injury-causing tornado has occurred, on average, once every 18 and 3.5 years, respectively. Average annual damages are estimated at \$74,000. Although we can extract data and probability of occurrence from historical information, the risk of a tornado occurring and the location of damage appear to be a random event. Figure 4.15 shows the number of tornadoes that have occurred per one thousand square miles. Clarke County falls within the one to five tornadoes per one thousand square miles range.

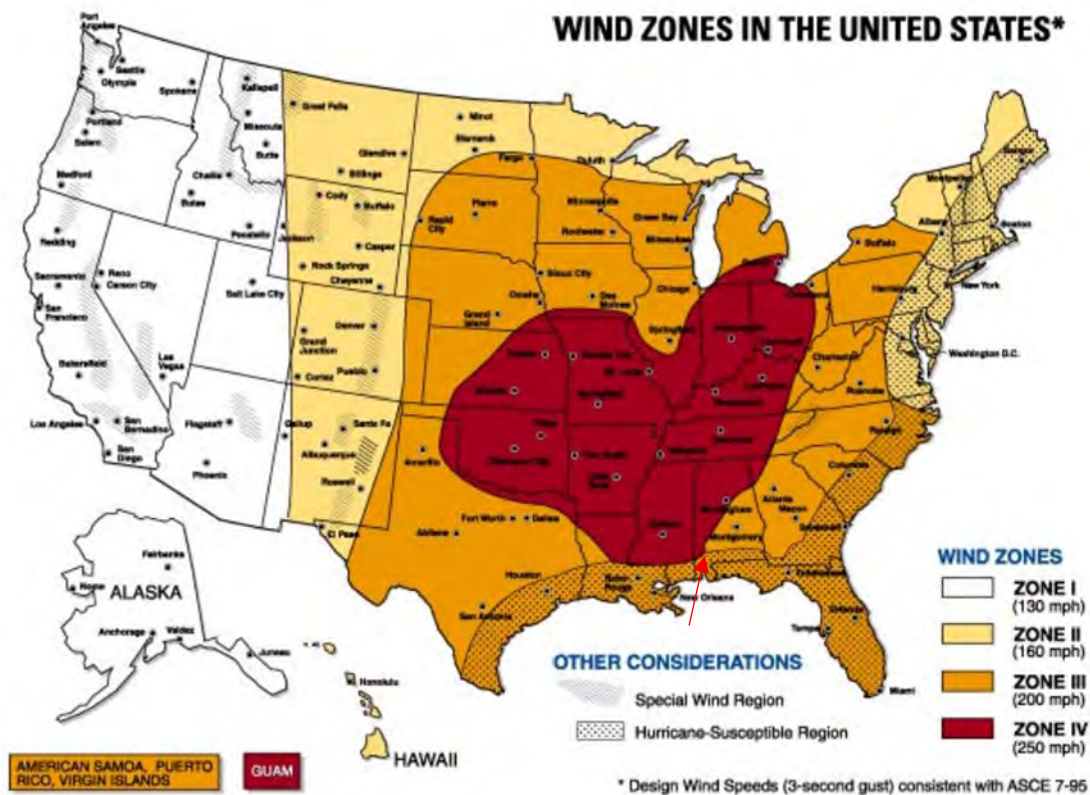
Figure 4.15 Tornadoes per 1,000 square miles



Source: <http://www.fema.gov/pdf/library/2ismsec1.pdf>

The United States Wind Zone map (Figure 4.16) shows how intense and frequent strong winds occur across the United States. Clarke County is in Wind Zone II, which has a design wind speed of 200 miles per hour. Design wind speed is the wind speed that homes should be constructed to withstand. Locations within this zone have had the medium intensity and frequency of tornadoes and strong winds. Due to the county's historical occurrences, climate, and location the committee considers tornadoes a high-risk hazard.

Figure 4.16 Wind Zones in the United States – Note Clarke County is in Zone III



Source: Federal Emergency Management Agency: <http://www.fema.gov/graphics/fima/tsfsm01.gif>

LANDSLIDES

Hazard Description - A "landslide" is the downward and outward movement of slopes. The term refers to various forming materials acting under the force of gravity. The term covers a broad category of events, including mudflows, mudslides, debris flows, rock falls, rockslides, debris avalanches, debris slides and earth flows. Landslides may consist of natural rock, soil, artificial fill, or combinations of these materials. Landslides are classified by type of movement, including slides, flows, lateral spreads, falls and topples.

Almost any steep or rugged terrain is susceptible to landslide under the right conditions.

The most hazardous areas are steep slopes on ridges, hills 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 caused by earthquakes or blasting can trigger landslides.

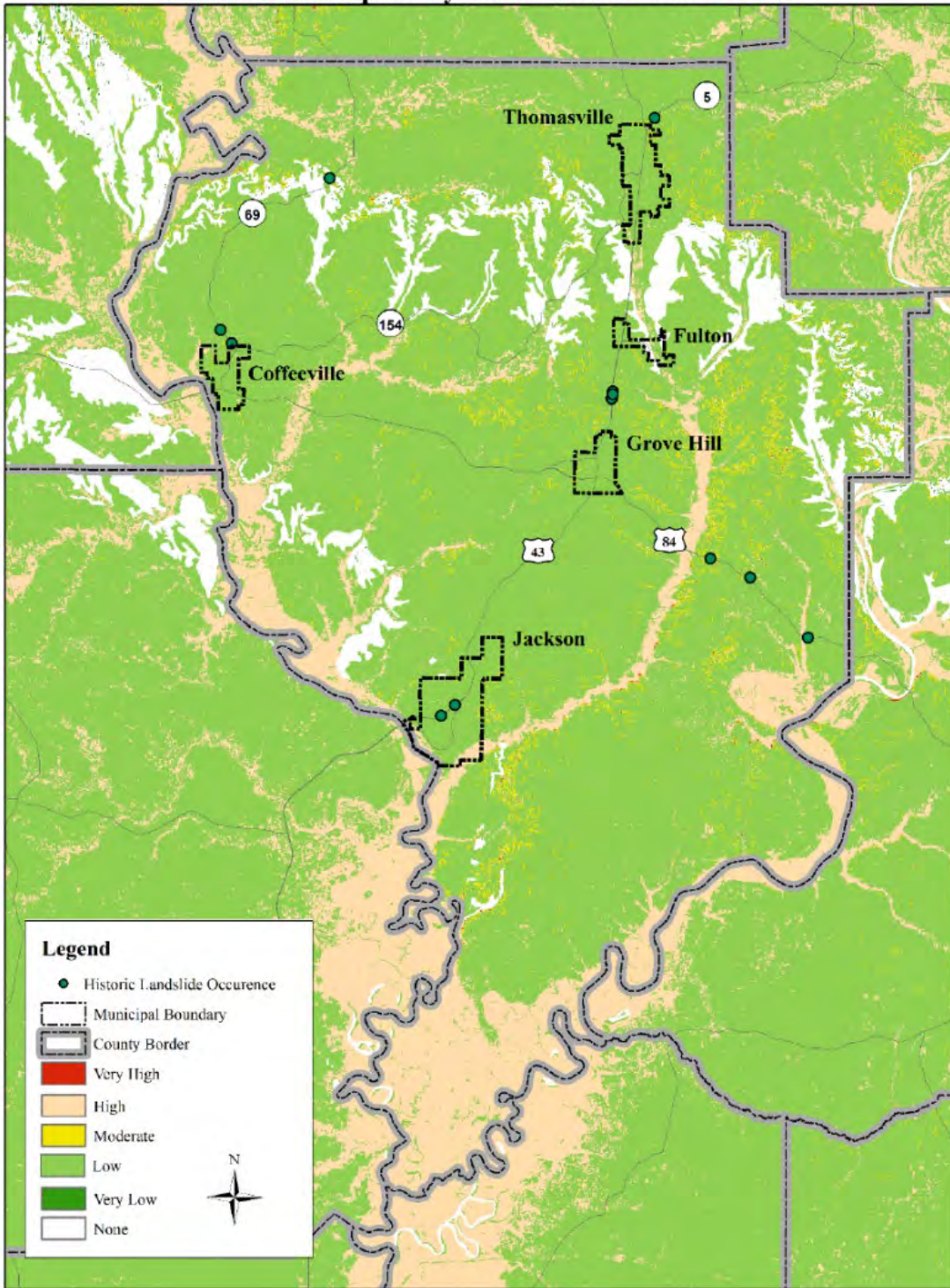
Debris flows (also referred to as mudslides) generally occur during intense rainfall on water saturated soils. They usually start on steep hillsides as soil slumps or slides that liquefy and accelerate to speeds as great as 35 miles per hour. Multiple debris flows may merge, gain volume and travel long distances from their source, making areas of down slope particularly hazardous. Surface runoff channels along roadways and below culverts are common sites of debris flows and other landslides.

Hazard History – Figure 4.17 denotes locations of historic landslides in Clarke County.

Community Impact - The effects of landslides are often misrepresented as being the result of the landslide's trigger event, such as flood, earthquake, volcanic eruption, hurricane, or coastal storm. The impact from a landslide can include loss of life, damage to buildings, lost productivity, disruption in utilities and transportation systems, and reduced property values.

Location and Extent – Figure 4.17 also illustrated the county's susceptibility to landslides. By examining the maps, one can see that the majority of the county is classified as having low susceptibility. Susceptibility is defined as the probable degree of response of rocks and soils to natural or artificial cutting of slopes, or to anomalously high precipitation. Low susceptibility translates to less than 1.5% of the planning being affected by landslides.

Figure 4.17
Clarke County
Landslide Susceptibility and Historical Occurrences



Source: Geological Survey of Alabama

Probability of Future Occurrences- The probability of future occurrences of landslides in Clarke County is “low incidence” (less than 1.5% of the area is involved in landsliding.)

LAND SUBSIDENCE/SINKHOLES

Hazard Description- Land subsidence occurs when large amounts of groundwater have been withdrawn from certain types of rocks, such as fine-grained sediments. The rock compacts because the water is partly responsible for holding the ground up. When the water is withdrawn, the rocks collapse. Subsidence can occur over large areas and in more localized locations. Smaller localized areas of subsidence are referred to as sinkholes.

Sinkholes can form from a variety of causes including natural and man-made activities and include ground collapse related to:

- Naturally dissolved voids in rock
- A drop in the water table from drought or pumping of nearby wells
- Heavy construction or weight at the ground surface
- Drainage problems
- Collapse of underground mines
- Excessive rainfall.

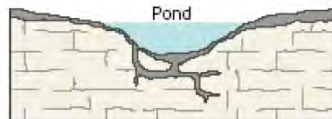
There are three types of sinkholes. A description and illustration (Figure 4.18) of each follow:

Figure 4.18 Types of Sinkholes

- Dissolution:



Rainfall and surface water percolate through joints in the limestone. Dissolved carbonate rock is carried away from the surface and a small depression gradually forms.



On exposed carbonate surfaces, a depression may focus surface drainage, accelerating the dissolution process. Debris carried into the developing sinkhole may plug the outflow, ponding water and creating wetlands.

- Cover subsidence:

Granular sediments spall into secondary openings in the underlying carbonate rocks.

A column of overlying sediments settles into the vacated spaces (a process termed “piping”).

Dissolution and infilling continue, forming a noticeable depression in the land surface.

The slow downward erosion eventually forms small surface depressions 1 inch to several feet in depth and diameter.



- Cover collapse

Sediments spill into a cavity.

As spalling continues, the cohesive covering sediments form a structural arch.

The cavity migrates upward by progressive roof collapse.

