Choctaw County, Alabama

Multi-Jurisdictional Natural Hazards Mitigation Plan

August 4, 2020

Michael W. Armistead, Probate Judge
Sammy Bonner, Jr. Commissioner
Tony Cherry, Commissioner
Horace Mosley, Commissioner
C.D. Ruffin, Commissioner
Tyler Davidson, Director Choctaw County Emergency Management Agency

Choctaw County, Alabama

Unicorporated Choctaw County

Town of Butler

Town of Gilbertown

Town of Lisman

Town of Needham

Town of Pennington

Town of Silas

Town of Toxey

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November 2019

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List of Acronyms

AEMA ..... Alabama Emergency Management Agency

FEMA..... Federal Emergency Management Agency

HMGP ..... Hazard Mitigation Grant Program

NCDC ..... National Climate Data Center

NFIP..... National Flood Insurance Program

NWS ..... National Weather Service

PDM ..... Pre-Disaster Mitigation

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1. Background and Purposes of the Plan

   a. About the Plan - On October 30, 2000, the United States Congress passed the Disaster Mitigation Action Act of 2000. This act requires a local jurisdiction to develop and adopt hazard mitigation plans in order to receive federal funding from the Hazard Mitigation Program (HMGP) or the Pre-Disaster Mitigation Program (PDM). Hazard Mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. Mitigation activities may be implemented prior to, during, or after an incident. However, it has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs.

      The Choctaw County Multi-Jurisdictional Natural Hazards Mitigation Plan is an update to the previously approved plan which was approved by FEMA in 2014. In 2018, the Choctaw County Commission was awarded a HMGP grant (4349-0006) to update the previously-approved plan so that Choctaw County will meet the eligibility requirements for PDM and HMGP funding.

   b. Scope – The Choctaw County Multi-Jurisdictional Natural Hazards Mitigation Plan includes numerous entities located within Choctaw County Alabama. These entities include both incorporated and unincorporated areas along with rural water authorities and the Choctaw County Board of Education. The plan update followed the guidance provided by the Federal Emergency Management Agency (FEMA) entitled Local Mitigation Plan Review Guide (October 1, 2011). This document will contain all of the required elements in order to be eligible for federal funding.

   c. Authority – Section 409 of the Robert T. Stafford Disaster and Relief Act (Public Law 93-288, as amended) and Title 44 CFR, as amended by Section 102 of the Disaster Mitigation Act of 2000 provide the framework for state and local governments to evaluate and mitigate all hazards as a condition for receiving Federal disaster assistance. A major requirement of the law is the development and adoption of a local hazard mitigation plan.

   d. Funding – On January 23, 2019, FEMA awarded an HMGP (4349-0006) grant to the Alabama Emergency Management Agency (AEMA) for $30,000.00 with a federal share (75%) of $7,500. Donation of staff time from the local community was used as the required match for the grant.

   e. Purposes - Hazard mitigation is any action taken to permanently reduce or eliminate long-term risks to people and their property from the effects of hazards. Natural hazards come in many forms: tornadoes, floods, hurricanes, severe storms, winter freezes, droughts, landslides, or dam failures resulting from natural disaster crises. Communities can take steps to prepare and implement mitigation techniques for almost any type of hazard that may

threaten its citizens, businesses and institutions. Hazard mitigation planning helps to identify a range of structural approaches to lower the costs of future disasters by meeting the unique needs of the community. For example, structural mitigation projects for flooding could involve modifying a stream channel to increase the conveyance of floodwaters or retarding the flow rate by the construction of detention facilities. Mitigation strategies can also involve non-structural initiatives, such as educational programs to inform homeowners of their vulnerability to natural disasters in order to encourage them to purchase insurance or retrofit their homes. Non-structural programs can also include developing and enforcing regulations to prevent construction in hazard areas, or to ensure that development that does occur will be resistant to the hazards threatening the area.

Mitigation programs and projects serve to lessen a community's vulnerability to the hardships and costs of disasters. The implementation of mitigation programs is a key component to achieving a sustainable community, one in which the economic and social needs of people, businesses, and institutions coexist with natural environmental constraints and are protected from the disruptions and impacts of emergencies and disasters. Hazard mitigation planning must be closely coordinated with a community's overall planning and development efforts. The most effective way for a community to initiate this objective is through a comprehensive local mitigation planning program, as presented here. Comprehensive planning can provide Choctaw County citizens a safe, healthy and prosperous place in which to live and work.

The purpose of the Choctaw County Multi-Jurisdictional Hazard Mitigation Plan is to develop a unified approach among its local governments for dealing with identified hazards and hazard management problems. This plan serves as a guide for local governments in their ongoing efforts to reduce vulnerability to the impacts produced by natural hazards.

Further, the plan seeks to accomplish the following additional purposes:

1. Establish an ongoing hazard mitigation planning program
2. Identify and assess the hazards that pose a threat to life and property
3. Evaluate additional mitigation measures that should be undertaken
4. Outline procedures for monitoring the implementation of mitigation strategies

f. 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.

2. County Profile

a. *Geographic setting and history – Choctaw County is located in rural western* Alabama. According to the 2010 U.S. Census, the County's population was 13,859. The County contains approximately 921 square miles and is bordered on the north by Sumter County, on the east by Marengo and Clarke Counties, on the south by Washington County, and on the west by the State of Mississippi. It was established on December 29, 1847 and named for the Choctaw tribe of American Indians. The county also contains, in decreasing order of population, the towns of Butler (2010 U.S. Census population 1,894), Lisman (2010 U.S. Census population 539), Silas (2010 U.S. Census population 452), Pennington (2010 U.S. Census population 221), Toxey (2010 U.S. Census population 137, and Needham (2010 U.S. Census population 99).

Map 1. Location Map of Choctaw County, Alabama

b. Government - County government is in the form of a representative four-member commission presided over by the probate judge. All of the municipalities have a mayor/city council form of government.

c. Demographics - The total population of Choctaw County, Alabama is 13,859 according to the 2010 Census. This amount decreased slightly from the 2000 Census. Chart 1 depicts

the total population of the Choctaw County in using data from 2000 and 2010 United States Census. Chart 1 also includes the population of unincorporated areas in Choctaw County.

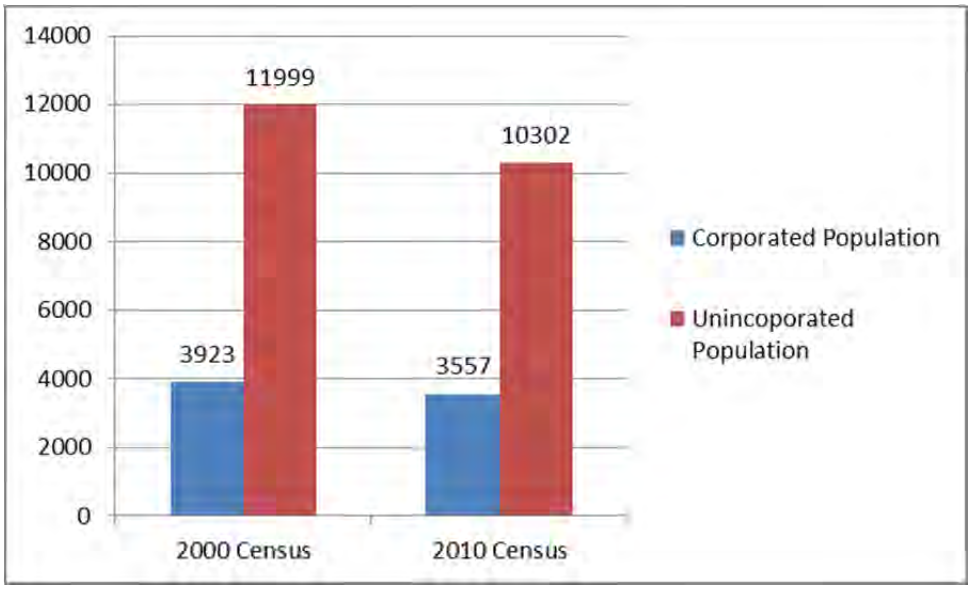


Chart 1. Population of Choctaw County and Unincorporated Areas in 2000 and 2010.
Source: U.S. Census Data www.census.gov

There are 7 municipalities located in Choctaw County. Chart 2 depicts the 2000 and 2010 Census data for the population of each of the municipalities.

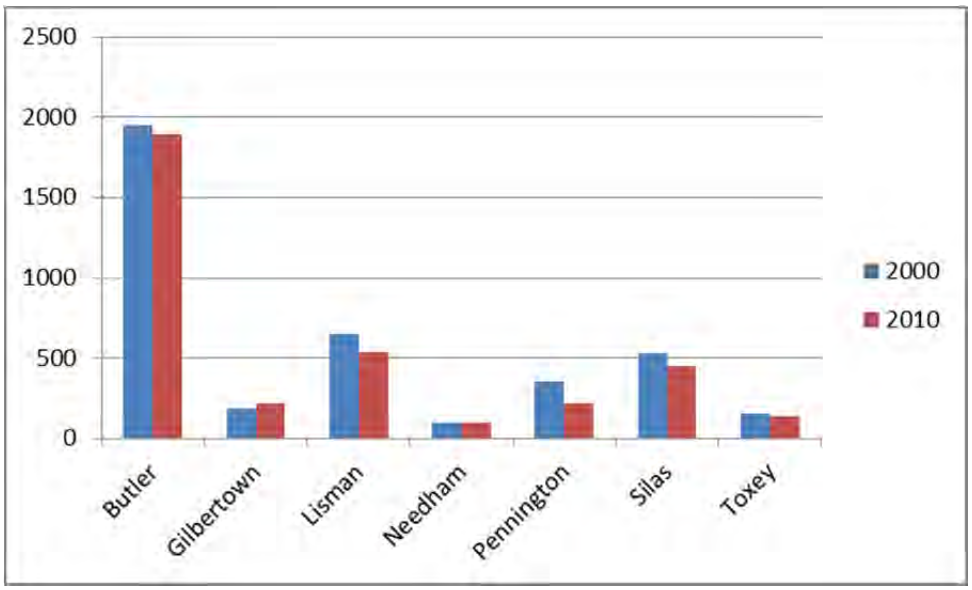


Chart 2. Population Choctaw County Incorporated Areas in 2000 and 2010. Source: U.S. Census Data www.census.gov

Chart 3 depicts the racial characteristics of Choctaw County. The population is made of 55% White population, 41% African American, and the other 4% is made of other races including Asian, American Indian, Alaska Native, Native Hawaiian, Pacific Islander or other.

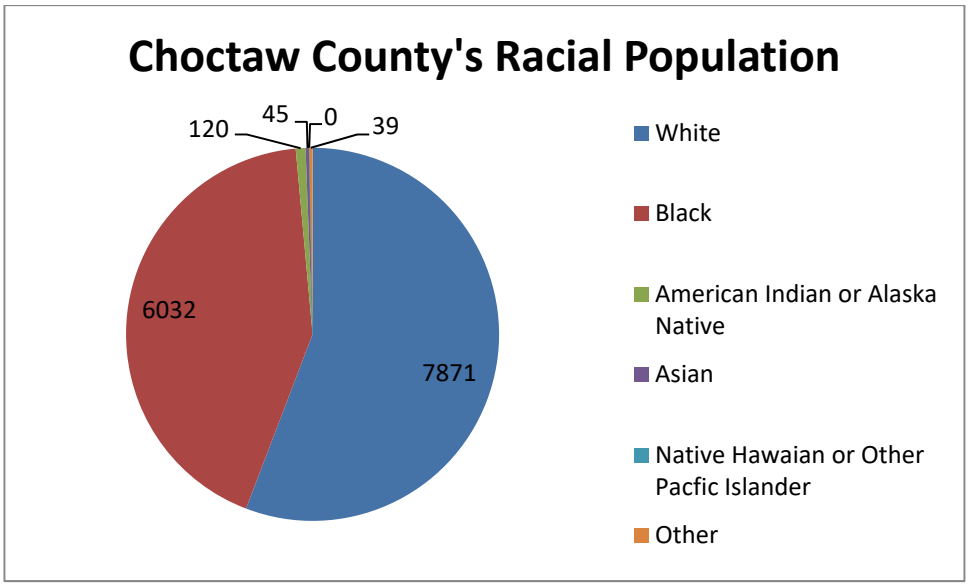
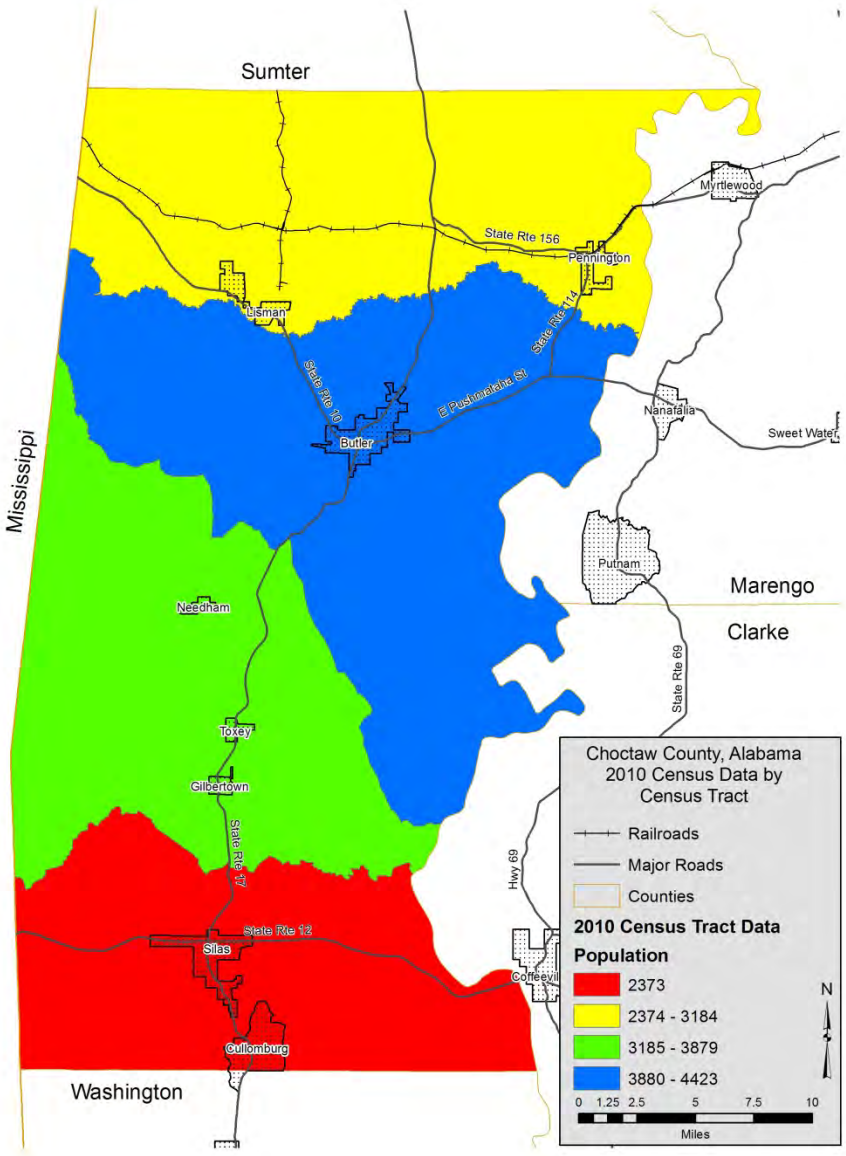


Chart 3. 2010 Choctaw County Race Data. Source: U.S. Census Data www.census.gov

The population of the county is concentrated into four principal Census Tracts. Map 2 depicts the densest population of Choctaw County in the area surrounding Butler. The area of Choctaw County with the lowest density is located the southern section.