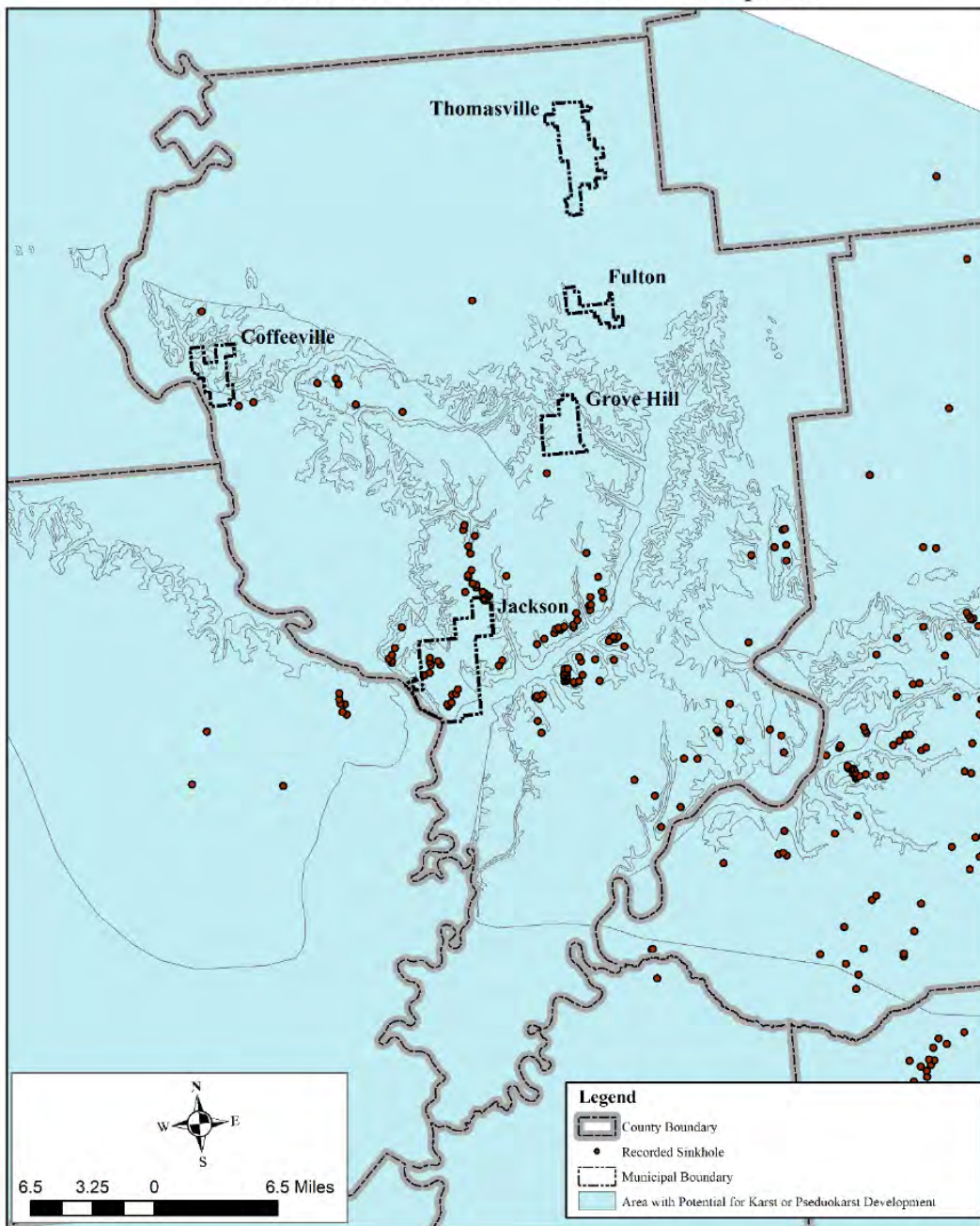
The cavity eventually breaches the ground surface, creating sudden and dramatic sinkholes.



Source: United States Geological Survey

Hazard History- There are historical occurrences of subsidence in the planning area. The Geologic Survey of Alabama digitized historical topographic depression features on historical 1:24,000-scale topographic maps. Figure 4.19 includes these occurrences. It is important to note that while most of the topographic depressions are related to sinkholes, some may also be related to mine subsidence.

Figure 4.19
Clarke County Areas Underlain By Soluble Rocks
with Potential for Karst or Pseudokarst Development



Source: Geological Survey of Alabama

Community Impact -All jurisdictions share the same estimated impact from land subsidence: <2 acres affected per incidence, minor localized impacts to structures and infrastructure

Location and Extent- Figure 4.19 also provides areas in Clarke County underlain by water soluble rocks. These areas are at risk for land subsidence.

Probability of Future Occurrence- Based on the information presented, it is difficult to quantify any future incidence of land subsidence. Areas of potential subsidence can be identified based on knowledge of subsurface conditions, but future occurrence is unpredictable. Land subsidence research including limited documentation of previous occurrences lead to the belief that future occurrences would have a minimal impact. The probability of these incidents is classified as low.

WILDFIRE

Hazard Description - There are four categories of wildfires that are experienced throughout the United States including: wildland fires, interface or intermix fires, firestorms, prescribed fires and prescribed natural fires. The primary categories of fires in Clarke County are wildland fires. Wildland fires are fueled exclusively by natural vegetation. The frequency and severity of wildfires is dependent on weather and on human activity. Nearly all wildfires in Clarke County are human caused (only a very small percentage are caused by lightning), with arson and careless debris burning being the major causes of wildfires. If not promptly controlled, wildfires may grow into an emergency or disaster. Even small fires can threaten lives, damage forest resources, and destroy structures.

*Hazard History –*Historical fire data was obtained from the Alabama Forestry Commission for the county since 2015. There have been extreme fires in several locations throughout Clarke County, but overall, the majority of the county’s area has been low to medium fire occurrence. Table 4.13 lists wildfires in Clarke County between the years of 2015 and 2025.

Table 4.13 Clarke County Wildfires 2015-2025

Fire #	Acres	Reported On	Controlled On
20251124-7	0.5	11/24/2025 14:10	11/26/2025 15:47
20251117-12	2	11/17/2025 12:42	11/19/2025 16:25
20251110-6	1	11/10/2025 14:09	11/10/2025 16:04
20251018-16	0.25	10/18/2025 14:29	10/21/2025 9:54
20251016-11	0.75	10/16/2025 14:59	10/20/2025 13:50
20251013-23	0.5	10/13/2025 18:55	10/16/2025 13:56
20250921-21	44	9/21/2025 19:10	9/25/2025 8:16
20250921-12	0.1	9/21/2025 15:31	9/21/2025 15:49
20250919-4	5	9/19/2025 14:46	9/23/2025 16:30
20250913-5	2	9/13/2025 14:28	9/15/2025 9:55
20250905-3	2	9/5/2025 13:20	9/5/2025 14:55
20250719-1	4	7/19/2025 14:21	7/20/2025 14:04
20250420-1	3	4/20/2025 13:11	4/20/2025 14:50
20250416-11	12	4/16/2025 18:09	4/17/2025 13:28
20250318-9	1	3/18/2025 14:23	3/19/2025 15:56
20250313-3	1.5	3/13/2025 12:44	3/14/2025 10:34
20250307-4	2.5	3/7/2025 12:55	3/7/2025 15:43
20250306-2	0.25	3/6/2025 12:47	3/10/2025 11:13
20250304-121	2	3/4/2025 16:59	3/5/2025 14:01

20250304-31	1	3/4/2025 13:12	3/5/2025 14:00
20250303-44	0.5	3/3/2025 16:13	3/3/2025 17:00
20250301-9	66	3/1/2025 11:47	3/4/2025 19:30
20250226-46	0.5	2/26/2025 16:02	2/26/2025 17:21
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20250209-9	1.5	2/9/2025 17:51	2/12/2025 15:28
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20250125-1	1	1/25/2025 12:48	1/25/2025 15:35
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20250101-1	4	1/1/2025 12:39	1/1/2025 15:39
20241221-5	5	12/21/2024 15:21	12/23/2024 8:09
20241104-3	0.5	11/4/2024 12:22	11/7/2024 12:12
20241026-2	2	10/26/2024 12:58	10/28/2024 15:43
20241022-1	0.5	10/22/2024 6:53	10/24/2024 12:36
20241017-6	2	10/17/2024 14:34	10/18/2024 11:28
20241016-7	0.5	10/16/2024 12:59	10/18/2024 11:05
20241016-2	0.5	10/16/2024 10:22	10/18/2024 11:05
20241009-7	0.25	10/9/2024 19:55	10/10/2024 10:28
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20240712-10	0.25	7/12/2024 18:12	7/12/2024 19:37
20240712-4	15	7/12/2024 13:52	7/12/2024 16:28
20240625-8	0.25	6/25/2024 16:24	6/25/2024 17:34
20240613-3	3	6/13/2024 15:30	6/14/2024 8:01
20240611-2	1	6/11/2024 12:34	6/11/2024 13:54
20240502-2	19.5	5/2/2024 16:39	5/3/2024 14:28
20240430-3	1	4/30/2024 21:00	4/30/2024 22:19
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20240227-40	5	2/27/2024 17:28	3/3/2024 13:12
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20240219-8	12	2/19/2024 14:39	2/19/2024 17:18
20231106-12	11.4	11/6/2023 12:36	11/17/2023 8:20
20231103-32	2.5	11/3/2023 16:02	11/18/2023 14:13
20231102-33	2.5	11/2/2023 19:03	11/3/2023 11:50
20231031-4	1.5	10/31/2023 11:11	11/2/2023 9:54

20231024-10	5	10/24/2023 12:50	10/25/2023 14:49
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20231008-8	0.75	10/8/2023 13:02	10/10/2023 15:54
20230930-6	1	9/30/2023 14:36	9/30/2023 16:23
20230913-2	53	9/13/2023 14:37	9/14/2023 12:59
20230828-2	0.5	8/28/2023 7:50	8/28/2023 11:50
20230821-12	2	8/21/2023 18:15	8/21/2023 22:37
20230820-3	0.5	8/20/2023 14:10	8/20/2023 15:14
20230820-1	0.5	8/20/2023 10:34	8/20/2023 11:25
20230816-5	3	8/16/2023 17:07	8/16/2023 19:28
20230816-3	2	8/16/2023 14:30	8/16/2023 16:49
20230815-4	0.25	8/15/2023 18:06	8/15/2023 19:07
20230814-4	1	8/14/2023 16:57	8/14/2023 18:45
20230803-10	0.25	8/3/2023 17:25	8/3/2023 19:26
20230724-3	0.1	7/24/2023 12:49	7/26/2023 14:12
20230322-7	1.5	3/22/2023 16:51	3/22/2023 17:25
20230222-4	1	2/22/2023 11:56	2/22/2023 16:13
20230128-2	13	1/28/2023 12:24	1/28/2023 3:06
20230119-1	0.2	1/19/2023 13:47	1/19/2023 14:43
20221227-4	1	12/27/2022 13:02	12/27/2022 13:58
20221023-3	1	10/23/2022 13:42	10/23/2022 14:54
20221022-9	3	10/22/2022 13:32	10/22/2022 16:33
20221007-15	8	10/7/2022 14:45	10/9/2022 10:12
20220930-2	2	9/30/2022 10:57	9/30/2022 11:52
20220921-2	0.25	9/21/2022 14:50	9/21/2022 15:08
20220627-3	10	6/27/2022 20:05	6/27/2022 22:09
20220620-1	70	6/20/2022 11:35	6/20/2022 12:12
20220504-3	110	5/4/2022 16:18	5/6/2022 8:19
20220330-16	9	3/30/2022 13:51	3/30/2022 18:02
20220329-24	37	3/29/2022 19:01	3/30/2022 18:03
20220306-15	0.5	3/6/2022 13:13	3/6/2022 14:14
20220305-84	20	3/5/2022 16:41	3/6/2022 15:34
20220304-78	1	3/4/2022 16:28	3/4/2022 17:20
20220303-14	61.3	3/3/2022 13:25	3/3/2022 17:27
20220224-2	8	2/24/2022 12:46	2/24/2022 15:02
20211115-1	5	11/15/2021 15:11	11/15/2021 18:50
20210528-1	10	5/28/2021 13:59	6/1/2021 11:45
20210518-2	0.25	5/18/2021 21:16	5/18/2021 22:05
20210405-8	6	4/5/2021 15:03	4/5/2021 17:44
20210311-13	2	3/11/2021 15:12	3/11/2021 16:24
20210310-29	36	3/10/2021 15:30	3/11/2021 13:36
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20210224-50	3	2/24/2021 17:08	2/24/2021 18:39

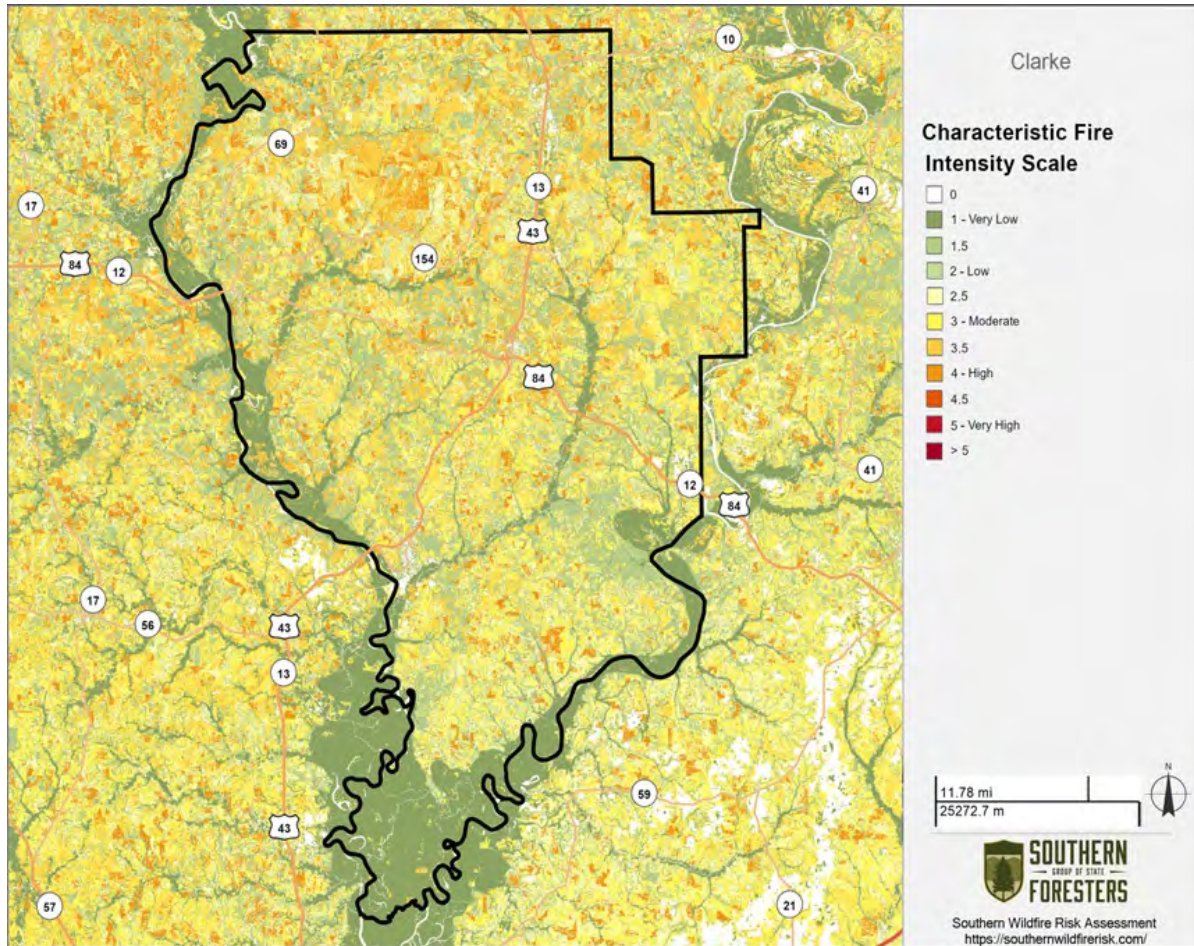
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20201118-5	2	11/18/2020 12:35	11/18/2020 14:35
20201013-2	4	10/13/2020 15:10	10/13/2020 15:27
20201002-1	4	10/2/2020 15:17	10/2/2020 17:22
20200930-3	0.5	9/30/2020 16:27	9/30/2020 17:20
20200928-2	0.1	9/28/2020 14:36	9/28/2020 16:55
20200928-1	0.25	9/28/2020 12:02	9/28/2020 12:40
20200817-3	15	8/17/2020 14:42	8/18/2020 8:39
20200514-4	2	5/14/2020 15:17	5/14/2020 16:15
20200510-6	5	5/10/2020 17:26	5/10/2020 19:42
20200507-15	6	5/7/2020 22:34	5/8/2020 0:33
20200507-6	6.2	5/7/2020 14:13	5/8/2020 9:44
20200428-8	2	4/28/2020 16:37	4/28/2020 19:30
20200312-5	15	3/12/2020 16:29	3/12/2020 20:07

Source: NCDC Database

Community Impact - Wildfires can cause considerable damage and loss of life especially in areas where there is an interface between wild land and urban development. Clarke County has multiple fuel sources and is prone to drought and thunderstorms; therefore, wildfires are a significant risk. Furthermore, rural fire departments are almost exclusively made up of volunteers and usually have limited resources that are stretched during periods when numerous fires occur.

Location and Extent – Wildland fires can occur anywhere in Clarke County; however, the risk is higher in rural forested areas. Municipal jurisdictions in the county all share similar risks with most municipal boundaries being classified as moderate on the fire intensity scale.

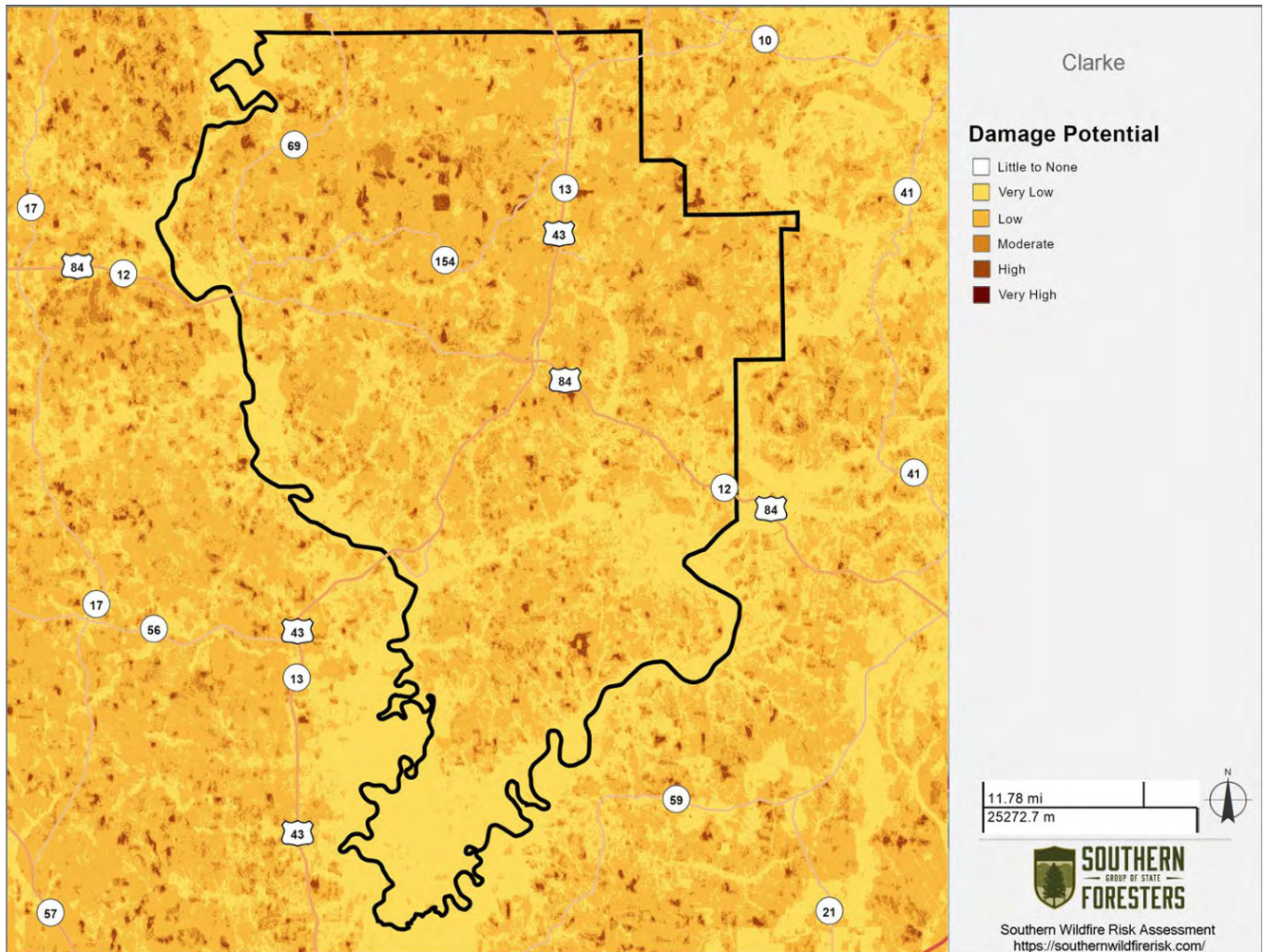
Figure 4.18 Characteristic Fire Intensity for Clarke County



Source Southern Group of State Foresters' Wildfire Risk Assessment Portal

Damage potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel. Again, most municipal boundaries lie within the low- moderate range. There are areas in the northern and southern portions of the county classified as high on the scale, these are heavily forested less populated areas.

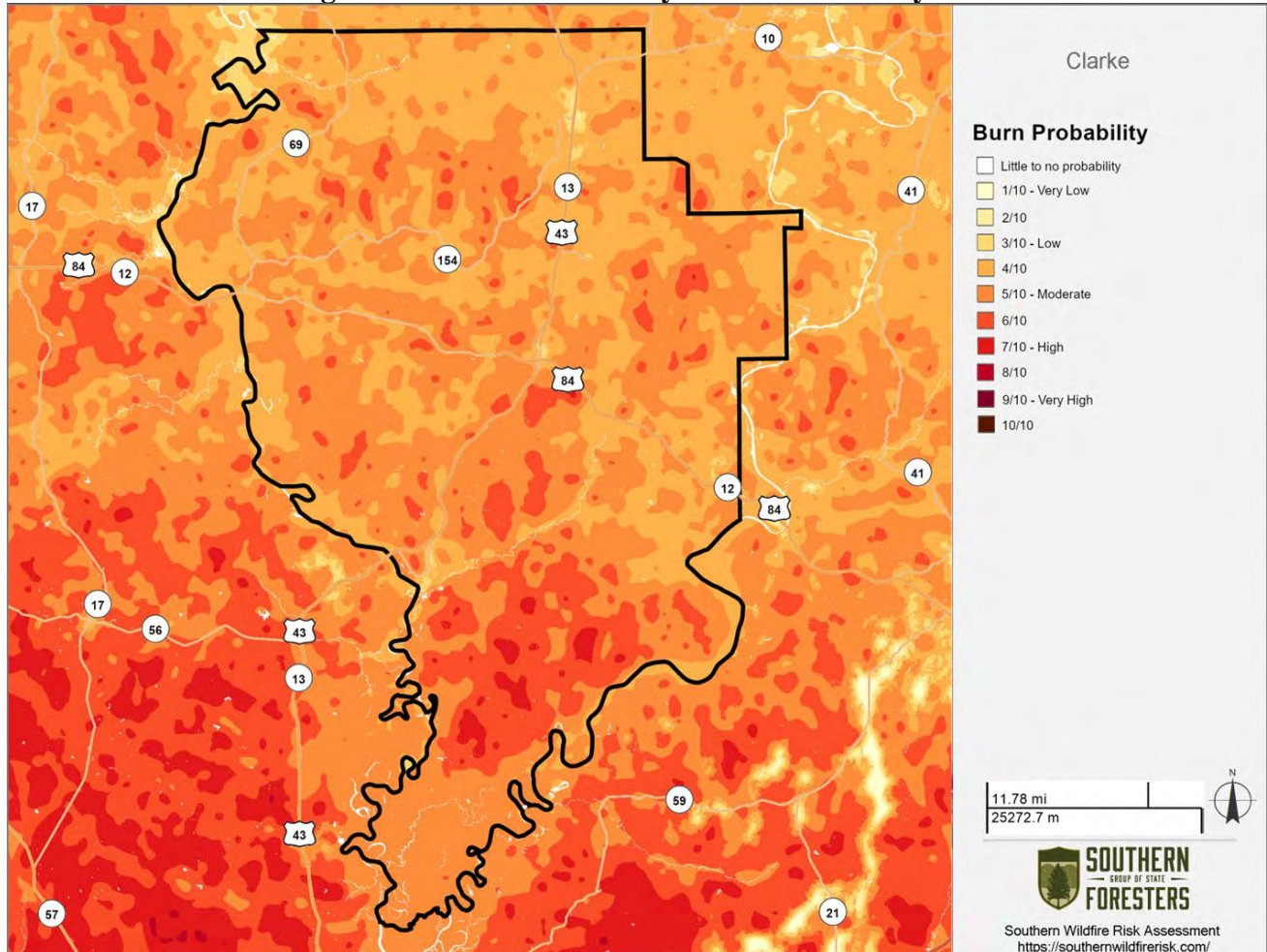
Figure 4.19 Wildfire Damage Potential for Clarke County



Source Southern Group of State Foresters' Wildfire Risk Assessment Portal

Probability of Future Occurrences- Based on historical information, Clarke County can expect an average of 50 significant wildfires per year that damage or destroy an average of 21.08 acres per event. Although one can extract data and probability of occurrence from historical information, the risk of a wildfire occurring and the location of damage appear to be random. Figure 4.20 provides the burn probability for locations in the county. Burn probability is the likelihood of wildfire burning a specific location within one calendar year or wildfire season.