Map 2. 2010 Population by Census Tract in Choctaw County, Alabama

d. Economy – According to the 2010 U.S. Census, 61% of Choctaw County's population lives in unincorporated areas. This has remained relatively unchanged since the 2000 Census. The percentage of the population that has finished high school (74.7%) or better is lower than both the state average (82.1%). Choctaw County also has below average median and per capita incomes. The median annual income in Choctaw County is $28,877, lower than the state median income ($40,474). A significantly higher percentage of individuals and families live below the poverty line (24.8%) when compared to the state average (14.7%). Table 1 summarizes economic data of Choctaw County using data from the U.S. Census.

Population	13,859
Male	6688
Female	7,171
Median Age	43.4
Total Households	5,866
Total Housing Units	7,269
Population 3 years and over enrolled in school	3,302
Percent High school graduate or better	39.3%
Percent Bachelors' degree or higher	6.3%
Median Annual Household Income	$32,188
Per capita income	$18,201
Families below the poverty level	14.4%
Individual below the poverty level	20.5%

Table 1. Summary of economic data for Choctaw County. Source: U.S. Census

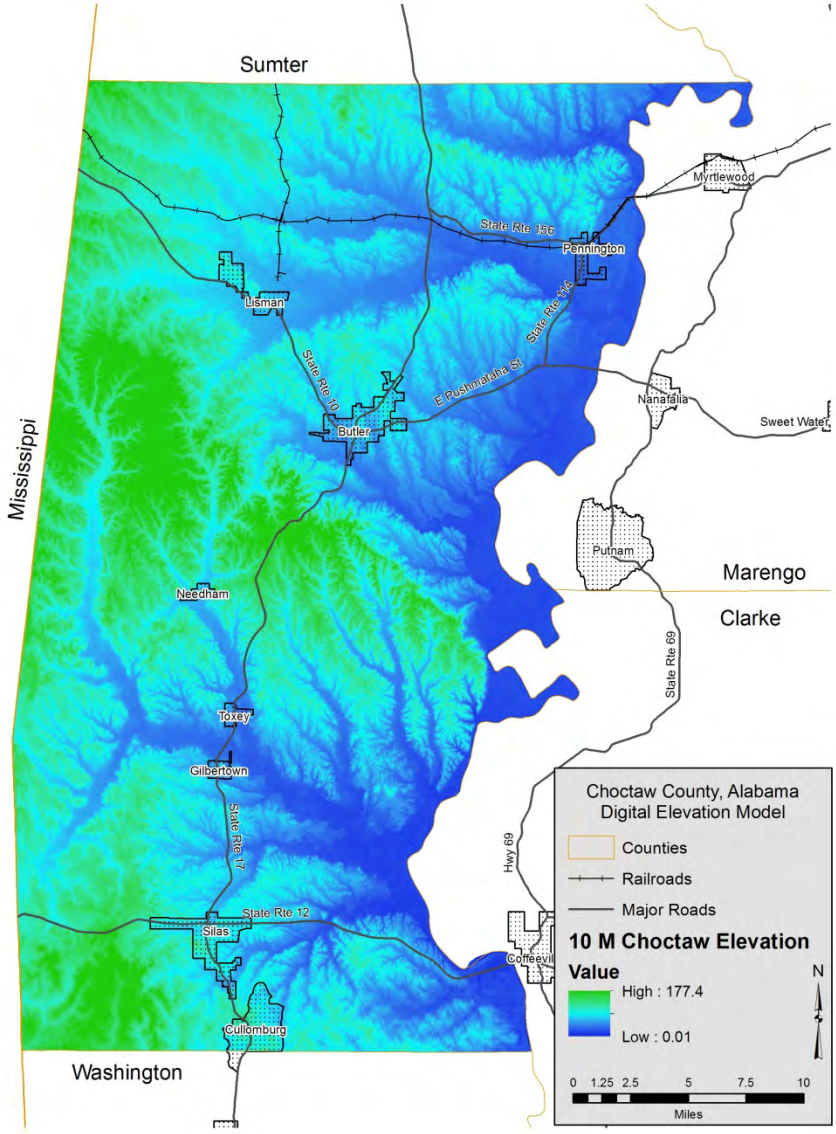
The economy in Choctaw County has been hard hit by the recession in the late 2000's. The largest employer is the Georgia Pacific Plant in Pennington on the Tombigbee River.

e. Climate - Choctaw County has long, hot summers because moist tropical air from the Gulf of Mexico persistently covers the area. Winters are cool and fairly short. Cold waves are rare and generally moderate in 1 or 2 days. Precipitation is fairly heavy throughout the year, and prolonged droughts are rare. Severe local storms, including tornadoes, strike occasionally in or near the area. They are of 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 47 degrees F and the average daily minimum temperature is 35 degrees. The lowest temperature on record, which occurred on January 22, 1985, is -1 degree. In summer, the average temperature is 79 degrees and the average daily maximum temperature is 90 degrees. The highest recorded temperature, which occurred on June 26, 1930, is 108 degrees. Growing degree days are shown in table 1. They are equivalent to "heat units." During the month, growing degree days accumulate by the amount that the average temperature each day exceeds a

base temperature (50 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring
and the first freeze in fall. The total annual precipitation is about 58.5 inches.
Of this, 27 inches, or about 47 percent, usually falls in April through September. The growing season for most crops falls within this period. In 2 years out of 10, the rainfall in April through September is less than 12 inches. The heaviest 1-day rainfall during the period of record was 11.1 inches on March 12, 1935. Thunderstorms occur on about 58 days each year, and most occur in July. The average seasonal snowfall is about 0.4 inch. The greatest snow depth at any one time during the period of record was 4 inches. On the average, no days of the year have at least 1 inch of snow on the ground. The number of such days varies greatly from year to year. The average relative humidity in midafternoon is about 55 percent. Humidity is higher at night, and the average at dawn is about 89 percent. The sun shines 67 percent of the time possible in summer and 50 percent in winter. The prevailing wind is from the south. Average windspeed is highest, 7.8 miles per hour, in March.

f. Physical features -Choctaw County is in the East Gulf Coastal Plain Section of the Coastal Plain physiographic province. Gently rolling to strongly dissected, hilly topography characterizes this area of the lower Coastal Plain. The soils on the landscape are forming in outcrops of Tertiary-aged material that consists primarily of unconsolidated sand, silt, and clay and lesser amounts of limestone, chalk, siltstone, and claystone. The Tertiary-aged sediments are underlain by Mesozoic and Cenozoic sedimentary rocks that dip southward at 20 to 40 feet per mile (Copeland, 1968). Sedimentary beds that are resistant to erosion form southeasterly trending hilly belts known as cuestas, which are asymmetrical hogback ridges on which the steeper slopes face northward and the opposing slope is long and gentle. Elevation ranges from about 30 feet above mean sea level on the flood plain along the Tombigbee River in the southeast corner of the county to about 553 feet on Scott Mountain in the west-central part of the county. includes some comparatively smooth and nearly level interstream divides that contain broad expanses of high terraces. The Southern Red Hills subdivision has two parts. In the northeast corner of the county, a relatively smooth area known as the “Flatwoods” corresponds to the Porters Creek Formation. The southern part of the Southern Red Hills contains an area known as the “Buhrstone Hills.” This area is underlain by the Tallahatta Formation and contains the most rugged topography on the Alabama Coastal Plain. Summits along the northern edge of the cuesta rise 150 to nearly 400 feet above the major streams. The Lime Hills subdivision is in the southern third of the county. In some areas it is characterized by rugged topography that is attributed to several geologic faults in conjunction with underlying resistant beds of limestone of Eocene and Oligocene age. The Lime Hills comprise an area of soils that are distinctly different from the other soils in the county. The soils in the Lime Hills are forming in materials weathered from marl,

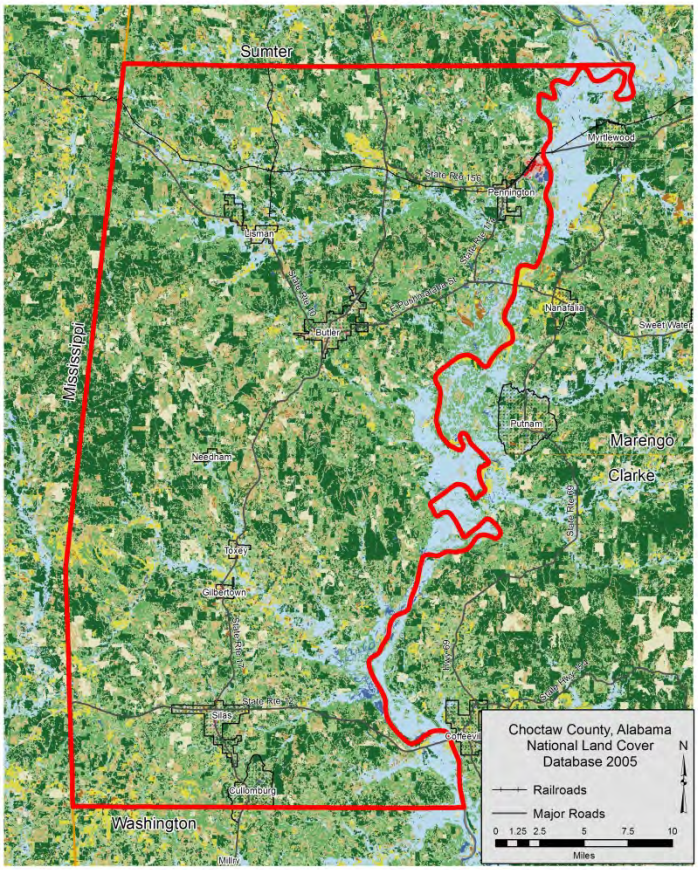
limestone, and chalk. Also, the Tallahatta Formation reappears in the area of the Hatchetigbee Anticline in the southeastern part of the county. Relief is commonly 100 to 200 feet in this area. The streams of Choctaw County dominantly drain into the Tombigbee River. In the southwestern part of the county, however, the Red Creek and other tributaries flow into the Chickasawhay River in Mississippi. The major tributaries of the Tombigbee River, from north to south, are Kinterbish, Clear, Yantley, Boguelichitto, Tuckabum, Wahalak, Tishlarka, Tallawampa, Surveyors, Bogueloosa, Okatuppa, PussCuss, Souwilpa, Turkey, Thompson, Sea Warrior, and Seyouyah Creeks. Stream valleys generally are narrow in the upper reaches and become broad flood plains that have widely meandering stream channels in the lower reaches includes some comparatively smooth and nearly level interstream divides that contain broad expanses of high terraces.



Map 3. Choctaw County Digital Elevation Model

Agriculture and forest products have sustained the economy of the county over recorded history. Textile manufacturing and a few other small industries have
also been in the county. Where cotton was once king, the main agricultural enterprises are now beef cattle and hog production. Significant growth has also occurred in the pond-raised catfish and bait-fish industry. Timber is produced on about 87 percent of the land area in the county. It provides raw material for local

sawmills and for pulp and paper producers. Woodland also provides habitat for wild game, such as wild turkey, white-tailed deer, and feral hogs. This game attracts hunters from across the Nation. Loblolly pine has largely replaced longleaf pine and shortleaf pine, which were harvested by the early settlers.



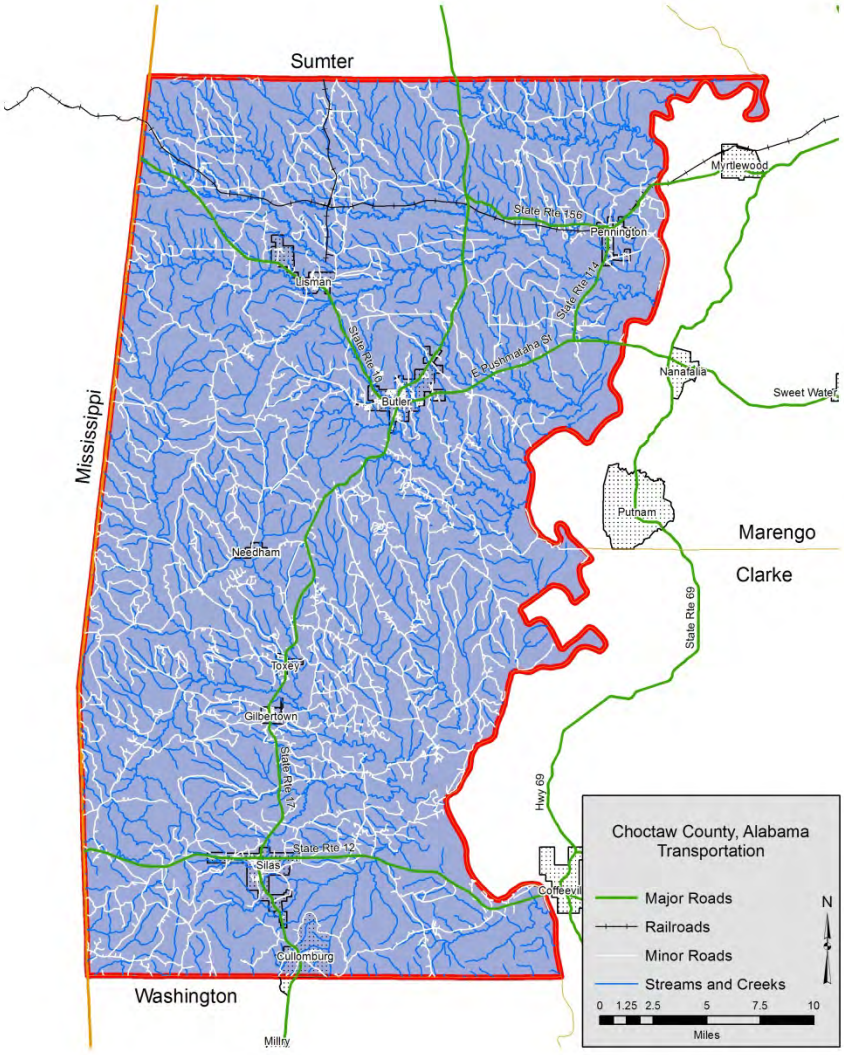
Map 4. National Land Cover Database for Choctaw County. 2005.

g. Transportation - Over the past 150 years, the major mode of transportation in Choctaw County shifted from horse and wagon through steamboat and railroad to automobile. Each shift brought readjustment to the settlement patterns and economy of the county. Today, the major highways serving the county are U.S. Highway 84, which passes east to west through Silas and Isney; Alabama Highway 10, which passes east to west through Butler and exits the northern corner of the county near Yantley; and Alabama Highway 17, which passes north to south through the center of the county and serves Silas, Gilbertown, and Butler. Numerous hard-surface county roads provide access throughout the county. Choctaw County is presently served by one railroad, which provides freight

service through Pennington and Yantley in the northern part of the county. A municipal airport near Butler serves small, private and commercial aircraft.

The Tombigbee River has been a major avenue of transportation throughout the history of the county. It is navigable throughout its length in Choctaw County and

connects the Tennessee River system to ports on the Gulf of Mexico and other inland water systems. Port facilities are available nearby at Demopolis and Jackson.



Map 5. Major Transportation in Choctaw County, Alabama. Source: U.S. Tiger Data 2010.

h. Utilities - Electric power is provided by the Alabama Power Company and Black Warrior Power Company. Water service is provided by the Town of Butler, the Gilbertown Water Authority, Town of Pennington, and North Choctaw Water Authority. There are

centralized sanitary sewer service offered in the Town of Butler, Town of Lisman, and Town of Pennington. TDS Communications provides electronic communications. The Choctaw Sun Advocate is the newspaper of general circulation. It is published on Thursday of each week and is the major media outlet in Choctaw County.

i. What has been updated in this section – Updated data was used to update the County profile. These data sets include 2010 Census, current land use maps, and recent economic data provide by Choctaw County Chancer of Commerce.