Figure 4.20 Burn Probability for Clarke County



Source: Southern Group of State Foresters' Wildfire Risk Assessment Portal

Winter Storms/Freezes

Hazard Description – Winter storms vary in size and strength and include heavy snowstorms, blizzards, freezing rain, sleet, ice storms and blowing and drifting snow conditions. Extremely cold temperatures accompanied by strong winds can result in wind chills that cause bodily injury such as frostbite and death. Severe winter storms can cause unusually heavy rain or snowfall, high wind, extreme cold and ice storms throughout Clarke County. Winter storms and blizzards originate as mid-latitude depressions or cyclonic weather systems, sometimes following the meandering path of the jet stream. A blizzard combines heavy snowfall, high winds, extreme cold, and ice storms. The origins of the weather patterns that cause severe winter storms are primarily from four sources in the continental United States. Winter storms in the southeast region are usually a result of Canadian and Arctic cold fronts from the north and mid-western states combining with tropical cyclonic weather systems in the Gulf of Mexico.

Hazard History – There have been six reported instances of winter weather in Clarke County since 2015.

Table 4.14 Winter Weather Occurrence in Clarke County 2105-2025	
Year	Event
2017 (Dec)	Snow
2018 (Jan)	Snow
2021 (Feb)	Ice / winter mix
2022 (Jan)	Snow
2024 (Jan)	Ice / freezing rain
2025 (Jan)	Ice / winter mix
<i>Compiled by Local Sources</i>	

January 2018- Grove Hill



January 2024-Bashi Road



Courtesy of Clarke County Emergency Management

Community Impact- Risks associated with winter storms are a direct correlation to the strength of the storm and the region's ability to handle a storm. The risks include loss of life due to cold and disruption of transportation routes, loss of electricity for extended periods, and impact on agriculture.

Location and Extent - All the jurisdictions within Clarke County including unincorporated Clarke County and Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, and City of Thomasville have the same chances of being hit by severe cold and winter freezes.

Probability of Future Occurrences - Due to a lack of data, average annual occurrences and damage estimates cannot be made. However, Clarke County does not have a considerable risk of a winter storm occurring and it does have a high threat of a winter storm adversely affecting the area. This is a direct result of the area's ability to handle a severe winter storm. Although they are rare, Clarke County is susceptible to winter storms. They are estimated to occur once every 10 years.

4.2 Vulnerability Summary by Jurisdiction

Vulnerability Overview

This section presents a qualitative assessment of the risk and potential impact of each identified hazard. Assigned risk levels were determined based on the hazard profiles developed earlier in this section. The classifications generated from this table assists in the prioritization of hazard risk through objectively looking at the possible scope of the studied hazards. In order to quantify the risk classifications, varying degrees of risk factors (probability, impact, location extent, warning time, and duration) were assigned a value of “1” to “4” and weighted in order to create at total value with a maximum score of 4.0.

Table 4.15 Risk Index for Hazards

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	

Table 4.16 assigns a qualitative risk impact assessment for each hazard, based from the hazard profiles created in this section and other input from plan stakeholders. The results were used in calculating the values for each hazard in order to prioritize the regional impacts of identified hazards in this plan. It should be noted that this assessment is just a categorization of most likely factors for each hazard.

Table 4.16 Summary of Clarke County Hazard Risk Impact

Hazard	Degree of Risk					
	Probability	Impact	Location Extent	Warning Time	Duration	Weighted Score
Dam Failure	Very Low	Critical	Small	6-12 hours	Less than 24 hours	2.1
Drought/ Extreme Heat	Medium	Minor	Small	More than 24 hours	More than one week	2.1
Flooding	High	Critical	Moderate	6-12 hours	Less than one week	3.3
High Winds- Hurricanes	Medium	Critical	Large	More than 24 hours	Less than 24 hours	2.6
High Winds- Tornadoes	High	Critical	Small	Less than 6 hours	Less than 6 hours	3.0
High Winds- Severe Thunderstorms	Medium	Minor	Moderate	Less than 6 hours	Less than 6 hours	2.6
Landslides	Low	Minor	Negligible	Less than 6 hours	Less than 6 hours	1.6
Land Subsidence/ Sinkholes	Low	Minor	Small	Less than 6 hours	Less than 6 hours	1.8
Wildfire	High	Minor	Small	Less than 6 hours	Less than one week	2.3
Winter Storms	Low	Limited	Large	More than 24 hours	Less than one week	2.4

Based from the results of the hazard assessment summary, the highest priority hazards for the county are Flooding (3.3 score), High Winds-Tornadoes (3.0 score), and High Winds- Severe Storms/Hurricanes (2.6 score).

Jurisdictions in the county share similar vulnerabilities with respect to natural hazards. A discussion of these vulnerabilities are discussed below:

Clarke County

- With respect to vulnerable populations, both Fulton and Jackson have over twenty percent of their populations being over the age of 65. Older individuals are generally accepted to have higher vulnerability to hazards due to lessened physical and often mental capacity. Additionally, lower income individuals are classified as having higher vulnerability due to lack of resources to prepare and to recover from disasters. All jurisdictions have at least 20% of their population living below the poverty line except for Thomasville.
- Around 21% of the housing stock in Fulton is mobile homes. These homes make individuals more vulnerable to the effects of all hazards.

- In Clarke County there are a number of group quarters, these facilities have higher population density which makes them more vulnerable to hazards. Specifically, these locations are more vulnerable to High Wind Events (Hurricanes, Tornadoes, Severe Thunderstorms) and Wildfires. Group quarters in the county include the Clarke County Jail, Arc of Clarke County, Crowne Healthcare-Thomasville, Jackson Healthcare, and the Meadows of Jackson. There are also hospitals in Grove Hill and Jackson.
- A number of factors influence jurisdiction's vulnerability to flooding and flash flooding. There are floodplain areas located throughout the county (refer to Figure 3.3). All jurisdictions participate in the NFIP. No jurisdiction has a certified floodplain manager. Flash flooding vulnerability exists throughout the county and is influenced by multiple areas throughout the county that flood due to nonexistent, undersized, or deteriorated drainage infrastructure.
- The county is reliant upon the timber industry. If an event occurred that damaged the county's timber stock, it would cripple the economy. Strong winds (Hurricanes, Tornadoes, Severe Thunderstorms) and wildfires are two hazards for which the county has an increased vulnerability. The county's largest employers are wood products producers: Packaging Corporation of America (Jackson), Canfor (Fulton), Scotch Plywood (Fulton), Westervelt (Thomasville), and Louisiana Pacific (Thomasville).
- Although many critical facilities have backup power generation in the county, there are still a significant number in need of this capability. The lack of this capability increases vulnerability to all hazards.
- The jurisdictions in the county have limited to no funding to support mitigation efforts. This lack of funding to dedicate to mitigation projects influences its' vulnerability to all hazards.
- Many areas in the county have limited cellphone service, many individuals depend on their phones to alert them to severe weather. The limited coverage makes these individuals more vulnerable to severe thunderstorms, flash flooding events, and tornadoes.

Vulnerability and Changes in Development

Overall, the population in the county has been declining for many years. The county is primarily rural with limited manufacturing and sluggish commercial activity. There have been some bright spots with some small local businesses opening; however, many have downtowns with a high percentage of vacant store fronts and struggling schools and hospitals.

The City of Thomasville has seen a substantial amount of development in the last five years. The more development, the more individuals will be attracted into these areas. Development leads to more structures being vulnerable to the effects of hazards. In particular, the dynamic of the wildland urban interface is affected leading to a higher risk of WUI wildfires occurring. With regards to developments effect on floodplain areas, all growing jurisdictions discussed here are active participants in the NFIP. It will be vital for these communities to enforce their flood ordinances in order to minimize vulnerability.

4.3 Probability of Future Occurrences and Damage Estimates

Table 4.17 estimates the hazard event frequency of occurrences cumulatively for the county. These estimates were calculated from events recorded at different time periods, based on source data, which is described below. There is no guarantee the recorded level of hazard events will continue into the future at the same rate; however, the figures below provide a possible estimate of potential damages.

The period for each recorded hazard is listed below (when known and/or applicable) in Table 4.17:

- Dam Failure: 2015-2025
- Drought/Extreme Heat: 2015-2025
- Flooding: 2015-2025
- High Winds: 2015-2025
- Landslides: Unknown
- Land Subsidence/Sinkholes: Unknown
- Wildfire: 2015-2025
- Winter Storms: 2015-2025

4.17 Natural Hazard Probability and Damage Estimates

Hazard	Occurrences	Time (Years)	Damages Recorded	Probability (Annual)	Estimated Future Damage (Annual)
Dam Failure	N/A	10	N/A	N/A	N/A
Drought/Extreme Heat	6	10	N/A	60%	N/A
Flooding	25	10	\$2,235,000	100%	\$89,400.00
High Winds	166	10	\$16,161,513	100%	\$1,616,151.00
Landslides	N/A	N/A	N/A	N/A	N/A
Land Subsidence/Sinkholes	N/A	N/A	N/A	N/A	N/A
Wildfire	120	10	N/A	100%	N/A
Winter Storms	6	10	N/A	60%	N/A

Sources: National Climatic Data Center (NCDC), Alabama Forestry Commission

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 mostly unprecedented in the county, an occurrence could cause critical damage downstream.

Drought/Extreme Heat: The risk of losses from drought and extreme heat cannot be calculated due to the lack of historic 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. The probability of drought and extreme heat occurring within the region is relatively high. The probability of an impactful drought or an extreme heat event occurring in the county is classified as medium (10-50 years).

Flooding: The county is both subject to flash and riverine flooding. Incidences and damages have been reported as a result of both. Risks vary by jurisdiction as discussed in the Risk Assessment. There have been 25 occurrences of flooding in the past 10 years, with an estimated cost in damages of \$2,235,000.00 dollars annually in damages. Flooding is the second highest damaging hazard in the county.

High Winds (Hurricanes, Tornadoes, and Severe Thunderstorms): Since 2015, AEMA Clarke County has experienced high winds every year. The county has had 166 occurrences of high wind events over the past 10 years. These occurrences have caused over \$16 million in damages, making it the highest damaging hazard in the county.

Landslides: The risk of losses from landslides cannot be calculated based on historic records due to lack of data. Though incidents of landslides have been recorded in Clarke County there are no damage estimates attached to those events. Any landslide occurrence in the county would most likely be minor in impact due to the localized nature of these events.

Land Subsidence/Sinkholes: 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 county has depressions noted on topographic maps or has karst terrain, information about previous incidents are limited at best with no damage estimates. Any land subsidence occurrence in the county would most likely be minor in impact due to the localized nature of these events.

Wildfires: Though wildfires are the most likely hazard to occur in the county, the impact of wildfires have been very minor and localized in mostly undeveloped areas. Though historically, wildfires have only affected timber resources in the county, future development in wildland urban interface areas should be mindful of this potential hazard.

Winter Storms: There have been six winter storms over the past 10 years. Damage amounts are not available. These events normally have a short duration and have minor impacts, though the county is not especially prepared for a long duration event, if it would occur.

4.4 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. These facilities are critical to the health and welfare of the entire jurisdiction. They become essential in the event of a natural disaster. Examples of these facilities include police stations, fire stations, schools, and hospitals. Critical facilities are lifelines that provide the jurisdiction with necessities such as potable water. Critical facilities include the transportation corridors necessary to keep the jurisdiction connected. Critical facilities include those facilities that house persons with special needs or at-risk populations (schools, jails, nursing homes). They may also include locations where large groups often meet. Critical facilities include those in which potential losses, both human and economic, are high.

A concerted effort was made using information from the public, EMA, local government officials and industry stakeholders to identify the critical facilities. While only a summary is provided in the table, each jurisdiction has a list of critical facilities with the most current estimated replacement cost on file. The information listed below was provided by the individual jurisdictions. Other critical facilities are locations 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. The local EMA office maintain these lists.

Table 4.18 lists a summary of critical facilities summarized by type in the county. 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 4.18 Critical Facilities Summary

Facilities	Clarke County	Coffeeville	Fulton	Grove Hill	Jackson	Thomasville
Continuity of Government	11	4	4	4	6	5
Hospital/Health Department	0	0	0	2	4	2
Public Safety	9	2	3	2	3	3
Schools	0	0	0	3	3	3

Source: Steering Committee Members

4.5 Hazard Impacts

This section provides a narrative overview of each hazard’s impact on the county, based on previous finding within this section. These descriptions were compiled using guidance from FEMA Region IV, which recommends using the strongest reported incidence when describing impact.

DAM FAILURE

According to the Risk Impact Assessment, the dam failure hazard scored a value of 2.1 (on a scale of 0 to 4).

Table 4.19 Risk Impact Assessment for Dam Failure

Probability	Very Low
Impact	Critical
Location Extent	Small
Warning Time	6 to 12 hours
Duration	Less than 24 hours

There are 18 dams listed in the National Inventory of Dams (NID) database for Clarke County. Of these dams, one is classified as a high hazard dam. The Coffeeville Lock and Dam’s primary uses are navigation and recreation. The Corps has safety plans and policies in place for this facility.

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. The ADECA Office of Water Resources is currently conducting a dam study, as data listed within the National Inventory of Dams (NID) is outdated and not entirely accurate. Once ADECA’s dam assessment is complete, information regarding high hazard dams should allow for additional studies pertaining to potential vulnerability of this hazard.

Due to the lack of dam data, information pertaining to potential damage from dam failure is limited at the current time. An estimate of potential dam failure damages regionally over a long period of time yields a very low loss estimate in the planning region. As better data becomes available, more detailed impacts by jurisdiction can be provided.

DROUGHT/EXTREME HEAT

According to the Risk Impact Assessment, the drought/extreme heat hazard scored a value of 2.1 (on a scale of 0 to 4).

Table 4.20 Risk Impact Assessment for Drought/Extreme Heat

Probability	Medium
Impact	Minor
Location Extent	Small
Warning Time	More than 24 hours
Duration	More than one week

Both extreme heat and drought can occur at any location in the county making the potential impact across all jurisdictions in the county constant. All new and existing buildings/infrastructure, facilities, natural resources, wildlife, and the general population are vulnerable to these hazards and their impacts. Due to the nature of these hazards, it is difficult to estimate losses that may result as little methodology exists.

Droughts can have wide ranging impacts. In the county, all jurisdictions have historically experienced D4 drought conditions. D4 drought conditions can lead to economic losses due to insufficient water for large agricultural operations. Households that depends on private wells for potable water are affected as groundwater levels decrease. There is an increased risk of wildfires resulting from these conditions.

The most significant impact of extreme heat is on vulnerable populations’ health. Vulnerable populations include the young, the elderly, and those with respiratory problems. Extreme heat can lead to heatstroke, heat cramps, and heat exhaustion. A widespread extreme heat event could possibly overcrowd local clinics with persons suffering from the heat’s effects. In addition to health-related effects, increased use of electricity to run fans and air conditioners may overextend electric utilities.

Due to ongoing planning and these hazards being relatively common in Alabama due to its subtropical climate, anticipated future damages or losses are expected to be minimal.

FLOODING

According to the Risk Impact Assessment, the flooding hazard scored a value of 3.3 (on a scale of 0 to 4).

Table 4.21 Risk Impact Assessment for Flooding

Probability	High
Impact	Critical
Location Extent	Moderate
Warning Time	6 to 12 hours
Duration	Less than one week

Figures 4.5-4.10 provide floodplain areas for each jurisdiction in the county. River flooding is classified as minor, moderate, or major based on water height and impacts along the river that have been coordinated with the NWS and local officials. Minor river flooding means that low-lying areas adjacent to the stream or river, mainly rural areas and farmland and secondary roadways near the river, flood. This level of flooding is common in the county. Moderate flooding means water levels rise high enough to impact homes and businesses near the river and some evacuations may be needed. This level of flooding occurs less often in the county but is expected to happen annually. Major flooding means that extensive rural and/or urban flooding is expected. Towns may become isolated and major traffic routes may be flooded. Evacuation of numerous homes and business may be required. This level of flooding is rare in the county.

Flash floods may lead to property damage or loss depending on severity. Their rapid onset makes them even more deadly. Often water rises so quickly that people have little time to protect

themselves. These floods can also lead to death and injury. Flash flooding on roadways is a major risk. Many times, drivers underestimate water depth and become stranded in floodwater. Residents in the areas identified as flooding frequently are at the greatest danger of this hazard.

As development increases, the risk for flash flooding will increase as impermeable surfaces increase. Aging drainage infrastructure will contribute to an increase in flash flooding also. Based on the information provided in this profile, the probability of future flood events is High. Roads often suffer the greatest impacts as their base layer becomes compromised by standing water. Standing water also leads to cracks and damage to asphalt. Due to their nature, these floods are very dangerous. Often these events are localized and have a rapid onset, making them hard to predict. Deaths occur each year from vehicles being swept away in flood waters. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles, including pickups and SUVs.

Total potential loss data is incomplete due to lack of reliable records.

Historical Insured Flood Losses

According to FEMA flood insurance policy records as of December 2025, there have been 21 flood losses reported through the NFIP since 1980 in the county, totaling \$773,385.81 in claims payments. It should be noted that these loss numbers only include structures that were insured through NFIP and that were reported. It is likely that there are many other flood losses not reported, in uninsured structures, or denied payment. Table 4.22 provides the number of flood policies and coverage amount by jurisdiction.

Table 4.22 Active Policies and Coverage Amounts

Jurisdiction	Policies	Coverage Amount
Clarke County	20	\$3,724,000.00
Town of Coffeerville	1	\$272,000.00
Town of Fulton	6	\$1,111,000.00
Town of Grove Hill	0	0
City of Jackson	0	0
City of Thomasville	4	\$1,155,000.00

Source: Federal Emergency Management Agency, National Flood Insurance Program

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). The following is a discussion of repetitive loss properties by county:

- 4.5.1 Clarke: One repetitive loss property is listed for the Town of Fulton in Clarke County. It is a single-family dwelling. The claims paid on the property total \$6,646.

HIGH WINDS (HURRICANES, TORNADOES, AND SEVERE THUNDERSTORMS)

HURRICANES

According to the Risk Impact Assessment, the hurricane hazard scored a value of 2.6 (on a scale of 0 to 4).

Table 4.23 Risk Impact Assessment for Hurricanes

Probability	Medium
Impact	Critical
Location Extent	Large
Warning Time	More than 24 hours
Duration	Less than 24 hours

Because hurricanes and other tropical events commonly affect a large spatial area, all existing and future buildings, facilities, and the general population in the county are vulnerable to this hazard and its impacts. The county is an inland location and will not receive the brunt of these storms, but the intensity of tropical systems affecting the Gulf Coast can remain high as these storms travel inland into the region.

Severe storms, tornadoes, high winds, hail, torrential rains, river flooding, and flash flooding are all associated with tropical systems as they move inland. The entire county shares the same potential impact of these occurrences. The loss of life, property, and possessions is common.

Interruption of utility and communication service is expected. In instances such spawned tornadoes and flash flooding where warning time may be short or nonexistent the risk factors are higher. Low-lying areas and areas prone to flooding are at higher risk of damage. Another concern is the large amount of debris that results. Normally there are a few days of warnings before a tropical system impacts the county allowing for preparations.

The landscape of the counties within the county is heavily wooded, which leads to the possibility of significant tree and property damage. Debris removal can become a major cost for local governments. Flooding may lead to property damage, disruption in utility services, roadway damage, injury to residents, and death. High winds can also cause significant damage to homes, buildings, and utility infrastructure. The threat of injury and death is present.

TORNADOES

According to the Risk Impact Assessment, the tornado hazard scored a value of 3.0 (on a scale of 0 to 4).

Table 4.24 Risk Impact Assessment for Tornadoes

Probability	High
Impact	Critical
Location Extent	Small
Warning Time	Less than 6 hours
Duration	Less than 6 hours

Tornadoes are not constrained to follow any definite path, so every area and every resident the county is at risk. A tornadoes path is generally 300-400 yards wide and four miles long (NOAA 1973). Areas within that path may suffer from slight to severe damage depending on the tornado’s strength. Injury and death can occur as a result of even the weakest tornado.

Because tornadoes may touch down anywhere within the county, all existing and future buildings, facilities, and the general population in the ten counties are vulnerable to this hazard and its impacts. Tornadoes can occur during hurricane events or other severe thunderstorm events, which can create multiple impacts. 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 present the most frequent hazard and most likely source of property damage and injury in the county from a natural hazard. Tornadoes are possibly more destructive than hurricanes, but impacts are far more localized. 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.

The effects of any tornado may be far reaching. Life, property, and personal items are all at risk. Interruption of electric, telephone and other utility and communications services may occur. Transportation corridors may be blocked or in some cases destroyed. Debris must be removed, and this is often a costly task. Citizens may suffer from posttraumatic syndrome, depression, anxiety, and grief for lost loved ones. When large storms with widespread damage and injuries occur, rural areas have a more difficult time responding to all calls they receive.

Based on historical data, the county could experience devastating damage from a tornado resulting in well-constructed houses being leveled; structures with weak foundations blown away some distance; cars thrown, and large debris missiles generated.

SEVERE THUNDERSTORMS

According to the Risk Impact Assessment, the severe thunderstorm hazard scored a value of 2.6 (on a scale of 0 to 4).

Table 4.25 Risk Impact Assessment for Severe Thunderstorms

Probability	High
Impact	Minor
Location Extent	Moderate
Warning Time	Less than 6 hours
Duration	Less than 6 hours

Because severe thunderstorms with high winds may occur at any location within the county, all existing and future buildings, facilities, and the general population in the county are vulnerable to this hazard and its impacts.

Severe thunderstorms with high winds can produce similar effects to tornadoes and hurricanes. These effects will be more localized than hurricane events but more widespread than tornadoes. Past occurrences of high winds associated with severe thunderstorms have been recorded. Clarke County has an 87-mph wind gust on record. Winds this high can be expected to cause downed trees and power lines, and flying debris. They may lead to power outages, transportation disruptions, damage to buildings and vehicles, and injury or death.

LANDSLIDES

According to the Risk Impact Assessment, the landslide hazard scored a value of (from a scale of 0 to 4).

Table 4.26 Risk Impact Assessment for Landslides

Probability	Low
Impact	Minor
Location Extent	Negligible
Warning Time	Less than 6 hours
Duration	Less than 6 hours

Information from the Geological Survey of Alabama shows that historical landslide events have occurred in the county, but information about specific slides is sparse. One can get a general idea of areas more likely for landslides to occur by examining Figure 4.17 which provides areas with higher susceptibility. Due to the lack of substantive 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 the county is considered to be vulnerable to this hazard and its impacts. With little recorded activity and documentation, it is believed that any potential losses in the county would be minor in scope.

LAND SUBSIDENCE / SINKHOLES

According to the Risk Impact Assessment, the land subsidence / sinkhole hazard scored a value of 1.8 (on a scale of 0 to 4).

Table 4.27 Risk Impact Assessment for Land Subsidence / Sinkholes

Probability	Low
Impact	Minor
Location Extent	Small
Warning Time	Less than 6 hours
Duration	Less than 6 hours

Information from the Geological Survey of Alabama shows that geology conducive to sinkholes and other forms of land subsidence exists within the county. One can get a general idea of areas more likely for land subsidence to occur by examining Figure 4.19 which provides areas with karst topography and topographic depressions which leads to higher susceptibility. Due to the lack of substantive documentation of previous events, it is assumed that land subsidence events may occur at any location within the county, all existing and future buildings, facilities, and the general population in the county is considered to be vulnerable to this hazard and its impacts. With little recorded activity and documentation, it is believed that any potential losses in the county would be minor in scope.

WILDFIRE

According to the Risk Impact Assessment, the wildfire hazard scored a value of 2.3 (on a scale of 0 to 4).

Table 4.28 Risk Impact Assessment for Wildfires

Probability	High
Impact	Minor
Location Extent	Small
Warning Time	Less than 6 hours
Duration	Less than one week

Due to the large areas of forest-covered land in the county, wildfires are a threat to all four counties. Potential risk by jurisdiction can be seen from examining Figures 4.18, 4.19, and 4.20. The potential impact of wildfires is consistent across all jurisdictions. Damage to timber land and wildlife habitat are the primary impacts. If factors such as winds and drought are present, wildfires may spread from forested areas to areas with residential structures.