3. Planning Process

CFR Title 44 201.6 (c) (1) requires the Local Hazard Mitigation Plan must include: "Documentation of the planning process used to develop the plan including how it was prepared, who was involved in the process, and how the public was involved". In order to facilitate this process, the Choctaw County Commission hired a consultant to facilitate the plan update process. From May 2019 through November 2019, the Choctaw County Hazard Mitigation Committee held three meetings. Agendas and sign in sheets from those meets are on file in the Choctaw County EMA office. Committee members unable to attend a meeting received agendas and Committee assignments via fax, email, telephone or personal meetings with the planning team.

a. Hazard Mitigation Planning Committee – In May of 2019, under the leadership of the Choctaw County Emergency Management Director (Tyler Davidson), the Hazard Mitigation Planning Committee was re-assembled. Since the original plan was developed in 2013, many of the elected officials have such left office or changed jobs. As such, it was determined to sponsor a Kick-Off meeting which would invite elected officials, EMA officials, and volunteer fire fighters, police officers, elected officials, school representatives, industry representative, interested citizens, and others. This meeting was held on May 7, 2019 and invited representatives from numerous public and private agencies throughout Choctaw County. Table 2 lists the agencies invited to the Choctaw County Hazard Mitigation Kickoff Meeting.

	Name of Organization Invited to Hazard Mitigation Kickoff Meeting on May 7, 2019
1	Alabama Cooperative Extension Service
2	Alabama Department of Environmental Management
3	Alabama Emergency Management Agency
4	Alabama Forestry Commission
5	Alabama National Guard
6	Alabama Power Corporation
7	Alabama Southern Community College
8	Alabama-Tombigbee Regional Planning Commission
9	American Red Cross
10	Baldwin County Commission
11	Town of Butler
12	Sumter County Commission
13	Clarke County Commission
14	Mississippi Emergency Management Agency
15	Town of Lisman
16	Federal Emergency Management Agency
17	Town of Pennington

18	Georgia Pacific Cellulose
19	Town of Gilbertown
20	Choctaw County Chamber of Commerce
21	Choctaw County Board of Education
22	Choctaw County Commission
23	Choctaw County E-911
24	Choctaw County Emergency Management Agency
25	Choctaw County Health Department
26	Town of Needham
27	Choctaw County Hospital
28	Choctaw County Sherriff's Department
29	Choctaw County Volunteer Fire Departments
30	Choctaw Sun Advocate
31	Black Warrior Power Company
32	South Alabama Gas
33	Gilbertown Utilities
34	North Choctaw Water Authority
35	US Army Corps of Engineers, Mobile District
36	US Fish and Wildlife Service
37	Town of Silas
38	Town of Toxey

Table 2 – list of entities invited to attend HMGP Meeting

There were over 30 attendees to at the Kickoff meeting representing numerous of the entities invited above. The Hazard Mitigation Planning Committee (HMPC) was formed. The committee's adopted mission statement is:

'To oversee and establish comprehensive hazard mitigation planning process that:

1. Engages public participation and support;
2. Facilitates Federal, state, regional and local coordinator
3. Constantly monitors and evaluates the potential risks of hazards to life and property;
4. Actively mobilizes all available community resources and measures to mitigate the threats of hazards; and
5. Results in programmed actions with specific results.'

At this meeting, the topics included an introduction to mitigation planning, a review of the 2013 plan, and preview of the plan update process. Each member was given a summary of the 2013 plan and asked to write down any changes to their jurisdiction's capabilities since 2013. Also, an inventory of critical infrastructure was conducted at this meeting along with identifying participants and agencies that weren't represented at the meeting.

These specific participants were contacted and were asked to participate in the HMPC at the next meeting. Representatives from each of the participating jurisdictions were invited and/or represented at each of the meetings. The attendees were handed out a stakeholder survey that contained the following three questions:

1. Who should be involved in this process and is not at the meet kickoff meeting? The Update to the Choctaw County Hazard Mitigation Plan should include all aspects- i.e. public agencies, private businesses, and non-profit organizations. Please include contact information if available.

2. What in your opinion are the vulnerable areas of Choctaw County to a hazard? In other words, what should be protected?

    a. Building Stock
    b. Critical Facilities
    c. Transportation Systems
    d. Lifeline Utility Systems
    e. Communication Systems
    f. High Potential Loss Facility
    g. Hazardous Material Facility
    h. Economic Elements
    i. Historical, Environmental, and Cultural Resource Areas

3. In light of the tornadoes in April, what types of actions are necessary to improve Choctaw County's response to hazard events?
    a. Prevention
    b. Property Protection
    c. Public Education and Awareness
    d. Natural Resource Protection
    e. Structural Projects – Safe Rooms, Drainage Projects, Culverts, etc...

These responses were tabulated on a spreadsheet and were used to develop the agenda for the second planning meeting. A second meeting was held on August 13, 2019 – a risk assessment was performed. At this meeting, the committee addressed the findings of the previous exercises and the planning team described in detail the different hazards and how their risks vary throughout Choctaw County and its communities. Man-made hazards were introduced during this meeting and the committee was given a man-made hazard risk assessment exercise to fill out and return to EMA. The Risk Assessment questions are included below.

1. How concerned are you the following disasters will affect Choctaw County? (please circle the corresponding number for each hazard)

Hurricane/Tropical Storm	1	2	3	4	5
Flood	1	2	3	4	5
Severe Weather	1	2	3	4	5
Tornadoes	1	2	3	4	5
Wildfires	1	2	3	4	5
Drought/Heat Waves	1	2	3	4	5
Winter Storm/Freeze	1	2	3	4	5
Levee Dam Failures	1	2	3	4	5
Landslides	1	2	3	4	5
Manmade Hazards	1	2	3	4	5
Other: _____	1	2	3	4	5

2. In the past 10 years, have you or your family experienced a natural disasters such as a hurricane/tropical storm, flood, tornadoes, wildfires, drought/heat wave, winter storm freezes, levee dam failure, landslide, or other?
   □ Yes □ No (If no skip to question 4.)

3. If yes, which disasters have your or your family experienced?

   □ Hurricane/Tropical Storm
   □ Severe Weather
   □ Wildfires
   □ Winter Storm/Freezes
   □ Landslides
   □ Other: _____
   □Flood
   □Tornadoes
   □ Drought/Heat Waves
   □ Levee/ Dam Failures
   □ Manmade Hazards

4. Please prioritize the likelihood of the following disasters impacting you in the next 5 years (1 – most likely – 10 – almost never)

   a. Hurricane/Tropical Storm _____
   b. Flood _____
   c. Severe Weather _____
   d. Tornadoes _____
   e. Wildfires _____
   f. Drought/Heat Waves _____
   g. Winter Storm/Freezes _____
   h. Levee Dam Failures _____

i. Landslides _____
j. Manmade Hazards _____
k. Other: _____ _____

The results from this exercise were tallied and used in the risk assessment.

The final public meeting was held on November 5, 2019 and presented the results from the risk assessment along with mitigation strategies for each participating jurisdiction. All representatives who attended the meetings were participants on each committee. The consultant developed the meeting agendas following guidance provided by the Local Mitigation Plan Review Guide date October 1, 2011. The consultant developed the draft plan and it was reviewed the EMA Director (Tyler Davidson) along with other planning consultants. All meeting attendees were involved in the plan development process. Please find a detailed description below of the jurisdictions that are new, continuing, or no longer participating in the Hazard Mitigation planning process. Each chapter of the plan was reviewed and updated by the Choctaw County Multi-Hazard Mitigation committee.

New Participating Jurisdictions

None.

Continuing Jurisdictions

1. Choctaw County Commission – Tyler Davidson, EMA Director
2. Town of Butler – Lindy Long, Utilities Director
3. Town of Gilbertown – Mayor Bobby May
4. Town of Lisman – Mayor Jason Ward
5. Town of Needham – County Administrator, Jessica Hare
6. Town of Pennington – Teresia Cherry, Town Clerk
7. Town of Silas – Mayor Russell A. Williams
8. Town of Toxey – Mayor

Jurisdictions that are no longer participating

1. None

Entities Notified of the Update, but Chose Not to Participate

1. Alabama Cooperative Extension Service
2. Alabama Department of Environmental Management
3. Alabama National Guard

4. Alabama Department of Conservation and Natural Resources – Wildlife and Freshwater Fisheries
5. Wilcox County
6. Sumter County
7. Clarke County
8. Washington County
9. Marengo County
10. Economic Development Administration
11. Natural Resource Conservation Service
12. US Army Corps of Engineers, Mobile District
13. US Fish and Wildlife Service
14. USDA Farm Service Center
15. USGS, Office of Water Resources

b. Public Involvement - The public was involved in every step of Choctaw County's Hazard Mitigation Planning process. The HMPC solicited public input into the mitigation plan through public meetings the local news media, and social media. For each meeting, notices were posted in courthouse and City Halls throughout Choctaw County. Notice was given via the Choctaw County EMA's Facebook page. In sum, there were 3 public meetings held to update and revise the plan. The first was the kickoff meeting on May 7, 2019, the Risk Assessment meeting on August 13, 2019 and the Final Commission meeting adopting draft plan on November 5, 2019. There was no public feedback provided by the participants in the plan development.

Figure 1. Meeting notice

THE CHOCTAW COUNTY COMMISSION WILL HOLD A PUBLIC HEARING on November 5, 2019 during the regular meeting of the Choctaw County Commission.

Last, prior to adopting the plan, each jurisdiction will hold a public hearing at each of their Commission and Council meeting. These meetings will be held after Choctaw County received its approval letter from FEMA.

c. Interagency and intergovernmental coordination – As stated in the part a above, numerous federal, state, regional and local agencies were invited to the kickoff meeting. Participation was encouraged through mailings, e-mail and follow-up phone calls. In sum, there were over 25 agencies represented through the planning process either directly or indirectly.

d. Participating jurisdictions - All jurisdictions within Choctaw County have participated in the planning process by direct representation on the planning committee and have committed to adopting the final plan by formal resolution. These jurisdictions include the municipalities of Butler, Gilbertown, Lisman, Needham, Pennington, Silas and Toxey. Some of the communities are very small. If a representative did not attend any of the meetings, Tyler Davidson, the EMA Director makes an effort to visit the mayor and Town clerk from the unrepresented municipality. For example, no one from Toxey attended any of the meetings. As a result, Tyler met with the Clerk and Mayor after the meeting to provide an update on the process. Choctaw County is very rural and has not experienced any significant growth over the past 20 years.

e. Integration with existing plans - This document will be incorporated into the Choctaw 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 Choctaw County. For example, there are no building codes enforced in Choctaw County

nor any comprehensive or zoning plans. However, there are many plans that indirectly coordinate with the Choctaw County Hazard Mitigation Plan. These plans were checked to make sure any of the proposed policies in the Choctaw County Hazard Mitigation Plan does not conflict with these existing plans. These plans include:

- Choctaw County Emergency Operations Plan
- U.S. 2010 Census
- Alabama State Data Center Population Projections 2000-2025
- NOAA and NWS records: past occurrence data
- Flood Insurance Rate Maps
- Forest Statistics for Alabama
- State of Alabama State Hazard Mitigation Plan
- Geological Hazards Information for the Geological Survey of Alabama
- Choctaw County Soils Survey

f. 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 in order to document the update process. The Choctaw County Commission reviewed this section and made all revisions. The revised areas include an Outlined Natural Hazards Steering Committee's involvement in 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.

4. Risk Assessment

a. Risk Assessment Process - This risk assessment identifies all natural hazards affecting Choctaw County. It provides information on the history and extent of hazards, evaluates the possible effects, identifies vulnerable populations and assets (buildings, critical facilities, and essential infrastructure), and estimates potential losses that might occur. The risk assessment process identifies the most critical problems and issues that require mitigation actions.

b. Identification of Risks - In the initial phase of the planning process, the HMPC identified potential natural hazards that could impact Choctaw County. The HMPC decided to use the same hazards included in the 2010 approved Hazard Mitigation Plan. Each of these risks were evaluated by the HMPC and ranked based on previous experience with the hazard and probability or risk of impact by the event. This assessment resulted in the hurricanes/tropical storms and tornadoes to be the largest perceived likelihood of threat in the next 5 years. Table 3 below includes a list of each of the hazards assessed, and the percentage of HMPC members experience with the hazard and the perceived risk of the hazard in the future.

	Type of Hazard Impacting Choctaw County	**HMPC Experience**	**HMPC perceived risk**
1	Hurricanes/Tropical Storms	85%	85%
2	Flood	80%	80%
3	Severe Storms	50%	71%
4	Tornadoes	25%	60%
5	Wildfire	10%	50%
6	Drought Heat Waves	10%	48%
7	Winter storms/Freezes	10%	39%
8	Levee/Dam Failures	0%	5%
9	Landslides	0%	0%
10	Earthquakes	0%	0%
11	Manmade Hazards (e.g. Oil Spills)	10%	80%

Table 3. Assessment of Perceived Risk of from Hazards

c. Federally-declared disasters - Choctaw County has been included in a total of 11 federal disaster declarations from 1973 to date. Table 4 summarized the federal disaster declarations that have taken place in Choctaw County since the 1970's.

	Disaster Number	**Type**	**Date of Declaration**
1	369	Tornado	4/5/1973
2	458	Flood	3/14/1975
3	3045	Drought	8/16/1977
4	3074	Flood	3/17/1979
5	578	Flood	4/18/1979
6	598	Hurricane Frederik	9/13/1979
7	861	Severe Storms	4/7/1990
8	1466	Severe Storms, Tornadoes and Flooding	5/12/2003
9	3096	Snow Storm	3/15/1993
10	1185	Severe Storm	7/25/1997
11	1250	Hurricane Georges	10/13/1998
9	1549	Hurricane Ivan	9/15/2004
10	1605	Hurricane Katrina	8/25/2005
11	1971	Tornadoes	4/29/2011
13	4349	Hurricane Nate	10/8/2017

Table 4. Summary of Federal Disasters in Choctaw County, Alabama

d. 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 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 Choctaw County.

Though the center of Choctaw 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 5 lists the major hurricanes/tropical storms that have impacted Choctaw County and Southwest Alabama over the 20 years. Damage estimates are for the entire region can be high per capital.

Hurricane Dennis made landfall on July 10, 2005 at the Santa Rosa Sound in Florida, approximately 25 miles from the Florida-Alabama state line, at this time, Alabama had already received significant rainfall from Tropical Storm Arlene and Hurricane Cindy. Because coastal Alabama was on the western side of the eye of Dennis, it was spared the worst of the storm surge; however, as much as 10 inches of rain fell in some areas causing flash flooding in inland Alabama counties, including Choctaw County.

Hurricane Katrina made landfall along the Louisiana-Mississippi border on August 29, 2005, approximately 80 miles east of the Mississippi-Alabama border. Because Alabama was on the eastern side of the system, it experienced a significant storm surge (higher than in Ivan just the year before). Storm surge throughout coastal Mobile and Baldwin Counties ranged from 9-14 feet. AS Katrina moved inland, it dropped huge amounts of rain throughout causing significant flash flooding in Alabama counties, including Choctaw County.