In the event of wildfires, structures in less populated areas in the proximity of the forested areas could be at risk of fire damage. Though all the county'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.

The impact of a wildfire event is dependent on many factors including weather conditions, available fuel, topography, and existing wildfire mitigation capabilities. In more densely populated areas, the impact of a wildfire is expected to be much greater.

WINTER STORM

According to the Risk Impact Assessment, the winter storm hazard scored a value of 2.4 (on a scale of 0 to 4).

Table 4.29 Risk Impact Assessment for Winter Storms

Probability	Low
Impact	Limited
Location Extent	Large
Warning Time	More than 24 hours
Duration	Less than one week

Historical records show the county has 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. The impacts of these storms are generally the result of the infrequency of their occurrence.

Because winter weather events may occur at any location within the county, all existing and future buildings, facilities, and the general population in the county are vulnerable to this hazard and its impacts. Winter weather events will affect those in vulnerable housing more severely than other areas.

Section 5- Mitigation Strategy

This Mitigation Strategy section of the plan addresses requirements of Section 201.6(c)(3) through providing the blueprint for participating jurisdictions in Clarke County to practice becoming less vulnerable to the identified hazards in the Risk Assessment.

Section Contents

- 5.1 Mitigation Planning Process
- 5.2 Mitigation Goals
- 5.3 Mitigation Strategies
- 5.4 Capabilities Assessment for Local Jurisdictions
- 5.5 Jurisdictional Mitigation Action Plans
 - 5.5.1 Clarke County Mitigation Action Plan
 - 5.5.2 Town of Coffeeville Action Plan
 - 5.5.3 Town of Fulton Action Plan
 - 5.5.4 Town of Grove Hill Action Plan
 - 5.5.5 City of Jackson Action Plan
 - 5.5.6 City of Thomasville Action Plan
 - 5.5.7 Clarke County Board of Education
 - 5.5.8 Thomasville City Schools

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 profiled hazard. The goals and strategies were reviewed considering the impact and extent of hazard occurrences in local jurisdictions and the region.

5.2 Mitigation Goals

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

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).

5.3 Mitigation Strategies

Mitigation strategies are more defined actions that help further define mitigation goals. A wide range of activities that are aligned with the six goal categorizations were considered. These activities were analyzed by their ability to help achieve established mitigation goals, emphasizing actions addressing new and existing buildings and infrastructure. These strategies provide additional background to addressing specific hazard concerns.

Land use planning capacity in most of the region is limited due to the lack of regulatory authority in unincorporated areas, except for floodplain management and subdivision regulations. Many small municipalities have limited to no planning and building enforcement function due to fiscal constraints and lack of expertise. The majority choose not to implement land use, zoning, or code enforcement mechanisms.

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. This discussion includes identifying the 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 or development. Examples of prevention activities include:

- 5.3.1 Land use planning and zoning administration (All Hazards, primarily Flooding)
- 5.3.2 Building code enforcement program (Flooding, High Winds)
- 5.3.3 Open space preservation (Flooding)
- 5.3.4 Floodplain management regulations (Flooding)
- 5.3.5 Stormwater management regulations (Flooding)
- 5.3.6 Participation in National Flood Insurance Program (NFIP) (Flooding)
- 5.3.7 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)

5.4 Capabilities Assessment for Local Jurisdictions

A capability assessment examines the ability of each jurisdiction to implement a comprehensive mitigation strategy through examining existing programs, regulations, resources, and practices. This determination allows a jurisdiction to assess whether mitigation actions are feasible by considering funding options, political support, public support, legality, preservation of the environment, and staff capability.

Clarke County is composed of five municipalities with a myriad of governmental powers. The county government is governed by a five-member elected commission. All municipalities have a Mayor/Council form of government.

The mitigation strategies listed in Section 5.3 above are framed by the capacity and capability of local jurisdictions to implement those actions through existing authorities, policies, programs, and resources. For most jurisdictions in the planning area, 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. However, capacity is limited for enforcement 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; therefore, most local jurisdictions avoid the practice for general purposes and for hazard mitigation. In unincorporated areas within county jurisdictions, this authority is largely absent except as it applies to flood control and public street and subdivision regulation. 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 all counties participate in the National Flood Insurance Program (NFIP) and maintain compliance with the applicable regulations (Table 5.3). Likewise, the authority to enforce building codes is primarily restricted to municipalities and is only practiced by a limited number of these due to capacity constraints in the form of personnel, financial ability, and public acceptance.

Financial and technical capacity is limiting factors for implementation in most participating jurisdictions. The need for assistance in local planning and implementation is well established. Communities work together through the local EMA and their regional commission (ATRC) 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 commission 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; however, in some cases they may sponsor the project directly. 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.

The authorities and capabilities are summarized based on the powers granted by different units of government that participated in the planning process. A listing of these participants can be found in Table 3.2 of this plan.

Table 5.1 below 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. 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 utility board.

Table 5.1 Statutory Authority and Resources

Clarke County Hazard Mitigation Action Plan: Capabilities Assessment	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, County	Clarke County: Clarke County Sheriff's Department, Town of Coffeeville, Town of Fulton, Town of Grove Hill, City of Jackson, City of Thomasville	All municipal jurisdictions	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, County, 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, County	Clarke County: Town of Grove Hill, City of Jackson, City of Thomasville		Council 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, County	All participating NFIP jurisdictions	All participating NFIP jurisdictions	Council or Commission action to enact and enforce regulation
Capital improvements: Ability to plan public infrastructure to mitigate hazards	Municipalities, County, School Boards, Utilities	All jurisdictions	All jurisdictions	Action to approve expenditures by County Commission, city council, school board, or utility board

Purchase properties subject to flooding and maintain as permanent open space.	Municipalities, County, School Boards, Utilities	All Jurisdictions		Action to approve expenditures by County Commission, city council, school board, or utility board
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Table 4.2 below provides a summary of local plans, ordinances, and programs currently in place, or being developed within jurisdictions in Clarke County. 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.

Table 4.2 Relevant Plans, Ordinances, and Programs

Jurisdiction	Zoning Ordinance	Code Enforcement	Recent Master Plan	Certified Flood Manager	NFIP Participation
Clarke County	N	N	N	N	Y
Town of Coffeeville	N	N	N	N	Y
Town of Fulton	N	N	N	N	Y
Town of Grove Hill	Y	Y	Y	N	Y
City of Jackson	Y	Y	Y	N	Y
City of Thomasville	Y	Y	Y	N	Y

Table 4.3 below summarizes NFIP participation and policy statistics for each jurisdiction in the planning area as of July1, 2020. More site-specific information on at-risk structures and repetitive loss properties is provided in Section 3.6 in the Risk Assessment. A number of jurisdictions that are currently not participating in the NFIP Program participated in the hazard mitigation planning process and have Mitigation Actions to address their status.

**Table 4.3 National Flood Insurance
(NFIP) Status**

Jurisdiction	Participation Status	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date
Clarke County	Participating	6/09/1978	10/16/2008	7/17/2012
Town of Coffeetown	Participating	-	10/16/2008	7/17/2012
Town of Fulton	Participating	7/18/1975	10/16/2008	7/17/2012
Town of Grove Hill	Participating	4/25/1975	9/4/1985	NSFHA
City of Jackson	Participating	6/27/1975	12/17/87	7/17/2012
City of Thomasville	Participating	8/1/1975	9/18/1985	7/17/2012

*Source: NFIP Community Status Book
(3/17/2026)*

The Clarke County Road & Bridge Department implements the NFIP program for all participating jurisdictions. Although the County and participating jurisdictions have not experienced a flood event requiring Substantial Damage (SD) determinations during this planning cycle, each jurisdiction has adopted floodplain management regulations consistent with NFIP requirements and has the administrative capability to implement SD/SI procedures as described below. This process is followed in all participating jurisdictions.

Following a flood event, the jurisdiction conducts post-disaster damage assessments of affected structures located within Special Flood Hazard Areas (SFHAs). The structure’s pre-damage market value is determined using county tax assessor records or a qualified independent appraisal. The total cost to repair the structure is estimated to its pre-damage condition using contractor estimates, inspection data, or FEMA’s Substantial Damage Estimator (SDE) tool. Repair costs are then compared to 50 percent of the structure’s pre-damage market value. If repair costs equal or exceed 50 percent, the structure is determined to be Substantially Damaged and must comply with current floodplain management requirements. All determinations are documented and maintained in accordance with NFIP recordkeeping requirements.

Damage assessments in each participating jurisdictions are conducted by trained building inspection or code enforcement staff in coordination with Emergency Management personnel.

The process includes:

- Field inspections and photographic documentation
- Completion of standardized damage assessment forms
- Verification of foundation type, lowest floor elevation, and flood zone
- Collection of repair cost estimates
- Entry of data into FEMA-approved or equivalent tracking tools

The jurisdiction may coordinate with the State NFIP Coordinator for technical assistance if necessary.

Affected property owners in each participating jurisdiction are notified of SD/SI requirements by written determination letters from the Clarke County Road and Bridge Department explaining whether the structure is Substantially Damaged. Information on required compliance measures (elevation, floodproofing, demolition, etc.) is included along with permit application requirements and next steps. The department is available to meet with property owners to explain compliance options and mitigation measures.

Permit applications for repair or improvement of structures within the SFHA are reviewed by the Floodplain Administrator to ensure:

- Market value and cost of improvement calculations are complete
- Cumulative improvements are considered, if applicable
- Elevation or floodproofing requirements meet current Base Flood Elevation standards
- Required elevation certificates or floodproofing certificates are provided

Permits are not issued until compliance with current floodplain regulations is verified.

During construction, the jurisdiction conducts inspections at key stages, including:

- Verification of lowest floor elevation prior to vertical construction
- Inspection of flood openings (if applicable)
- Verification of utility elevation and anchoring
- Confirmation of floodproofing measures for non-residential structures
- Final inspection prior to issuance of certificate of occupancy

Elevation Certificates are reviewed by the floodplain administrator and retained in the Clarke County Road and Bridge Department's permanent floodplain development file.

5.5 Jurisdictional Mitigation Action Plans

This section presents a long-term, comprehensive plan for mitigation of natural hazards. When mitigation actions are pursued the Clarke County Emergency Management in coordination with local, state, federal, and other agencies will assist with their implementation. Priority mitigation projects carried over into the action program should only be implemented if the benefits are maximized and outweigh the associated costs of the proposed projects. The goals of this mitigation policy plan apply to all jurisdictions within the county. The communities' long range vision for disaster resistance and the mission of the HMPC are restated here for reference.

The following table is a listing of mitigation measures for each jurisdiction. All jurisdictions in the county kept the existing actions from the 2020 plan. Priorities were modified to reflect current financial feasibility and capacity of each jurisdiction. Each item is prioritized by Low, Medium, and High. Items listed high priority have been ranked by the HMPC to be of more importance than the actions labeled medium or low. High Priority Actions are actions that should take place within the next planning period. Medium should take place in 5+ years and low should take place in the next 10+ years. The mitigation strategies did not change from the 2020 plan as there was very little growth and/or changes that took place in Clarke County. The mitigation plan was integrated into the county's Threat and Hazard Identification and Risk Assessment and Emergency Operations Plan during the last planning cycle.