Location	Date	Type	Mag	Dth	Inj	PrD	CrD
Choctaw County	07/21/1997	Hurricane Danny	N/A	0	0	25.0M	1.0M
Choctaw County	09/25/1998	Hurricane Georges	N/A	1	0	174.2M	5.0M
Choctaw County	09/13/2004	Hurricane typhoon Ivan	N/A	0	0	2.5B	25.0M
Choctaw County	07/09/2005	Hurricane typhoon Dennis	N/A	0	0	120.0M	100K
Choctaw County	8/27/2005	Hurricane typhoon Dennis	N/A	0	0	0	0
Choctaw County	10/29/2008	Hurricane Gustav	N/A	0	0	0	0
Choctaw County	9/11/2017	Hurricane Irma	N/A	0	0	0	0
Choctaw County	10/8/2017	Hurricane Nate	N/A	0	0	0	0

Table 5: Major hurricanes/tropical storms that have impacted Choctaw County and Southwest Alabama over the 20 years. Source: NCDB database.

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. Choctaw County is susceptible to the effects of

coastal storms. Since Choctaw 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 Choctaw 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 of the jurisdictions within Choctaw County including unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey 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 - Choctaw County is highly susceptible to hurricanes and tropical storms. Based on historical data, Choctaw County can expect a hurricane once every two years, or 50% of the time. Another analysis was conducted by the Atlantic Oceanographic and Meteorological Laboratory. The organization analyzed hurricane activity from 1944-1999. This study resulted in a map showing probabilities of a strike that will affect the during the hurricane season. Figure 2 depicts the results of this analysis.

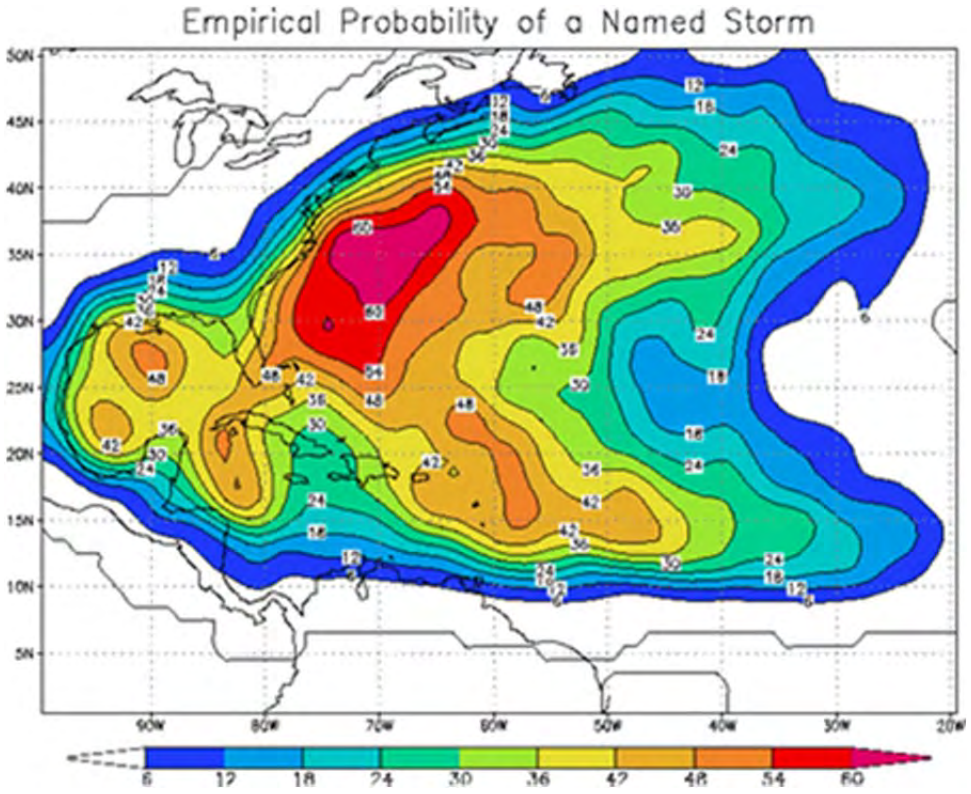


Figure 2. Empirical Probability of a Named Storm – note Choctaw County is noted as having a 36% chance of being hit by a Named Storm.

http://www.aoml.noaa.gov/hrd/tcfaq/G12.html

e. 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. Choctaw County is a 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.

"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.

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 also 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 1996, there have been several major flooding events in Choctaw County according to the National Climate Data Center. Table 6 lists each of these events. The NCDC Storm Events Database provides the following details on a flood event in 1996: 'Rainfall of up to eight inches caused many roads in the northwest part of the county to be closed. The storm that caused the heavy rains remained almost stationary over Choctaw County for most of the morning then slowly moved southeast during the afternoon. Most of the roads that had to be closed were dirt roads. The roads remained closed into the early evening hours, associated with a hurricanes or tropical storms. The depth of flooding was determined to be extremely high. Table 6 includes a list of the 28 recent flooding events in Choctaw County (Source: NCDC database).

BUTLER	CHOCTAW CO.	AL	05/28/1997	18:45	CST	Flash Flood	1.00K	0.00K
LISMAN	CHOCTAW CO.	AL	07/21/1997	07:00	CST	Flash Flood	0.00K	0.00K
LISMAN	CHOCTAW CO.	AL	07/22/1997	07:00	CST	Flash Flood	500.00K	50.00K
COUNTYWIDE	CHOCTAW CO.	AL	01/07/1998	07:00	CST	Flash Flood	20.00K	0.00K
CENTRAL PORTION	CHOCTAW CO.	AL	04/28/1998	08:00	CST	Flash Flood	25.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	09/21/1998	11:00	CST	Flash Flood	5.00K	0.00K
NORTH PORTION	CHOCTAW CO.	AL	01/30/1999	12:00	CST	Flash Flood	5.00K	0.00K
SOUTH PORTION	CHOCTAW CO.	AL	04/27/1999	15:30	CST	Flash Flood	3.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	01/09/2000	22:40	CST	Flash Flood	0.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	03/03/2001	02:30	CST	Flash Flood	10.00K	0.00K
NORTH PORTION	CHOCTAW CO.	AL	04/04/2001	08:15	CST	Flash Flood	3.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/08/2001	20:30	CST	Flash Flood	4.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	06/19/2003	19:20	CST	Flash Flood	0.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	07/19/2003	17:20	CST	Flash Flood	0.00K	0.00K
WEST PORTION	CHOCTAW CO.	AL	02/23/2004	10:45	CST	Flash Flood	0.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	03/31/2005	07:45	CST	Flash Flood	0.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	07/10/2005	17:30	CST	Flash Flood	0.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	08/29/2005	12:00	CST	Flash Flood	0.00K	0.00K
NORTH PORTION	CHOCTAW CO.	AL	05/10/2006	16:10	CST	Flash Flood	0.00K	0.00K
GILBERTOWN	CHOCTAW	AL	04/11/2008	18:00	CST-	Flash	0.00K	0.00K

	CO.				6	Flood		
BOLINGER	CHOCTAW CO.	AL	05/07/2009	21:00	CST-6	Flash Flood	75.00K	0.00K
BUTLER	CHOCTAW CO.	AL	02/04/2010	21:30	CST-6	Flash Flood	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/02/2010	17:00	CST-6	Flash Flood	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	03/05/2011	17:27	CST-6	Flash Flood	0.00K	0.00K
CHOCTAW	CHOCTAW CO.	AL	03/09/2011	04:45	CST-6	Flash Flood	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/09/2011	07:22	CST-6	Flash Flood	0.00K	0.00K
MELVIN	CHOCTAW CO.	AL	03/09/2011	07:30	CST-6	Flash Flood	10.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	03/09/2011	07:30	CST-6	Flash Flood	15.00K	0.00K
RIDERWOOD	CHOCTAW CO.	AL	04/06/2014	17:00	CST-6	Flash Flood	0.00K	0.00K
ROBJOHN	CHOCTAW CO.	AL	04/06/2014	17:30	CST-6	Flash Flood	0.00K	0.00K
WATER VLY	CHOCTAW CO.	AL	04/16/2015	23:00	CST-6	Flash Flood	1.200M	0.00K
HINTON	CHOCTAW CO.	AL	03/11/2016	10:13	CST-6	Flash Flood	0.00K	0.00K
TOXEY	CHOCTAW CO.	AL	06/22/2017	13:00	CST-6	Flash Flood	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	07/31/2018	15:00	CST-6	Flash Flood	0.00K	0.00K
CHOCTAW	CHOCTAW CO.	AL	09/05/2018	06:00	CST-6	Flash Flood	25.00K	0.00K
NAHEOLA	CHOCTAW CO.	AL	09/05/2018	14:00	CST-6	Flash Flood	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	12/28/2018	02:00	CST-6	Flash Flood	700.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	01/23/2019	16:30	CST-6	Flash Flood	25.00K	0.00K

Table 6: Flooding events in Choctaw County, Alabama. Sourch: www.ncdc.gov

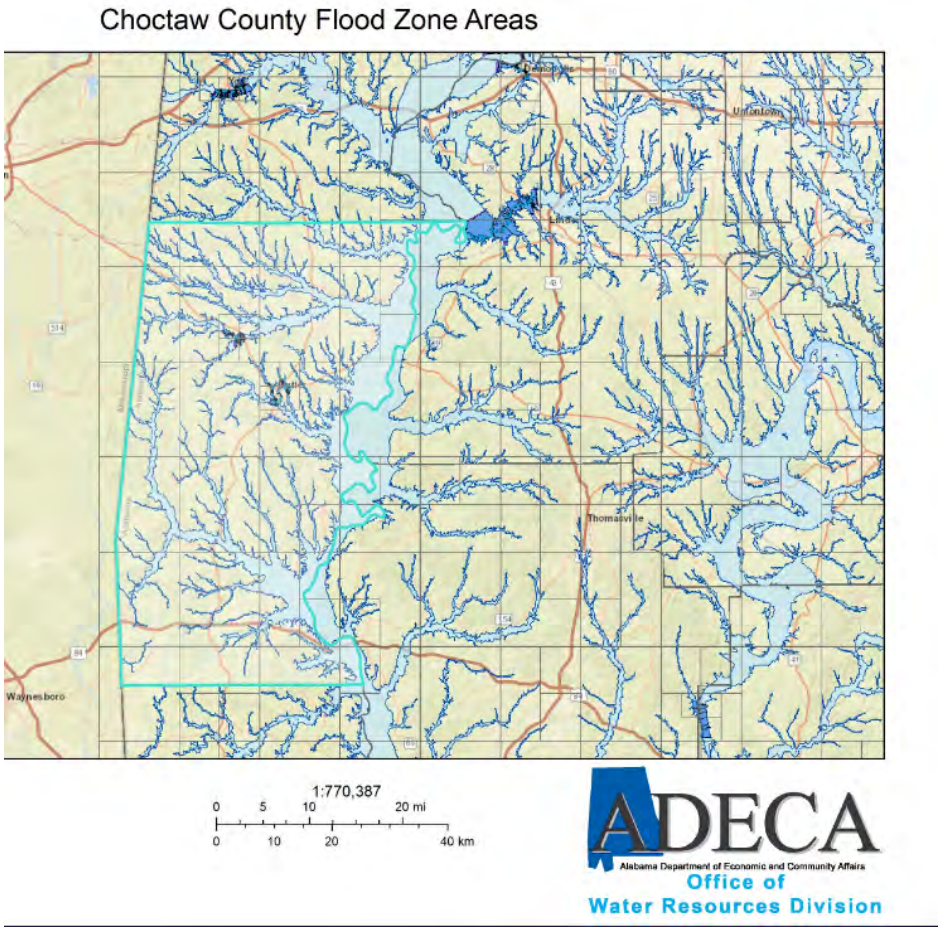
Community Impact - Flooding caused by rainfall occurs to some extent almost every year in almost every part of Choctaw County. Flooding occurs most frequently between November and April, with a peak from February through April. Alabama received more annual rainfall than any other state, creating a high potential for riverine and flash flooding in Choctaw 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 arc 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 Choctaw County or in any of the municipal jurisdictions.

Location and Extent - Most flooding occurs within the Tombigbee River floodplain, which runs along the eastern boundary of the County. Flooding for each jurisdiction varies (see maps below). There is no depth of flooding data available for Choctaw County and for any of the jurisdictions.

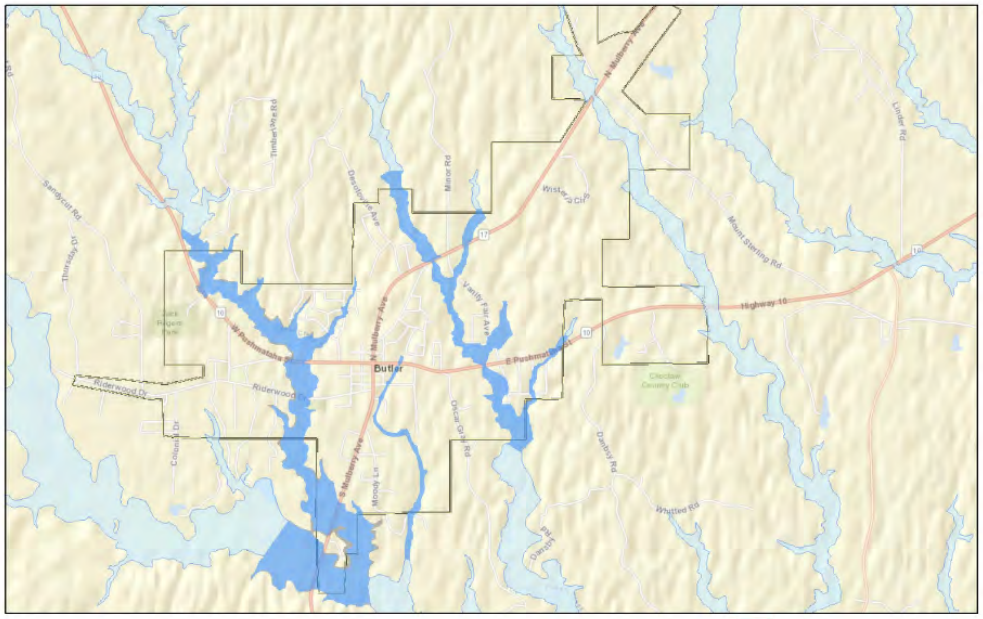
Choctaw County has experienced some flood damages, however due to the rural nature of County, flooding is not a major problem. Most flooding is of flash type, along streams and tributaries. Flooding and heavy rain both have also been known to cause major road damage. Floodwaters that cover the surface of the road often result in the base of the road washing away and surface asphalt cracking or failing. Failure of the roads can lead to utility damages. As shown by the flood on August 30, 1996, Choctaw County is susceptible to major damage from flooding. On March 3, 2001 a flood of similar nature caused an equal amount of damage but covered a larger area. Floods are capable of undermining buildings and bridges, eroding shorelines and riverbanks, tearing out trees, washing out access routes, and causing loss of life and injuries. Floods occur in all 50 states and FEMA estimates that 9 million households and $390 billion in property are at risk from flooding.

The location of flood-prone areas are located within the 100-year floodplain as determined by the FEMA flood maps. Map 6 is a map of the most recent 100-year floodplain data including maps of each specific jurisdiction. There are no NFIP structures located within the unincorporated areas of Choctaw County and the municipalities as well.



Map 6. Choctaw County Special Flood Hazard Area (100-year floodplain)

Map 6 a . Town of Butler Flood Areas



N

1:48,149

0 0.4 0.8 1.6 mi

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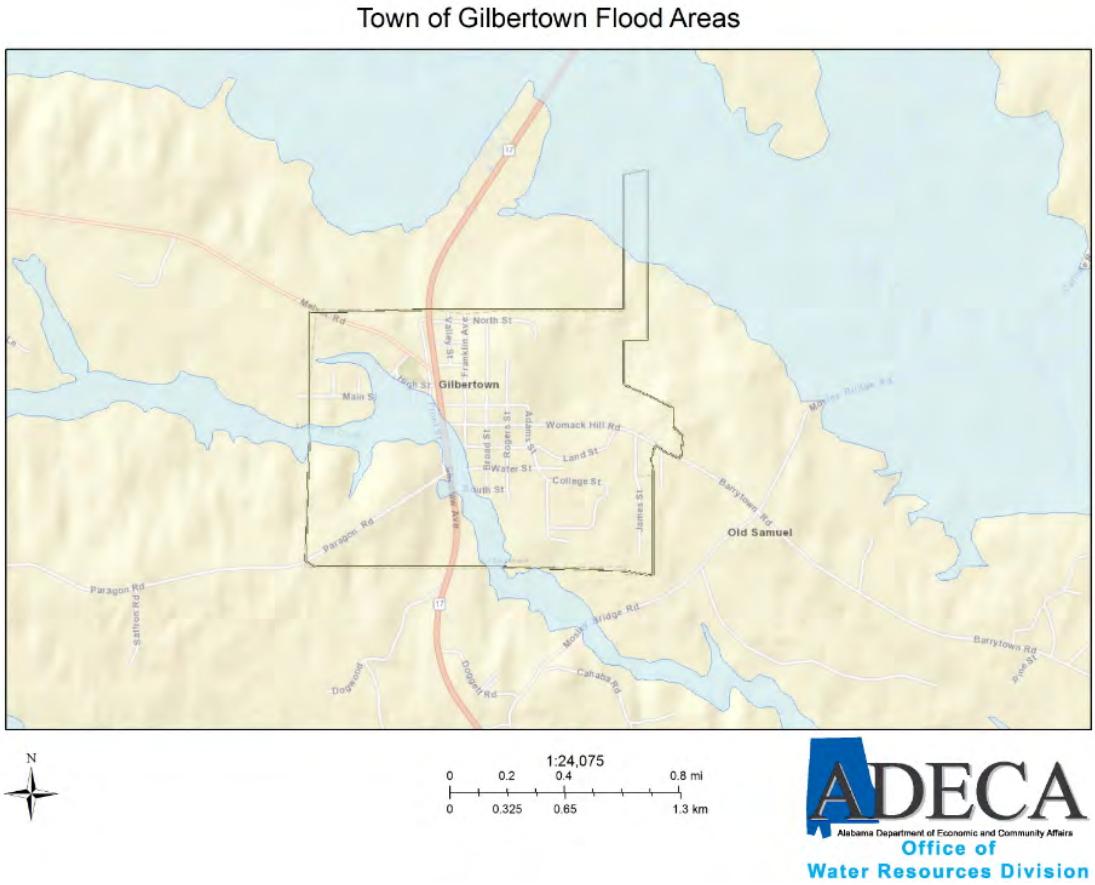
ADECA

Alabama Department of Economic and Community Affairs

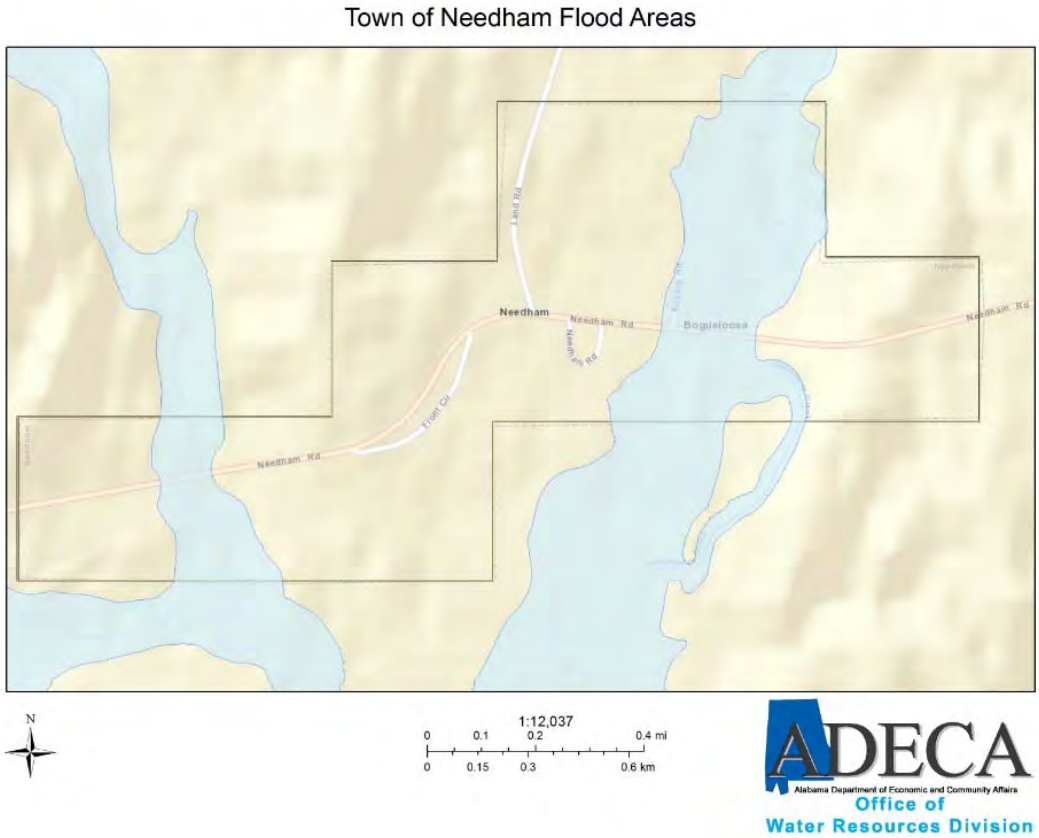
Office of

Water Resources Division

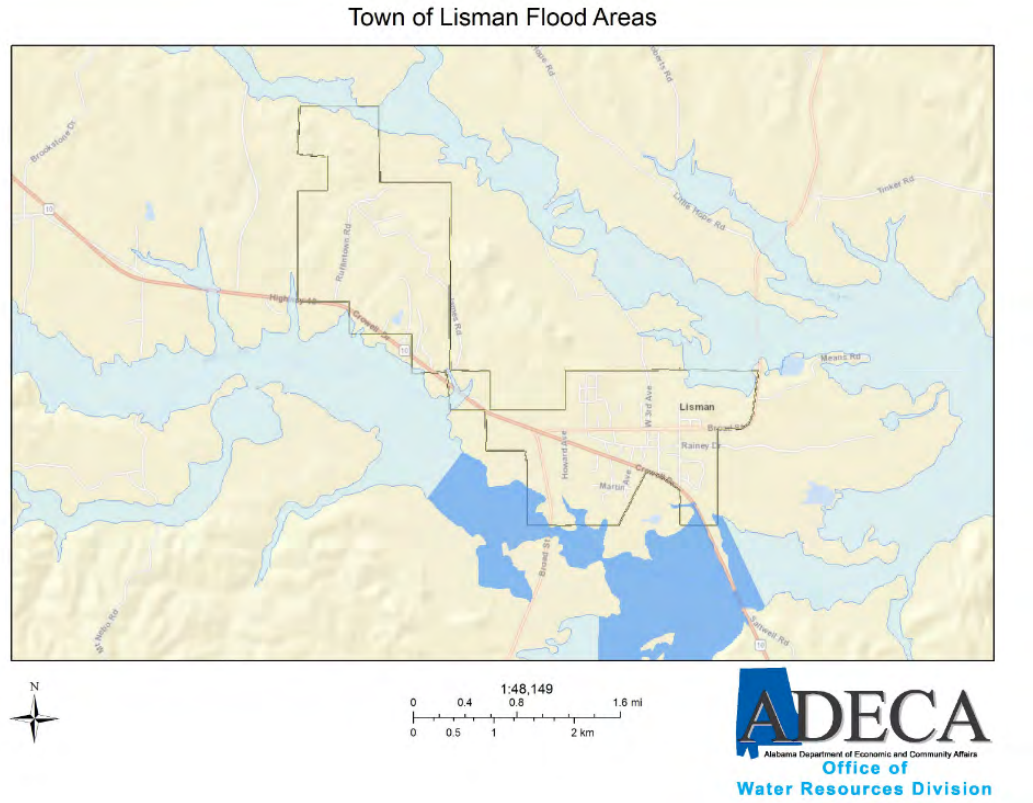
Map 6 b Town of Gilbertown Flood Aras



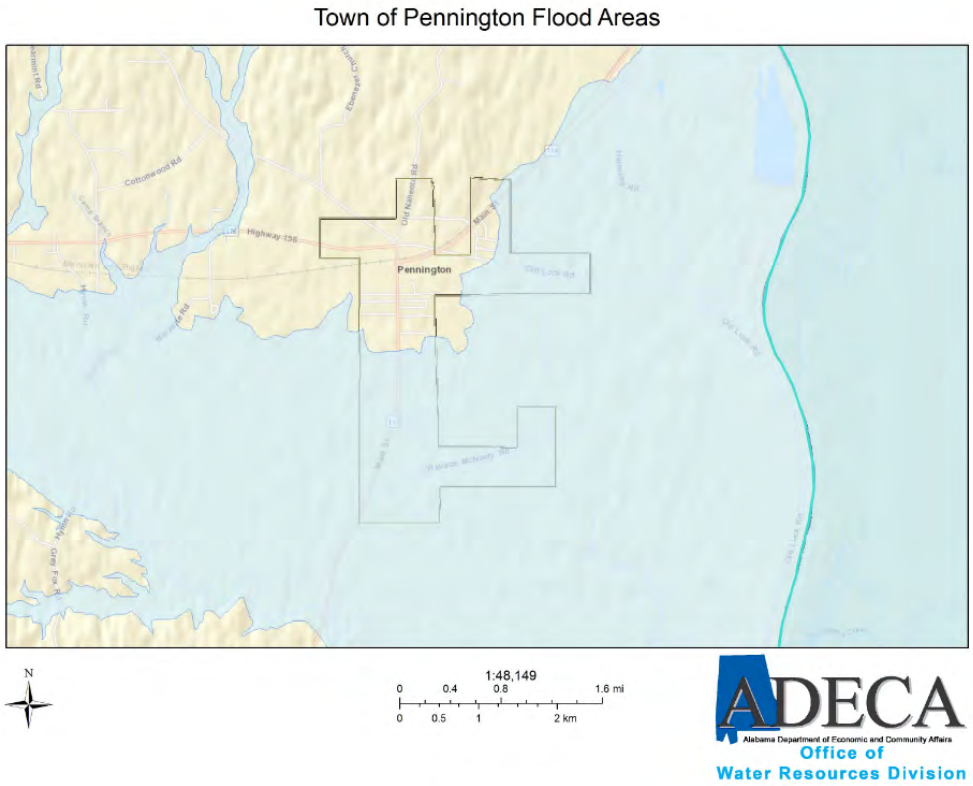
Map 6 c Town of Needham Flood Areas



Map 6 d Town of Lisman Flood Areas

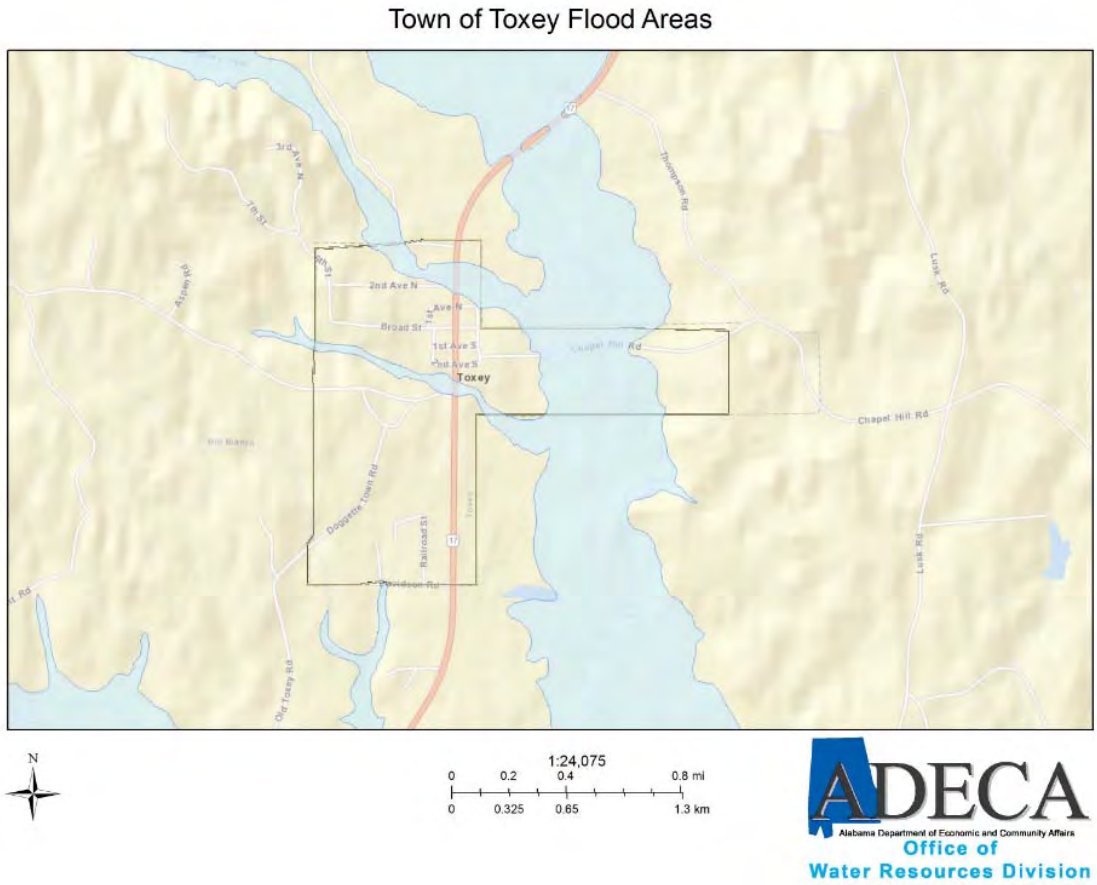


Map 6 e Town of Pennington Flood Areas



Map 6 f Town of Silas Flood Areas

Map 6 g Town of Toxey Flood Areas



The City of Butler is located in Choctaw County, Alabama with in the Lower Tombigbee River Basin (USGS Hydrologic Unit Code 03160201). The study area includes flood-prone areas of Brock Creek and tributary, Pickett Creek and tributaries, and Wahalak Creek and tributary within and adjacent to the City of Butler. Wahalak Creek originates in the central portion of Choctaw County, approximately 5 miles southwest of Butler. This stream has a drainage area of about 24 square miles and is located at the downstream end of the study area. Wahalak Creek flows southeast to join the Tombigbee River. Brock Creek, with a drainage area of 10.4 square miles, flows south and meets Wahalak Creek south of Butler. Pickett Creek, with a drainage area of 4.2 square miles, flows south into Wahalak Creek south of Butler. A total of 13.2 stream miles was studied for the City of Butler FIS. The Town of Lisman is in northwestern Choctaw County in southwestern Alabama. Lisman is served by State Highway 10 and a railroad.

At the time of the original study for Bogue Chitto, the potential for flood damage was minor due to sparse development in the floodplain. There is the potential for flood damage in areas along portions of Brock Creek, Pickett Creek, Pickett Creek Tributary No. 3, Wahalak Creek, and Wahalak Creek Tributary No. 1 in the vicinity of the City of Butler.