5.5.1 Clarke County Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	Clarke County Commission	Local Funds	High/Ongoing	High
2	Continue to clear debris from roads and drainage ways	All	Clarke County Road and Bridge Department	Local Funds	High/Ongoing	High
2,5	Continue to perform maintenance on roads, drainage culverts, creeks, and streams to mitigate the threat of floods	Flooding	Clarke County Road and Bridge Department	Local Funds	High/Ongoing	High
2	Continue to improve and maintain the county road system	All	Clarke County Road and Bridge Department	Local Funds	High/Ongoing	High
6	Provide the public information on actions to take during severe weather through newspaper, publications, social media, and radio announcements	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
4	Promotion of safe rooms/individual shelters in existing residences	Tornado, Severe Storms	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
6	Provide information to municipalities regarding natural hazards and general principles outlining procedures	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Contact utilities in the event of natural hazard so they can inspect their infrastructure for damage	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
2,3,4,5	Encourage jurisdictions to commit matches for grants dealing with mitigation	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
6	Educate local governments and groups on mitigation activities and grant funding	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
6	Provide information to the public through social media	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
6	Provide storm event data to the National Weather Service for events in Clarke County	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
5	Advocate for weather radar located closer to county	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
5	Replace generators at Clarke County EOC	All	Clarke County Commission	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	Clarke County Commission	HMGP/Local Funds	High	Moderate
5	Purchase generators for water and sewer systems	All	Clarke County EMA/Water and Sewer Systems	HMGP/Local Funds	Medium	Moderate
5	Purchase at least 2 emergency gas storage tanks	All	Clarke County Commission	Local Funds	Medium	Moderate

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
5	Place fixed site generators at communications towers	All	Clarke County Commission	Local Funds	Medium	Moderate
1	Apply for funding to update mitigation plan as needed	All	Clarke County Commission	PDM/HMGP/Local Funds	High	High
5	Purchase generators for critical facilities and fire stations	All	Clarke County Commission	HMGP/Local Funds	Medium	Moderate
6	Continue to explore ways to use social media to provide information	All	Clarke County EMA Director and Staff	Local Funds	High	High
6	Continue to inform residents of flood hazards and NFIP requirements	Flooding	Clarke County EMA and Staff, Road and Bridge	Local Funds	High	High
4	Drainage projects in areas identified as being prone to flooding	Flooding	Clarke County Commission/ Road and Bridge Department	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects throughout county	Flooding	Clarke County Commission/ Road and Bridge Department	PDM/HMGP/CDBG Local Funds	Medium	Moderate
2	Retrofitting critical facilities	Wind events	Clarke County Commission	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	Clarke County Commission	HMGP/Local Funds	Low	Low
5	Purchase of NOAA weather radios for community residents	All	Clarke County Commission	HMGP/Local Funds	Medium	Low

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
6	Research procedures for keeping historical storm data with location, magnitude, and loss values for each event	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
1	Begin maintaining an inventory of critical facilities with value and contact information	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High
5	Continue to offer shelter to individuals and families affected by natural hazards.	All	Clarke County EMA Director and Staff	Local Funds	High/Ongoing	High

Projects Pursued: The county's road and bridge department completes drainage projects as money allows.

5.5.2 Town of Coffeerville Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	Town of Coffeerville Town Council/Mayor	Local Funds	High/Ongoing	High
1	Continue to enforce flood ordinance	Flooding	Town of Coffeerville Town Council/Mayor	Local Funds	High/Ongoing	High
5	Continue to send law enforcement and fire personnel to emergency response training	All	Town of Coffeerville Town Council, VFD	Local Funds	High/Ongoing	High
5	Continue to apply for grants to fund training and equipment for the Coffeerville Fire Department	All	Town of Coffeerville Town Council, VFD	Local Funds/Assistance to Firefighters/USDA	High/Ongoing	High
5	Purchase generators for Town Hall (Including PD and VFD) COMPLETE FOR VFD	All	Town of Coffeerville Town Council, VFD	HMGP/Local Funds	Medium	Moderate
3	Repair erosion damage	All	Town of Coffeerville Town Council/Mayor	Local Funds/PDM/HMGP/NRCS	Low	Low
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	Town of Coffeerville Town Council/Mayor	Local Funds	High/Ongoing	High
6	Provide information to the public through social media	All	Town of Coffeerville Town Council/Mayor	Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
2,3,4,5	Maintain streets, culverts, and drainage infrastructure in town	Flooding	Town of Coffeeville Maintenance Employees	PDM/HMGP/CDBG Local Funds	High/Ongoing	High
5	Purchase generators for sewer system	All	Town of Coffeeville Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	Town of Coffeeville Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Drainage projects in areas identified as being prone to flooding	Flooding	Town of Coffeeville Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects	Flooding	Town of Coffeeville Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Retrofitting critical facilities	Wind events	Town of Coffeeville Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	Town of Coffeeville Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
6	Post extreme heat warnings with risks outlined in public areas	Extreme Heat	Town of Coffeeville Town Council/Mayor	Local Funds	High/Ongoing	High
6	Post drought notices in area businesses and Town Hall	Drought	Town of Coffeeville Town Council/Mayor	Local Funds	High/Ongoing	High
5	Purchase of NOAA weather radios for community residents	All	Town of Coffeeville Town Council/Mayor	HMGP/Local Funds	High/Ongoing	High

Projects Pursued: Purchase of generators for VFD was completed.

5.5.2 Town of Fulton Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	Town Council/Mayor	Local Funds	High/Ongoing	High
1	Continue to enforce flood ordinance	Flooding	Town Council	Local Funds	High/Ongoing	High
5	Continue to send law enforcement and fire personnel to emergency response training	All	Town Council, VFD	Local Funds	High/Ongoing	High
5	Continue to apply for grants to fund training and equipment for the Fulton Fire Department	All	Town Council, VFD	Local Funds/Assistance to Firefighters/USDA	High/Ongoing	High
5	Purchase generators for Town Hall (Including PD and VFD)	All	Town Council, VFD	HMGP/Local Funds	Medium	Moderate
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	Town Council & Mayor	Local Funds	High/Ongoing	High
6	Provide information to the public through social media	All	Town Council & Mayor	Local Funds	High/Ongoing	High
2,3,4,5	Maintain streets, culverts, and drainage infrastructure in town	Flooding	Town Council	PDM/HMGP/CDBG Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
5	Purchase generators for sewer system	All	Town Council & Mayor	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	Town Council & Mayor	HMGP/Local Funds	Medium	Moderate
4	Drainage projects in areas identified as being prone to flooding	Flooding	Town Council & Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects	Flooding	Town Council & Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Retrofitting critical facilities	Wind events	Town Council & Mayor	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	Town Council & Mayor	HMGP/Local Funds	Medium	Moderate
6	Post extreme heat warnings with risks outlined in public areas	Extreme Heat	Town Clerk	Local Funds	High/Ongoing	High
6	Post drought notices in area businesses and Town Hall	Drought	Town Clerk	Local Funds	High/Ongoing	High
5	Purchase of NOAA weather radios for community residents	All	Town Council & Mayor	HMGP/Local Funds	High/Ongoing	High

Projects pursued: The town completed a CDBG drainage project on West Main Street.

5.5.3 Town of Grove Hill Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	Town of Grove Hill Town Council/Mayor	Local Funds	High/Ongoing	High
1	Continue to enforce flood ordinance	Flooding	Town of Grove Hill Town Council/Mayor	Local Funds	High/Ongoing	High
1	Continue enforcing Town of Grove Hill Zoning Ordinance, Subdivision Regulations, & Building Codes	All	Town Building Inspector	Local Funds	High/Ongoing	High
5	Continue to send law enforcement and fire personnel to emergency response training	All	Town of Grove Hill Town Council, VFD	Local Funds	High/Ongoing	High
5	Continue to apply for grants to fund training and equipment for the Grove Hill Fire Department	All	Town of Grove Hill, VFD	Local Funds/Assistance to Firefighters/USDA	High/Ongoing	High
5	Purchase generators for Town Hall (Including PD and VFD)	All	Town of Grove Hill Town Council, VFD	HMGP/Local Funds	Medium	Moderate
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	Town of Grove Hill Town Council/Mayor	Local Funds	High/Ongoing	High
4	Construct safe room in Grove Hill Senior Center	Tornado, Severe Storms	Town of Grove Hill Town Council/Mayor	HMGP/Local Funds	Medium	Moderate

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
6	Provide information to the public through social media	All	Town of Grove Hill Town Council/Mayor	Local Funds	High/Ongoing	High
2,3,4,5	Maintain streets, culverts, and drainage infrastructure in town	Flooding	Town of Grove Hill Street Department	PDM/HMGP/CDBG Local Funds	High/Ongoing	High
5	Purchase generators for sewer system	All	Town of Grove Hill Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	Town of Grove Hill Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Drainage projects in areas identified as being prone to flooding	Flooding	Town of Grove Hill Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects	Flooding	Town of Grove Hill Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Retrofitting critical facilities	Wind events	Town of Grove Hill Town Council/Mayor	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	Town of Grove Hill Town Council/Mayor	HMGP/Local Funds	Medium	Moderate
5	Purchase of NOAA weather radios for residents	All	Town of Grove Hill Town Council/Mayor	PDM/HMGP/Local Funds	Low	Moderate
1	Prepare an Emergency Response Plan	All	Town of Grove Hill Town Council/Mayor	Local Funds	Low	Low

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
6	Provide information regarding the emergency response system to the public in the form of a brochure or handout	All	Town of Grove Hill Town Council/Mayor	Local Funds	Low	Low

Projects pursued: The town has completed drainage projects on Asbury Road and Love Road.

5.5.4 City of Jackson Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	City of Jackson City Council/Mayor	Local Funds	High/Ongoing	High
1	Continue to enforce flood ordinance	Flooding	City of Jackson City Council/Mayor	Local Funds	High/Ongoing	High
1	Continue enforcing City of Jackson Zoning Ordinance, Subdivision Regulations, & Building Codes	All	City Building Inspector	Local Funds	High/Ongoing	High
5	Continue to send law enforcement and fire personnel to emergency response training	All	City of Jackson City Council, VFD	Local Funds	High/Ongoing	High
5	Continue to research funding opportunities and apply for grants to fund training and equipment for the Jackson Fire Department and Police Department	All	City of Jackson City Council, VFD	Local Funds/Assistance to Firefighters/USDA	High/Ongoing	High
1	Continue to sponsor a community fire prevention program.	Wildfire	City of Jackson City Council, VFD	Local Funds	High/Ongoing	High
5	Purchase generators for City Hall (Including PD and VFD)	All	City of Jackson City Council, VFD	HMGP/Local Funds	Medium	Moderate
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	City of Jackson City Council/Mayor	Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Construct safe room in Jackson Senior Center	Tornado, Severe Storms	City of Jackson City Council/Mayor	HMGP/Local Funds	Medium	Moderate
6	Provide information to the public through social media	All	City of Jackson City Council/Mayor	Local Funds	High/Ongoing	High
2,3,4,5	Maintain streets, culverts, and drainage infrastructure in City	Flooding	City of Jackson Street Department	PDM/HMGP/CDBG Local Funds	High/Ongoing	High
5	Purchase generators for water and sewer system	All	City of Jackson City Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	City of Jackson City Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Drainage projects in areas identified as being prone to flooding	Flooding	City of Jackson City Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects	Flooding	City of Jackson City Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Retrofitting critical facilities	Wind events	City of Jackson City Council/Mayor	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	City of Jackson City Council/Mayor	HMGP/Local Funds	Medium	Moderate
5	Purchase of NOAA weather radios for residents	All	City of Jackson City Council/Mayor	PDM/HMGP/Local Funds	Low	Moderate

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
6	Post extreme heat warnings with risks outlined in public areas	Extreme Heat	City of Jackson City Council/Mayor	Local Funds	High/Ongoing	High
4	Construct a Community Shelter at the Municipal Complex	All	City of Jackson City Council/Mayor	HMGP/PDM/Local Funds	Medium	Moderate
2	Raw water intake structure: replace and stabilize riverbank, raise access roads	Flooding	City of Jackson Water Works	State Revolving Loan Fund/HMGP/PDM/Local Funds	High	High
3	Identify areas of soil erosion and techniques that can be used to correct the problem.	Flooding	City of Jackson City Council/Mayor	HMGP/PDM/Local Funds	Medium	Moderate

Projects pursued: The City of Jackson has completed a two-phase DRA drainage project along Cleveland Street, a CDBG drainage project on Valentine Street, and a CDBG drainage project along Cemetery Road. The city has completed numerous street improvement projects with local funding.