Probability of Future Occurrences - Choctaw County experienced 28 flood events over a 16 year period. This results in a probability of a flooding event once every 1-2 years. Based on the flood events since 1996 contained in the Storm Events Database, Choctaw County and the incorporated areas may expect about 0.6 flash or riverine floods per year. Average annual damages are estimated at $4,300. Although we can extract data and probability of occurrence from historical information, they do not necessarily predict future occurrences.

f. 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 listing of storms with hail, thunderstorm wind, and lighting. Since 1950 there have been numerous reports of these types of storms. Table 7, Table 8 and Table 9 include summaries of these events in Choctaw County.

Since 1968, there have been over 62 hail events resulting in over $1.32 million damage to crops and property.

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	PrD	CrD
CHOCTAW CO.	CHOCTAW CO.	AL	04/12/1965	04:00	CST	Hail	1.00 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	03/30/1973	10:00	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/15/1985	13:43	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/15/1985	17:35	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/09/1987	17:00	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/18/1988	20:00	CST	Hail	1.00 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/23/1988	12:10	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/25/1988	04:00	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/24/1988	12:45	CST	Hail	1.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/24/1988	15:30	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/24/1988	16:00	CST	Hail	1.00 in.	0.00K	0.00K
CHOCTAW	CHOCTAW	AL	04/04/1989	13:35	CST	Hail	0.75	0.00K	0.00K

CO.	CO.						in.		
CHOCTAW CO.	CHOCTAW CO.	AL	04/04/1989	14:30	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/04/1989	15:00	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	03/28/1991	16:40	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/05/1991	12:00	CST	Hail	0.75 in.	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/11/1993	16:49	CST	Hail	0.75 in.	0.00K	0.00K
Butler	CHOCTAW CO.	AL	04/11/1995	15:00	CST	Hail	1.75 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	03/30/1996	02:45	CST	Hail	0.75 in.	0.00K	0.00K
ARARAT	CHOCTAW CO.	AL	01/08/1997	06:50	CST	Hail	0.50 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/22/1997	15:40	CST	Hail	1.75 in.	0.75K	0.00K
BARRYTOWN	CHOCTAW CO.	AL	04/22/1997	16:00	CST	Hail	1.00 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/22/1997	16:19	CST	Hail	0.75 in.	0.00K	0.00K
ROCK SPGS	CHOCTAW CO.	AL	05/03/1997	04:05	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/28/1997	01:20	CST	Hail	0.75 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	11/01/1997	14:10	CST	Hail	1.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	11/01/1997	14:15	CST	Hail	1.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/06/1998	18:20	CST	Hail	0.75 in.	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	05/03/1998	13:30	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/03/1998	13:35	CST	Hail	1.00 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/03/1998	13:55	CST	Hail	0.75 in.	0.00K	0.00K
ARARAT	CHOCTAW	AL	04/24/1999	16:25	CST	Hail	0.75	0.00K	0.00K

	CO.						in.		
RIDERWOOD	CHOCTAW CO.	AL	05/04/1999	11:20	CST	Hail	1.00 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/06/1999	04:50	CST	Hail	0.88 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	05/28/1999	17:21	CST	Hail	1.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/02/1999	18:35	CST	Hail	0.88 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/02/1999	18:44	CST	Hail	1.75 in.	2.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/02/1999	19:25	CST	Hail	0.75 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	08/25/1999	17:20	CST	Hail	0.75 in.	0.00K	0.00K
NAHEOLA	CHOCTAW CO.	AL	01/09/2000	21:25	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/18/2000	16:35	CST	Hail	1.00 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/02/2000	15:15	CST	Hail	0.75 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	03/12/2001	09:20	CST	Hail	0.88 in.	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	01/24/2002	17:27	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	08/02/2002	14:30	CST	Hail	0.88 in.	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/14/2003	17:30	CST	Hail	0.75 in.	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	04/25/2003	15:55	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/25/2003	16:00	CST	Hail	1.00 in.	0.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	05/02/2003	19:00	CST	Hail	0.75 in.	0.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/03/2003	06:45	CST	Hail	1.75 in.	0.00K	0.00K
PUSHMATAHA	CHOCTAW CO.	AL	05/07/2003	15:25	CST	Hail	0.88 in.	0.00K	0.00K
PENNINGTON	CHOCTAW	AL	10/19/2004	16:35	CST	Hail	0.75	0.00K	0.00K

	CO.						in.		
GILBERTOWN	CHOCTAW CO.	AL	03/26/2005	17:25	CST	Hail	1.75 in.	3.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/31/2005	03:10	CST	Hail	1.75 in.	3.00K	0.00K
YANTLEY	CHOCTAW CO.	AL	05/20/2005	18:45	CST	Hail	0.75 in.	0.00K	0.00K
MELVIN	CHOCTAW CO.	AL	12/24/2005	14:00	CST	Hail	1.00 in.	0.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	12/24/2005	14:35	CST	Hail	1.00 in.	0.00K	0.00K
MELVIN	CHOCTAW CO.	AL	02/03/2006	18:45	CST	Hail	0.75 in.	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	03/20/2006	17:00	CST	Hail	0.75 in.	0.00K	0.00K
CROMWELL	CHOCTAW CO.	AL	05/10/2006	15:00	CST	Hail	1.75 in.	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	02/18/2009	17:23	CST-6	Hail	1.00 in.	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	02/18/2009	17:33	CST-6	Hail	1.00 in.	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	08/05/2010	16:13	CST-6	Hail	1.25 in.	0.00K	0.00K
CHAPEL HILL	CHOCTAW CO.	AL	04/15/2011	15:38	CST-6	Hail	2.75 in.	300.00K	0.00K
NAHEOLA	CHOCTAW CO.	AL	04/15/2011	15:55	CST-6	Hail	2.75 in.	1.000M	0.00K
Totals:								1.	

Table 7. Hail storms in Choctaw County, Alabama (source: NCDC Database)

Location	County/Zone	St.	Date	Time	T.Z.	Type	PrD	CrD
CHOCTAW CO.	CHOCTAW CO.	AL	07/22/1960	15:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	12/14/1967	19:35	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/17/1969	13:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	03/06/1973	23:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/18/1976	09:45	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/25/1982	20:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	10/21/1984	04:15	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/04/1986	17:20	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/18/1986	16:20	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	06/07/1988	15:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	06/14/1989	14:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	11/08/1989	19:50	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/10/1990	01:36	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/12/1990	17:15	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	12/18/1990	13:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/14/1991	22:10	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	05/15/1991	12:50	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	07/22/1991	12:00	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW	AL	10/22/1991	16:45	CST	Thunderstorm	0.00K	0.00K

	CO.					Wind		
CHOCTAW CO.	CHOCTAW CO.	AL	03/18/1992	16:45	PST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	08/27/1992	05:30	PST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	08/27/1992	07:50	PST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	11/22/1992	04:00	PST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/21/1993	11:50	CST	Thunderstorm Wind	0.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	03/07/1995	14:00	CST	Thunderstorm Wind	25.00K	0.00K
Butler	CHOCTAW CO.	AL	04/11/1995	06:55	CST	Thunderstorm Wind	0.50K	0.00K
Yantley	CHOCTAW CO.	AL	04/20/1995	23:00	CST	Thunderstorm Wind	2.00K	0.00K
Gilbertown	CHOCTAW CO.	AL	04/20/1995	23:30	CST	Thunderstorm Wind	1.00K	0.00K
Gilbertown	CHOCTAW CO.	AL	07/08/1995	14:16	CST	Thunderstorm Wind	1.00K	0.00K
Hodgewood	CHOCTAW CO.	AL	07/12/1995	18:15	CST	Thunderstorm Wind	1.00K	0.00K
Butler	CHOCTAW CO.	AL	12/18/1995	16:00	CST	Thunderstorm Wind	2.00K	0.00K
SILAS	CHOCTAW CO.	AL	03/06/1996	19:40	CST	Thunderstorm Wind	5.00K	0.00K
WOMACK HILL	CHOCTAW CO.	AL	06/07/1996	17:30	CST	Thunderstorm Wind	1.50K	0.00K
BUTLER	CHOCTAW CO.	AL	07/13/1996	15:10	CST	Thunderstorm Wind	2.00K	0.00K
PLEASANT HILL	CHOCTAW CO.	AL	09/09/1996	18:05	CST	Thunderstorm Wind	1.00K	0.00K
YANTLEY	CHOCTAW CO.	AL	09/16/1996	15:25	CST	Thunderstorm Wind	1.00K	0.00K
PARAGON	CHOCTAW CO.	AL	10/26/1996	05:20	CST	Thunderstorm Wind	2.00K	0.00K
HALSELL	CHOCTAW CO.	AL	11/30/1996	22:20	CST	Thunderstorm Wind	1.50K	0.00K
BOLINGER	CHOCTAW	AL	01/15/1997	19:00	CST	Thunderstorm	1.50K	0.00K

	CO.					Wind		
BOLINGER	CHOCTAW CO.	AL	01/24/1997	06:00	CST	Thunderstorm Wind	1.50K	0.00K
WOMACK HILL	CHOCTAW CO.	AL	02/21/1997	07:45	CST	Thunderstorm Wind	2.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	05/28/1997	00:40	CST	Thunderstorm Wind	2.00K	0.00K
ARARAT	CHOCTAW CO.	AL	10/25/1997	15:15	CST	Thunderstorm Wind	2.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	01/07/1998	07:15	CST	Thunderstorm Wind	3.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	02/26/1998	17:10	CST	Thunderstorm Wind	3.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/05/1998	14:10	CST	Thunderstorm Wind	15.00K	0.00K
COUNTYWIDE	CHOCTAW CO.	AL	06/05/1998	22:15	CST	Thunderstorm Wind	300.00K	0.00K
BUTLER	CHOCTAW CO.	AL	07/20/1998	16:30	CST	Thunderstorm Wind	3.00K	0.00K
MELVIN	CHOCTAW CO.	AL	02/27/1999	19:20	CST	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	04/15/1999	00:00	CST	Thunderstorm Wind	25.00K	0.00K
BOLINGER	CHOCTAW CO.	AL	05/28/1999	17:23	CST	Thunderstorm Wind	10.00K	0.00K
LAVACA	CHOCTAW CO.	AL	07/07/1999	18:36	CST	Thunderstorm Wind	4.00K	0.00K
BUTLER	CHOCTAW CO.	AL	01/09/2000	21:20	CST	Thunderstorm Wind	5.00K	0.00K
SILAS	CHOCTAW CO.	AL	01/09/2000	22:55	CST	Thunderstorm Wind	4.00K	0.00K
PUSHMATAHA	CHOCTAW CO.	AL	03/10/2000	20:55	CST	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/27/2000	21:00	CST	Thunderstorm Wind	5.00K	0.00K
ROCK SPGS	CHOCTAW CO.	AL	06/17/2000	12:35	CST	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	07/16/2000	14:00	CST	Thunderstorm Wind	7.00K	0.00K
GILBERTOWN	CHOCTAW	AL	07/20/2000	14:00	CST	Thunderstorm	10.00K	0.00K

	CO.					Wind		
BUTLER	CHOCTAW CO.	AL	07/20/2000	15:25	CST	Thunderstorm Wind	10.00K	0.00K
TOXEY	CHOCTAW CO.	AL	08/27/2000	16:00	CST	Thunderstorm Wind	3.00K	0.00K
BUTLER	CHOCTAW CO.	AL	12/16/2000	14:55	CST	Thunderstorm Wind	5.00K	0.00K
HALSELL	CHOCTAW CO.	AL	02/16/2001	15:25	CST	Thunderstorm Wind	3.00K	0.00K
TOXEY	CHOCTAW CO.	AL	03/02/2001	15:15	CST	Thunderstorm Wind	3.00K	0.00K
TOXEY	CHOCTAW CO.	AL	03/12/2001	10:45	CST	Thunderstorm Wind	15.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	03/12/2001	11:00	CST	Thunderstorm Wind	15.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	06/14/2001	12:55	CST	Thunderstorm Wind	15.00K	0.00K
TOXEY	CHOCTAW CO.	AL	06/14/2001	13:30	CST	Thunderstorm Wind	10.00K	0.00K
BUTLER	CHOCTAW CO.	AL	07/05/2001	17:30	CST	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	08/17/2001	19:00	CST	Thunderstorm Wind	25.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	08/20/2001	17:00	CST	Thunderstorm Wind	5.00K	0.00K
CYRIL	CHOCTAW CO.	AL	10/13/2001	15:05	CST	Thunderstorm Wind	15.00K	0.00K
MELVIN	CHOCTAW CO.	AL	01/19/2002	11:20	CST	Thunderstorm Wind	50.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	01/24/2002	17:40	CST	Thunderstorm Wind	15.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	04/29/2002	14:55	CST	Thunderstorm Wind	10.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	07/07/2002	20:00	CST	Thunderstorm Wind	10.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	07/19/2002	14:10	CST	Thunderstorm Wind	15.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	11/10/2002	16:15	CST	Thunderstorm Wind	5.00K	0.00K
WIMBERLY	CHOCTAW	AL	11/15/2002	17:00	CST	Thunderstorm	5.00K	0.00K

	CO.					Wind		
NEEDHAM	CHOCTAW CO.	AL	02/15/2003	19:40	CST	Thunderstorm Wind	8.00K	0.00K
HODGEWOOD	CHOCTAW CO.	AL	04/06/2003	22:08	CST	Thunderstorm Wind	5.00K	0.00K
ARARAT	CHOCTAW CO.	AL	04/25/2003	16:15	CST	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/02/2003	14:05	CST	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	06/15/2003	18:35	CST	Thunderstorm Wind	5.00K	0.00K
TOXEY	CHOCTAW CO.	AL	07/11/2003	14:45	CST	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	07/17/2003	17:55	CST	Thunderstorm Wind	5.00K	0.00K
LISMAN	CHOCTAW CO.	AL	08/04/2003	12:45	CST	Thunderstorm Wind	5.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	11/18/2003	11:45	CST	Thunderstorm Wind	8.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	07/16/2004	13:00	CST	Thunderstorm Wind	8.00K	0.00K
BUTLER	CHOCTAW CO.	AL	08/20/2004	15:15	CST	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	03/26/2005	17:30	CST	Thunderstorm Wind	10.00K	0.00K
BUTLER	CHOCTAW CO.	AL	03/26/2005	17:45	CST	Thunderstorm Wind	10.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	04/30/2005	03:35	CST	Thunderstorm Wind	10.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	04/30/2005	03:50	CST	Thunderstorm Wind	10.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	04/30/2005	04:15	CST	Thunderstorm Wind	15.00K	0.00K
LISMAN	CHOCTAW CO.	AL	07/12/2005	19:45	CST	Thunderstorm Wind	12.00K	0.00K
BUTLER	CHOCTAW CO.	AL	08/09/2006	12:45	CST	Thunderstorm Wind	10.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	08/21/2006	18:10	CST	Thunderstorm Wind	10.00K	0.00K
NEEDHAM	CHOCTAW	AL	11/15/2006	05:05	CST-	Thunderstorm	10.00K	0.00K

	CO.				6	Wind		
ARARAT	CHOCTAW CO.	AL	04/11/2007	14:12	CST-6	Thunderstorm Wind	8.00K	0.00K
ARARAT	CHOCTAW CO.	AL	07/07/2007	11:50	CST-6	Thunderstorm Wind	12.00K	0.00K
HINTON	CHOCTAW CO.	AL	07/10/2007	16:00	CST-6	Thunderstorm Wind	15.00K	0.00K
EDNA	CHOCTAW CO.	AL	07/10/2007	16:35	CST-6	Thunderstorm Wind	10.00K	0.00K
HALSELL	CHOCTAW CO.	AL	08/10/2007	16:20	CST-6	Thunderstorm Wind	8.00K	0.00K
ISNEY	CHOCTAW CO.	AL	08/23/2007	17:55	CST-6	Thunderstorm Wind	15.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	08/24/2007	15:35	CST-6	Thunderstorm Wind	10.00K	0.00K
SILAS	CHOCTAW CO.	AL	01/31/2008	17:10	CST-6	Thunderstorm Wind	12.00K	0.00K
SERVICE	CHOCTAW CO.	AL	01/31/2008	17:35	CST-6	Thunderstorm Wind	10.00K	0.00K
CHAPEL HILL	CHOCTAW CO.	AL	04/11/2008	13:15	CST-6	Thunderstorm Wind	10.00K	0.00K
BLADON SPGS	CHOCTAW CO.	AL	04/11/2008	16:30	CST-6	Thunderstorm Wind	10.00K	0.00K
AQUILLA	CHOCTAW CO.	AL	05/15/2008	10:30	CST-6	Thunderstorm Wind	8.00K	0.00K
TOXEY	CHOCTAW CO.	AL	06/20/2008	16:55	CST-6	Thunderstorm Wind	10.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	01/06/2009	15:58	CST-6	Thunderstorm Wind	15.00K	0.00K
BUTLER	CHOCTAW CO.	AL	05/03/2009	11:43	CST-6	Thunderstorm Wind	20.00K	0.00K
BARRYTOWN	CHOCTAW CO.	AL	10/09/2009	16:00	CST-6	Thunderstorm Wind	0.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	08/05/2010	16:13	CST-6	Thunderstorm Wind	0.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	03/09/2011	04:55	CST-6	Thunderstorm Wind	2.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/04/2011	18:12	CST-6	Thunderstorm Wind	0.00K	0.00K
NEEDHAM	CHOCTAW	AL	04/04/2011	18:35	CST-	Thunderstorm	0.00K	0.00K

	CO.				6	Wind		
BUTLER	CHOCTAW CO.	AL	07/03/2011	17:06	CST-6	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	01/26/2012	09:43	CST-6	Thunderstorm Wind	10.00K	0.00K
TOXEY	CHOCTAW CO.	AL	01/26/2012	09:52	CST-6	Thunderstorm Wind	2.00K	0.00K
SILAS	CHOCTAW CO.	AL	12/20/2012	08:30	CST-6	Thunderstorm Wind	3.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	04/11/2013	14:03	CST-6	Thunderstorm Wind	0.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	04/28/2014	21:50	CST-6	Thunderstorm Wind	1.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	04/28/2014	21:51	CST-6	Thunderstorm Wind	1.00K	0.00K
SILAS	CHOCTAW CO.	AL	04/28/2014	22:09	CST-6	Thunderstorm Wind	3.00K	0.00K
BOLINGER	CHOCTAW CO.	AL	04/28/2014	22:09	CST-6	Thunderstorm Wind	3.00K	0.00K
PUSHMATAHA	CHOCTAW CO.	AL	12/23/2014	16:31	CST-6	Thunderstorm Wind	10.00K	0.00K
LAND	CHOCTAW CO.	AL	12/23/2014	16:36	CST-6	Thunderstorm Wind	3.00K	0.00K
MT STERLING	CHOCTAW CO.	AL	12/23/2014	16:41	CST-6	Thunderstorm Wind	3.00K	0.00K
BUTLER	CHOCTAW CO.	AL	10/31/2015	17:08	CST-6	Thunderstorm Wind	3.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	02/15/2016	15:23	CST-6	Thunderstorm Wind	5.00K	0.00K
ISNEY	CHOCTAW CO.	AL	02/15/2016	15:23	CST-6	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	02/15/2016	15:30	CST-6	Thunderstorm Wind	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	02/15/2016	15:33	CST-6	Thunderstorm Wind	5.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	02/15/2016	15:41	CST-6	Thunderstorm Wind	5.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	03/31/2016	17:15	CST-6	Thunderstorm Wind	2.00K	0.00K
BUTLER	CHOCTAW	AL	06/17/2016	16:02	CST-	Thunderstorm	4.00K	0.00K

	CO.				6	Wind		
BLADON SPGS	CHOCTAW CO.	AL	06/17/2016	16:15	CST-6	Thunderstorm Wind	4.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/17/2016	16:20	CST-6	Thunderstorm Wind	10.00K	0.00K
YANTLEY	CHOCTAW CO.	AL	04/03/2017	02:50	CST-6	Thunderstorm Wind	5.00K	0.00K
PENNINGTON	CHOCTAW CO.	AL	04/03/2017	03:25	CST-6	Thunderstorm Wind	5.00K	0.00K
Totals:							1.141M	0.00K

Table 8. High wind events from thunderstorms in Choctaw County, Alabama (source: NCDC Database)

Since 2011, there have been 4 major events resulting in damage from lightning. These damages have resulted in over 1.03 million in damage to property. Table 9 lists the events as described in the NGDC database.

Location	County/Zone	St.	Date	Time	T.Z.	Type	PrD	CrD
BUTLER	CHOCTAW CO.	AL	04/03/2001	21:30	CST	Lightning	20.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/14/2001	13:15	CST	Lightning	5.00K	0.00K
BUTLER	CHOCTAW CO.	AL	06/24/2004	14:30	CST	Lightning	40.00K	0.00K
TOXEY	CHOCTAW CO.	AL	06/26/2007	18:30	CST-6	Lightning	60.00K	0.00K

Table 9. Lightning events in Choctaw County since 1994 (source: NCDC Database)

Community Impact - Since 1975 Choctaw County has experienced 168 severe thunderstorms. 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 Choctaw County is vulnerable to severe storms with strong winds, hail and/or lightning. All of the jurisdictions within Choctaw County including

unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey 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 1994 contained in the Storm Events Database, Choctaw County can expect approximately four instances of lightning-, straight-line wind- or hail-induced damage per year. Average annual damages from severe storm events are estimated at $108,000. Although we can extract data and probability of occurrence from historical information, the risk of a thunderstorm occurring and the location of damage appear to be a random event.

g. 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 tornados that have occurred in Choctaw County. The earliest damage-causing event on record occurred in 1956 and the most recent occurred in 2011. Tornado magnitudes are measured on the enhanced Fujita Scale. Figure 3 is a depiction of the original and enhanced Fujita scale.

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

Figure 3. Original and Enhance Fujita Scale for U.S. tornadoes. Source: FEMA

Table 10 includes a list of all the tornadoes greater than F0 that have occurred in Choctaw County since 1956. There are 14 events that have caused 15.4 million dollars of damage to property and/or crops.

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	PrD	CrD
CHOCTAW CO.	CHOCTAW CO.	AL	05/01/1953	20:00	CST	Tornado	F4	25.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	02/26/1958	20:00	CST	Tornado	F2	250.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	04/06/1964	06:00	CST	Tornado	F1	25.00K	0.00K
CHOCTAW CO.	CHOCTAW CO.	AL	11/17/1968	11:30	CST	Tornado	F2	25.00K	0.00K
NEEDHAM	CHOCTAW CO.	AL	04/03/2000	11:25	CST	Tornado	F1	50.00K	0.00K
BUTLER	CHOCTAW CO.	AL	11/24/2001	11:45	CST	Tornado	F0	15.00K	0.00K
GILBERTOWN	CHOCTAW CO.	AL	11/24/2001	12:35	CST	Tornado	F0	15.00K	0.00K
TOXEY	CHOCTAW CO.	AL	11/24/2001	13:00	CST	Tornado	F0	25.00K	0.00K
SILAS	CHOCTAW CO.	AL	11/24/2004	04:40	CST	Tornado	F0	5.00K	0.00K
MELVIN	CHOCTAW CO.	AL	04/15/2011	10:24	CST-6	Tornado	EF0	60.00K	0.00K
EVANSBORO	CHOCTAW CO.	AL	04/15/2011	10:26	CST-6	Tornado	EF0	40.00K	0.00K
BUTLER	CHOCTAW CO.	AL	04/15/2011	10:48	CST-6	Tornado	EF1	40.00K	0.00K
HINTON	CHOCTAW CO.	AL	04/15/2011	15:15	CST-6	Tornado	EF1	150.00K	0.00K
LAND	CHOCTAW CO.	AL	04/15/2011	17:12	CST-6	Tornado	EF2	5.300M	0.00K
CYRIL	CHOCTAW CO.	AL	04/27/2011	18:10	CST-6	Tornado	EF3	8.600M	0.00K
ISNEY	CHOCTAW CO.	AL	01/26/2012	09:35	CST-6	Tornado	EF0	7.00K	0.00K
TOXEY	CHOCTAW CO.	AL	08/30/2012	09:58	CST-6	Tornado	EF0	5.00K	0.00K
WEST BUTLER	CHOCTAW CO.	AL	12/25/2012	16:45	CST-6	Tornado	EF2	0.00K	0.00K
LOU	CHOCTAW CO.	AL	01/21/2017	05:14	CST-6	Tornado	EF2	750.00K	0.00K
BARRYTOWN	CHOCTAW CO.	AL	11/01/2018	06:08	CST-6	Tornado	EF0	0.00K	0.00K

Table 10. Tornadoes in Choctaw County, Alabama. (source: NCDC Database)

According to the database, a total of 16 tornado events have caused 0 deaths, 42 injuries and approximately $5.27 million in property damage in the county since 1956. The worst tornado to strike the county was an F3 in April 1978 that caused 30 injuries and $2.5 million in damages. It cut a path of destruction 220 yards wide and 11 miles long, beginning at LAT/LON 31°32'N/87°27'W and ending at 31°35'N/87°17'W. Figure 3 depicts Choctaw County historical tornado tracks to 2003.

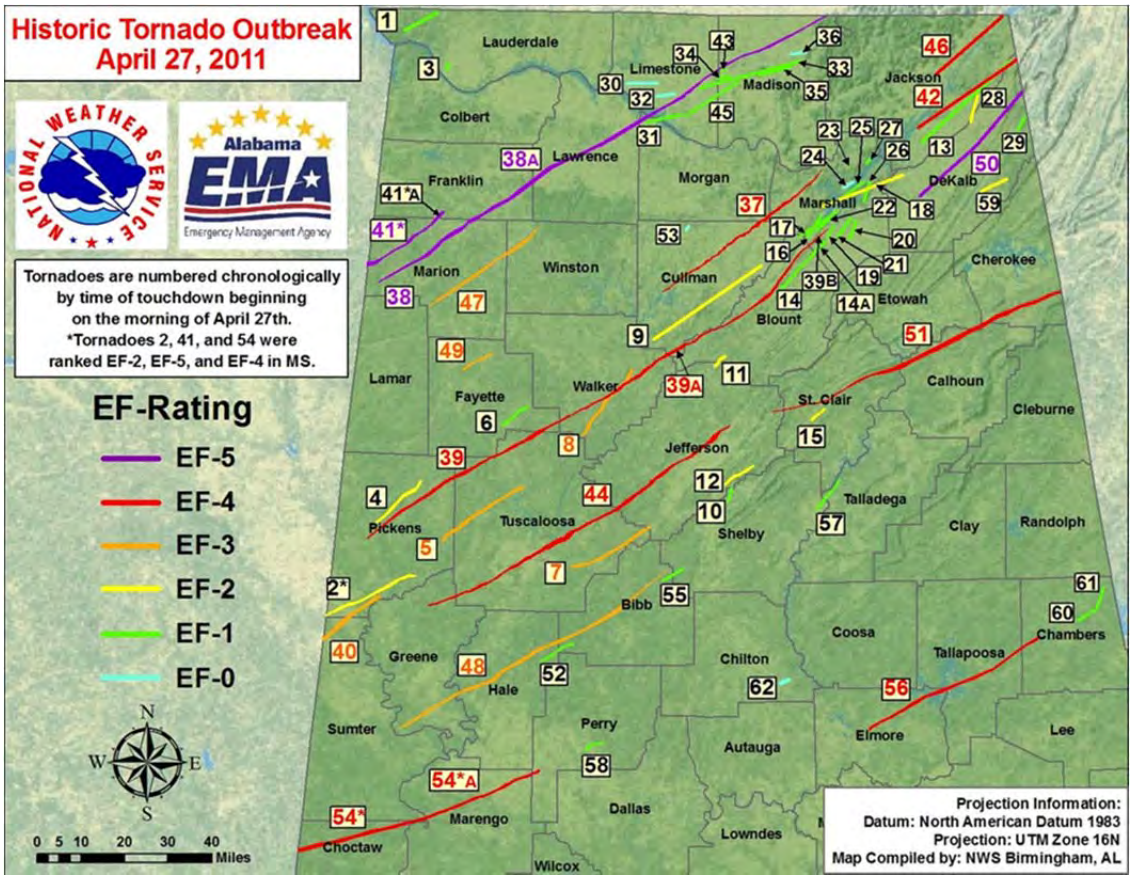


Figure 4. Historical Tornado Tracks in Choctaw County

On April 27, 2011, a F3 tornado entered the county from Mississippi. This tornado caused roof and shingle damage to 3 residences. One home had complete failure of roof and walls of garage. The path was 400 yards wide with numerous softwood and hardwood trees snapped or uprooted.

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 Choctaw County since 1950 have originate in the west and moved toward the east. The entire county is equally susceptible to damage from tornadoes. All of the jurisdictions within Choctaw County including unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey 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 per year. 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 6 shows the number of tornadoes that have occurred per one thousand square miles. Choctaw County falls within the one to five tornadoes per one thousand square miles range.

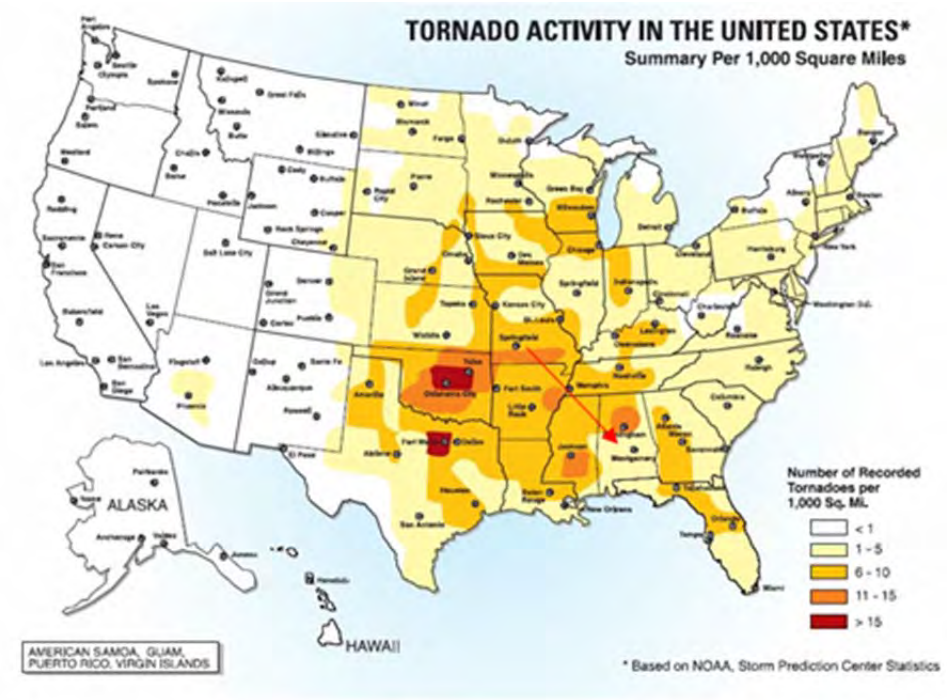


Figure 5. Tornadoes per 1,000 square miles. Source: http://www.fema.gov/pdf/library/2ismsec1.pdf

The United States Wind Zone map (Figure 7) shows how intense and frequent strong winds occur across the United States. Choctaw County is located 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.