5.5.6 City of Thomasville Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
1	Continue to participate in the National Flood Insurance Program	Flooding	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High
1	Continue to enforce flood ordinance	Flooding	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High
1	Continue enforcing City of Thomasville Zoning Ordinance, Subdivision Regulations, & Building Codes	All	City Building Inspector	Local Funds	High/Ongoing	High
1	Continue to send building inspector to building code related workshops and training	All	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High
3	Continue to maintain permanent open space as parks	All	City of Thomasville Public Works	Local Funds	High/Ongoing	High
2	Continue drainage maintenance and cleaning program	All	City of Thomasville Public Works	Local Funds	High/Ongoing	High
1	Continue utility right of way permitting, considering emergency vehicle access	All	City of Thomasville Public Works	Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
2	Continue the road repair/construction program considering evacuation and natural hazard response (includes repaving of city streets)	All	City of Thomasville Public Works	Local Funds	High/Ongoing	High
4	Downtown revitalization including streets, drainage, and restoring older buildings	All	City of Thomasville Public Works	Local Funds, Private Investment	High/Ongoing	High
5	Continue to send law enforcement and fire personnel to emergency response training including hazardous materials training	All	City of Thomasville City Council, VFD	Local Funds	High/Ongoing	High
5	Continue to research funding opportunities and apply for grants to fund training and equipment for the Thomasville Fire Department and Police Department	All	City of Thomasville City Council, VFD	Local Funds/Assistance to Firefighters/USDA	High/Ongoing	High
1	Continue to sponsor a community fire prevention program.	Wildfire	City of Thomasville City Council, VFD	Local Funds	High/Ongoing	High
5	Purchase generators for City Hall (Including PD and Fire Stations)	All	City of Thomasville City Council, VFD	HMGP/Local Funds	Medium	Moderate
4	Promotion of safe rooms in new residences	Tornado, Severe Storms	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High
4	Promote the use of voluntary standards for single family residences to exceed minimal building code requirements for wind design	Tornado, Severe Storms	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High
6	Provide information to the public through social media	All	City of Thomasville City Council/Mayor	Local Funds	High/Ongoing	High

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
2,3,4,5	Maintain streets, culverts, and drainage infrastructure in City	Flooding	City of Thomasville Street Department	PDM/HMGP/CDBG Local Funds	High/Ongoing	High
5	Purchase generators for critical facilities	All	City of Thomasville City Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Community Storm Shelters/multi-purpose buildings and individual storm shelters	All	City of Thomasville City Council/Mayor	HMGP/Local Funds	Medium	Moderate
4	Drainage projects in areas identified as being prone to flooding	Flooding	City of Thomasville City Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Storm Water Management Projects	Flooding	City of Thomasville City Council/Mayor	PDM/HMGP/CDBG Local Funds	Medium	Moderate
4	Retrofitting critical facilities	Wind events	City of Thomasville City Council/Mayor	PDM/HMGP/CDBG Local Funds	Low	Low
5	Purchase of Tornado Sirens	Tornadoes	City of Thomasville City Council/Mayor	HMGP/Local Funds	Medium	Moderate
5	Purchase of NOAA weather radios for residents	All	City of Thomasville City Council/Mayor	PDM/HMGP/Local Funds	Low	Moderate

Projects pursued: The city completed a CDBG sewer, drainage, and street improvement project around Duncan Drive. The city has completed numerous street improvement projects with local funding.

5.5.7 Clarke County Board of Education Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Provide storm shelters at schools	All	Clarke County School System Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
5	Purchase Generators for critical facilities	All	Clarke County School System Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
4	Retrofitting of schools and critical facilities	Wind Events	Clarke County School System Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
4	Correct storm water management/drainage issues on school grounds	Flood	Clarke County School System Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
6	Train and exercise regarding all hazards	All	Clarke County School System Board/Superintendent	HMGP/PDM/Local Funds	Ongoing/ High	High

The Clarke County School System updated surveillance systems on their campuses during this planning period.

5.5.8 Thomasville City School System Mitigation Action Plan

Goal	Action Description	Hazards Addressed	Lead Agency	Funding Source	Priority / Status	Benefit / Cost Score
4	Provide storm shelters at schools	All	Thomasville City School Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
5	Purchase Generators for critical facilities	All	Thomasville City School Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
4	Retrofitting of schools and critical facilities	Wind Events	Thomasville City School Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
4	Correct storm water management/drainage issues on school grounds	Flood	Thomasville City School Board/Superintendent	HMGP/PDM/Local Funds	Medium	Moderate
6	Train and exercise regarding all hazards	All	Thomasville City School Board/Superintendent	HMGP/PDM/Local Funds	Ongoing/ High	High

The Thomasville City School System has implemented Centegix Crisis Alert System and Parent Square Notification System.

Section 6- Plan Maintenance Process

This section of the plan addressed requirements of Interim Final Rule (IFR) Section 201. (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 Alabama Tombigbee Regional Commission (ATRC) will facilitate plan maintenance activities with assistance from the Clarke County EMA director throughout the five-year framework of the Hazard Mitigation Plan. The local EMA director will serve as a liaison to participating jurisdictions through their local processes, such as Local Emergency Planning Committee (LEPC) or similar stakeholder groups. The public, neighboring communities, and other stakeholders will be encouraged to participate throughout this process. During the fourth quarter of each calendar year, the EMA director will complete a county-level review.

Periodic review and revision of the Hazard Mitigation Plan is important to ensure the plan's appropriateness and compliance with applicable regulations and to assess the progress of local mitigation actions. County-level reviews will include:

- Evaluation of the effectiveness of previously implemented mitigation actions;
- Review of the status of high priority or ongoing mitigation actions;
- Addressing changing land use patterns and new developments; and
- Identification of any changes in the risk assessment and/or risk vulnerability.

Prior to convening a countywide meeting, the EMA director shall collect pertinent information from local jurisdictions and stakeholders, including the general public, in their counties. This information will be used for plan review and evaluation purposes. If the EMA Director believes there are significant changes, a countywide meeting will be scheduled. In instances where there have been no significant changes, the EMA Director will not convene a countywide meeting.

In addition, the plan review process will include the provision of a post-disaster review that merits a reevaluation of hazard priorities and mitigation actions to reflect fluctuating conditions within the region.

At any time during the planning cycle, a jurisdiction may revise its mitigation action plan. For jurisdiction specific revisions, only the jurisdiction making the revision will have to approve the change. The jurisdiction will work with the EMA director to submit these changes to ATRC for incorporation into the plan.

A thorough review of the Hazard Mitigation Plan will begin 18 months prior to the five-year expiration date of the plan. This review shall be held to identify any significant changes in the area that may affect the county's vulnerability to hazard impacts. An evaluation of the mitigation strategy and jurisdictional action plans developed as part of this process will be evaluated. This plan update shall incorporate any changes to federal or state regulations that may affect the Hazard Mitigation Plan contents. Upon completion of this review and update, the updated Hazard Mitigation Plan will be submitted to the AEMA and FEMA for review and approval. Public participation will be solicited and encouraged throughout this process.

6.2 Hazard Mitigation Plan Incorporation

The Clarke County Multi-Jurisdictional Hazard Mitigation Plan will be incorporated into existing planning mechanisms in all participating jurisdictions. Once the 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. Designation of a lead agency or department assigns responsibility and accountability to each action. In addition to the assigned local agency or department, each mitigation action plan has a priority or status assigned that roughly coincides with an implementation timeline. Local jurisdictions will work to continue providing operational funding for actions that are ongoing and will seek outside funding for capital projects that are outside the realm of normal funding during both pre- disaster and post-disaster periods.

Participating jurisdictions will integrate this Hazard Mitigation Plan into appropriate and relevant municipal and county government decision-making processes, when feasible. It is important to note that the majority of jurisdictions in the county do not have formal planning processes in place. For those who do, local EMA officials or planners from ATRC will provide technical assistance for incorporation, upon request. The process for all jurisdictions in the county will include integrating the findings of the Hazard Mitigation Plan into planning documents, such as comprehensive or master plans, future land use plans, subdivision regulations, building regulations, capital improvement plans, or similar mechanisms. The mitigation plan will be incorporated by ensuring the goals and actions of local planning documents are consistent with the goals and mitigation actions of the Hazard Mitigation Plan. Jurisdictions will not introduce additional hazard vulnerabilities to local areas and the region at-large. Mitigation projects will be incorporated into project lists and priorities, as appropriate. This integration process will involve reviewing the jurisdiction’s mitigation goals and action plans and comparing that to the proposed planning document. The EMA director will continue to incorporate applicable information from this Hazard Mitigation Plan into other required emergency management plans, including each county’s Emergency Operations Plan and Threat and Hazard Identification and Risk Assessment. 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. Since the last plans were adopted, the county-level plans have not been incorporated into any planning mechanisms outside of those performed by the county EMA.

The Hazard Mitigation Plan will be provided to the Alabama Tombigbee Regional Commission (ATRC) as well as local economic development councils, for consistency with other regional planning and economic development activities.

6.3 Public Awareness/Participation

Public participation is a key component in the hazard mitigation planning process. Outreach activities give jurisdictions the ability to garner the public's opinions and ideas regarding hazard mitigation. In addition, outreach gives jurisdictions an opportunity to educate the public about hazards and mitigation strategies being undertaken. Participation throughout the planning process is important. Clarke County's planning efforts will continue to encourage all local and state government agencies, businesses, academia, and the general public to participate in the ongoing mitigation planning process to the maximum extent possible.

Any significant changes or amendments to the Hazard Mitigation Plan shall require a public hearing prior to adoption. Significant amendments would be those changes that affect the entire county. 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 advertisements, postings at high traffic community areas, social media posts, telephone messages, and announcements on various websites (such as local EMA social media). ATRC and the local EMA office will keep public copies of the plan on hand. Copies will be provided to the County Commission office, each municipal seat of government, and other appropriate public locations. ATRC will post a copy of the Hazard Mitigation Plan on their websites. Press releases will be published via various media to inform the general public and stakeholders of the availability of the plan for review, locations where the plan can be accessed, and how they can play a role in its creation and future revisions.

APPENDIX 1
PUBLIC PARTICIPATION ITEMS

PUBLIC MEETING NOTICE

CLARKE COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

The Clarke County EMA will hold a public meeting on January 28th, to discuss the Clarke County Multi-Jurisdictional Hazard Mitigation Plan. The meeting will start at 9 AM at the Clarke County Courthouse in the Emergency Operations Center. The public, area businesses, and organizations located throughout the county are invited and encouraged to attend.

**NOTICE WAS DISTRIBUTED TO MUNICIPALITIES
FOR POSTING AT CITY HALL**



Clarke County Emergency Managemen... •••

Jan 22 •

PUBLIC MEETING NOTICE
**CLARKE COUNTY MULTI-
JURISDICTIONAL HAZARD MITIGATION
PLAN**

The Clarke County EMA will hold a public meeting on January 28th, to discuss the Clarke County Multi-Jurisdictional Hazard Mitigation Plan. The meeting will start at 9 AM at the Clarke County Courthouse in the Emergency Operations Center. The public, area businesses, and organizations located throughout the county are invited and encouraged to attend.



From: Roy Waite [mailto:rwaite@clarkecountyal.com]

Sent: Tuesday, January 20, 2026 9:14 AM

To: 'Abbey Haag'; 'Barry Chancey'; 'Barry Chancey Work'; 'Commission'; Jackie Ray Rush (county); 'Rhondel Rhone'; 'Tyrone Moye'; Alberta Dixon; Audra Raybon; Bill Davis; Daron Bolen; Eldrige Jackson; Jane Bettis james; Jimmie Atchison; Kossie Ray Powell; Lanessa Pugh; Phyllis Barnes; Ross Wood; 'Summer Scruggs'; Veria Beckham; Audra Raybon; Danny Bedwell ; Dwight Pugh; Sheldon Day

Subject: Hazard Mitigation Planning Meeting

See the attached notice of our Hazard Mitigation Planning Meeting on Wednesday, January 28, 2026 at 9am in the Clarke County EOC (basement of the courthouse). We are required to update this plan every 5 years in order to be eligible to federal funding. Also, any mitigation projects you anticipate in your jurisdiction must be on this plan to be eligible, so bring your ideas with you. If you are not able to attend, please send a representative for your agency/municipality.

Roy Waite, BSN, CEM
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**CLARKE COUNTY EMERGENCY MANAGEMENT AGENCY
CLARKE COUNTY HOMELAND SECURITY**

P.O. BOX 724 • 114 COURT STREET • GROVE HILL, ALABAMA 36451
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PUBLIC MEETING NOTICE

CLARKE COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

The Clarke County EMA will hold a public meeting on January 28th, to discuss the Clarke County Multi-Jurisdictional Hazard Mitigation Plan. The meeting will start at 9 AM at the Clarke County Courthouse in the Emergency Operations Center. The public, area businesses, and organizations located throughout the county are invited and encouraged to attend

Clarke County Haard Mitigation Plan Update
Meeting 1

January 28, 2026
9 AM- Clarke County EOC

Name	Agency	Email
Bandy Wilkerson	ATRC	
Megan Blackwell	ATRC	
MICHELLE MANDREWS	APC	MMMANDR@southernco.com
Thomas C. Williams		+481798@gmail.com
Royce Council	Grove Hill Fire	
Bradley Cooper	ADPH - SW EP	bradley.cooper@adph.state.al.us
Danny Bedwell	Town of Fulton	danny_bedwell@yahoo.com
Laura Newton	CWM Water Authority	Cwmwater36436@gmail.com
Christy Roberts	Clarke County Commission	croberts@clarkcountyal.com
Daniel F. Gibson Jr	Grove Hill Police Department	d.gibson@grovehillpd.com
Benjamin Dillaber	Clarke County EMA	b.dillaber@clarkcountyal.com