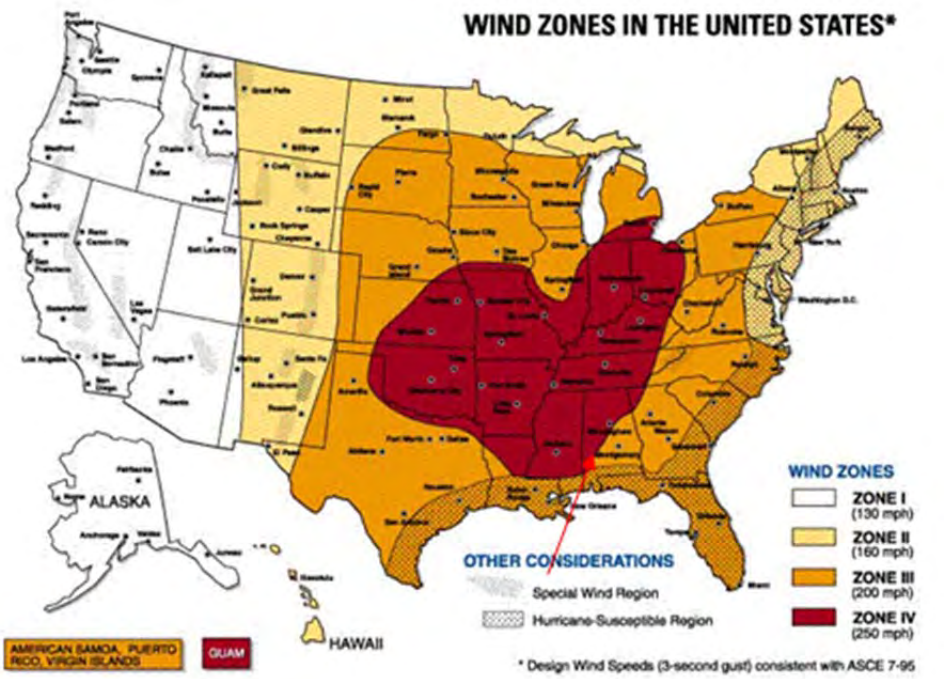


Figure 6. Wind Zones in the United States – Note Choctaw County is in Zone III.
Source: Federal Emergency Management Agency:
http://www.fema.gov/graphics/fima/tsfsm01.gif

h. 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 Choctaw 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 Choctaw County are human caused (only a very small percent 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 – According the NCDC database, there has only been one significant fire in Choctaw County. This fire was located in the Franklin community and took place on 8/27/2000. Historical fire data was obtained from the Alabama Forestry Commission for the past 365 days. There have been extreme fires in several locations throughout Choctaw County, but overall the majority of the county's area has been low to medium fire occurrence.

Fire #	County	Acres	Reported On
20191010-8	Choctaw	1.00	10/10/2019 1:38:50 PM
20191010-7	Choctaw	0.50	10/10/2019 1:26:01 PM
20191001-37	Choctaw	12.00	10/1/2019 4:59:09 PM
20190928-13	Choctaw	8.00	9/28/2019 6:30:14 PM
20190928-5	Choctaw	2.00	9/28/2019 12:34:29 PM
20190925-9	Choctaw	1.00	9/25/2019 1:53:26 PM
20190925-3	Choctaw	0.10	9/25/2019 10:50:42 AM
20190921-27	Choctaw	1.00	9/21/2019 6:55:54 PM
20190921-6	Choctaw	1.50	9/21/2019 12:58:39 PM
20190920-28	Choctaw	120.00	9/20/2019 5:26:41 PM
20190914-13	Choctaw	100.00	9/14/2019 5:07:51 PM
20190816-13	Choctaw	5.00	8/16/2019 8:47:26 PM
20190601-5	Choctaw	10.50	6/1/2019 2:47:34 PM
20190323-8	Choctaw	15.00	3/23/2019 1:39:20 PM
20190314-5	Choctaw	2.00	3/14/2019 1:25:49 PM

20190226-5	Choctaw	4.00	2/26/2019 10:36:59 PM
20180623-2	Choctaw	31.00	6/23/2018 7:27:17 PM
20180512-10	Choctaw	60.00	5/12/2018 10:28:36 PM
20180510-1	Choctaw	17.00	5/10/2018 6:58:18 AM
20180502-3	Choctaw	35.00	5/2/2018 4:25:13 PM
20180404-1	Choctaw	0.50	4/4/2018 4:05:54 PM
20180316-1	Choctaw	1.00	3/16/2018 12:57:04 AM
20180222-4	Choctaw	15.00	2/22/2018 12:48:57 PM
20180106-6	Choctaw	32.00	1/6/2018 2:01:00 PM
20171117-1	Choctaw	7.00	11/17/2017 12:14:14 PM
20171103-1	Choctaw	0.50	11/3/2017 3:02:50 PM
20171027-1	Choctaw	8.00	10/27/2017 1:56:38 PM
20171025-1	Choctaw	2.00	10/25/2017 2:17:56 PM
20171004-2	Choctaw	0.25	10/4/2017 1:10:54 PM
20171003-2	Choctaw	5.00	10/3/2017 1:17:33 PM
20170408-8	Choctaw	35.00	4/8/2017 5:09:35 PM
20170324-7	Choctaw	2.00	3/24/2017 10:12:57 AM
20170220-9	Choctaw	2.00	2/20/2017 12:50:18 PM
20170209-4	Choctaw	2.00	2/9/2017 6:25:14 PM
20170131-18	Choctaw	2.00	1/31/2017 1:55:17 PM
20170129-4	Choctaw	3.00	1/29/2017 1:05:19 PM
20170115-5	Choctaw	4.00	1/15/2017 1:26:31 PM
20161215-2	Choctaw	0.82	12/15/2016 4:07:39 PM
20161209-2	Choctaw	1.20	12/9/2016 11:57:36 AM
20161128-109	Choctaw	0.75	11/28/2016 6:52:50 PM
20161128-46	Choctaw	8.00	11/28/2016 1:51:51 PM
20161128-30	Choctaw	9.00	11/28/2016 12:38:20 PM
20161126-27	Choctaw	5.50	11/26/2016 9:02:31 PM
20161123-16	Choctaw	2.00	11/23/2016 12:17:04 PM
20161119-25	Choctaw	15.00	11/19/2016 2:40:38 PM
20161117-26	Choctaw	1.00	11/17/2016 3:10:00 PM
20161114-8	Choctaw	31.00	11/14/2016 9:50:52 AM
20161111-35	Choctaw	1.00	11/11/2016 6:17:39 PM
20161110-41	Choctaw	2.00	11/10/2016 3:49:23 PM
20161109-5	Choctaw	77.00	11/9/2016 9:16:12 AM
20161105-50	Choctaw	19.00	11/5/2016 8:32:20 PM

20161105-29	Choctaw	4.00	11/5/2016 2:29:14 PM
20161028-22	Choctaw	4.00	10/28/2016 3:46:17 PM
20161009-36	Choctaw	4.00	10/9/2016 1:57:25 PM
20161008-61	Choctaw	22.00	10/8/2016 11:31:59 PM
20161007-43	Choctaw	11.00	10/7/2016 2:49:33 PM
20161004-16	Choctaw	142.00	10/4/2016 1:45:23 PM
20161001-27	Choctaw	3.00	10/1/2016 7:45:34 PM
20160910-10	Choctaw	30.00	9/10/2016 1:55:39 PM
20160908-12	Choctaw	3.00	9/8/2016 3:52:24 PM
20160706-1	Choctaw	20.50	7/6/2016 12:42:06 PM
20160704-17	Choctaw	3.00	7/4/2016 3:39:02 PM
20160621-1	Choctaw	3.00	6/21/2016 4:26:10 PM
20160409-11	Choctaw	5.00	4/9/2016 3:23:31 PM
20160409-5	Choctaw	25.00	4/9/2016 2:02:16 PM
20160405-16	Choctaw	2.00	4/5/2016 10:21:58 PM
20160321-9	Choctaw	42.00	3/21/2016 3:33:38 PM
20160214-32	Choctaw	11.70	2/14/2016 5:01:20 PM
20160212-25	Choctaw	10.00	2/12/2016 10:13:40 PM
SWR-20151228-002	Choctaw	1.00	12/18/2015 1:28:00 PM
SWR-20151228-003	Choctaw	1.00	11/20/2015 2:15:00 PM
SWR-20151228-001	Choctaw	1.00	11/3/2015 11:30:00 AM
SWR-20151019-004	Choctaw	1.00	10/19/2015 12:46:00 PM
SWR-20150916-001	Choctaw	2.00	9/16/2015 12:32:00 PM
SWR-20150804-001	Choctaw	8.00	8/4/2015 12:48:00 PM
SWR-20150508-001	Choctaw	0.00	5/8/2015 1:55:00 PM
SWR-20150221-017	Choctaw	4.00	2/21/2015 2:03:00 PM
SWR-20150221-016	Choctaw	10.00	2/21/2015 1:37:00 PM
SWR-20150214-006	Choctaw	1.00	2/14/2015 1:14:00 PM
SWR-20150304-004	Choctaw	0.00	2/13/2015 2:20:00 PM
SWR-20150213-004	Choctaw	2.00	2/13/2015 1:46:00 PM
SWR-20150212-013	Choctaw	0.00	2/12/2015 7:04:00 PM
SWR-20150304-002	Choctaw	1.00	2/12/2015 6:00:00 PM
SWR-20150304-003	Choctaw	2.00	2/12/2015 3:00:00 PM
SWR-20150311-002	Choctaw	1.00	2/11/2015 3:15:00 PM
SWR-20150311-001	Choctaw	4.00	2/11/2015 2:15:00 PM
SWR-20150211-001	Choctaw	2.00	2/11/2015 12:30:00 AM

SWR-20150210-003	Choctaw	20.00	2/10/2015 12:46:00 PM
SWR-20150304-001	Choctaw	2.00	2/9/2015 2:50:00 PM
SWR-20150311-003	Choctaw	2.00	2/7/2015 2:30:00 PM
SWR-20150206-003	Choctaw	1.00	2/4/2015 4:04:00 PM
SWR-20150204-001	Choctaw	1.00	2/2/2015 3:30:00 PM
SWR-20150129-007	Choctaw	0.00	1/29/2015 4:39:00 PM
SWR-20150129-006	Choctaw	298.00	1/29/2015 2:35:00 PM
SWR-20150128-004	Choctaw	11.00	1/28/2015 2:39:00 PM
SWR-20150127-005	Choctaw	11.00	1/27/2015 2:31:00 PM
SWR-20150118-002	Choctaw	30.00	1/18/2015 2:46:00 PM
SWR-20150118-001	Choctaw	15.00	1/18/2015 12:49:00 PM
SWR-20150112-003	Choctaw	0.00	1/11/2015 1:15:00 PM
SWR-20150109-003	Choctaw	0.00	1/8/2015 4:10:00 PM
SWR-20150109-002	Choctaw	0.00	1/8/2015 2:30:00 PM
SWR-20150105-001	Choctaw	1.00	12/27/2014 12:20:00 PM
SWR-20150105-002	Choctaw	0.00	12/20/2014 2:05:00 PM
SWR-20141204-007	Choctaw	6.00	12/4/2014 8:49:00 PM
SWR-20141202-001	Choctaw	5.00	12/2/2014 1:58:00 PM
SWR-20141121-006	Choctaw	2.00	11/21/2014 8:55:00 PM
SWR-20141115-005	Choctaw	14.00	11/15/2014 3:11:00 PM
SWR-20141108-001	Choctaw	1.00	11/8/2014 1:01:00 PM
SWR-20141107-003	Choctaw	2.00	11/7/2014 1:40:00 PM
SWR-20141106-001	Choctaw	2.00	11/5/2014 4:50:00 PM
SWR-20141103-004	Choctaw	2.00	11/3/2014 2:15:00 PM
SWR-20141028-001	Choctaw	5.00	10/28/2014 6:56:00 PM
SWR-20141023-001	Choctaw	3.00	10/23/2014 8:11:00 AM
SWR-20141014-001	Choctaw	2.00	10/14/2014 4:40:00 PM
SWR-20140910-001	Choctaw	1.00	9/10/2014 1:07:00 PM
SWR-20140801-003	Choctaw	2.00	8/1/2014 10:09:00 PM
SWR-20140806-001	Choctaw	3.00	7/26/2014 1:55:00 PM
SWR-20140611-001	Choctaw	2.00	6/11/2014 5:56:00 PM
SWR-20140625-001	Choctaw	0.00	5/25/2014 2:15:00 PM
SWR-20140604-001	Choctaw	0.00	5/24/2014 1:58:00 PM
SWR-20140625-002	Choctaw	0.00	5/5/2014 1:20:00 PM
SWR-20140415-001	Choctaw	20.00	4/12/2014 1:45:00 PM
SWR-20140404-002	Choctaw	0.00	3/26/2014 2:10:00 PM

SWR-20140404-001	Choctaw	0.00	3/7/2014 1:30:00 PM
SWR-20140305-001	Choctaw	0.00	3/4/2014 1:05:00 PM
SWR-20140305-002	Choctaw	0.00	3/2/2014 2:00:00 PM
SWR-20140304-001	Choctaw	2.00	3/1/2014 1:30:00 PM
SWR-20140301-001	Choctaw	3.00	3/1/2014 4:19:00 AM
SWR-20140127-001	Choctaw	2.00	1/27/2014 2:42:00 PM
SWR-20140213-001	Choctaw	1.00	1/22/2014 2:25:00 PM
SWR-20131227-002	Choctaw	30.00	12/27/2013 2:21:00 PM
SWR-20131221-001	Choctaw	20.00	12/21/2013 11:20:00 AM
SWR-20131218-003	Choctaw	6.00	12/18/2013 11:53:00 AM
SWR-20131008-001	Choctaw	0.00	10/8/2013 2:12:00 PM
SWR-20130919-001	Choctaw	0.00	9/19/2013 7:45:00 AM
SWR-20130718-001	Choctaw	0.00	7/17/2013 11:54:00 PM
SWR-20130430-001	Choctaw	0.00	4/30/2013 12:38:00 PM
SWR-20130513-007	Choctaw	0.00	4/24/2013 3:10:00 PM
SWR-20130513-006	Choctaw	0.00	4/20/2013 3:00:00 PM
SWR-20130513-004	Choctaw	0.00	4/13/2013 1:35:00 PM
SWR-20130513-002	Choctaw	0.00	4/8/2013 2:15:00 PM
SWR-20130513-005	Choctaw	0.00	4/7/2013 5:52:00 PM
SWR-20130330-004	Choctaw	8.00	3/30/2013 1:03:00 PM
SWR-20130326-003	Choctaw	9.00	3/26/2013 11:50:00 AM
SWR-20130318-005	Choctaw	0.00	3/18/2013 7:42:00 PM
SWR-20130316-012	Choctaw	12.00	3/16/2013 3:00:00 PM
SWR-20130311-004	Choctaw	0.00	2/2/2013 1:47:00 PM
SWR-20121020-002	Choctaw	2.00	10/20/2012 3:22:00 PM
SWR-20120914-001	Choctaw	7.00	9/14/2012 2:26:00 PM
SWR-20120808-001	Choctaw	0.00	7/21/2012 1:20:00 PM
SWR-20120703-002	Choctaw	80.00	7/3/2012 12:31:00 PM
SWR-20120709-008	Choctaw	0.00	6/22/2012 4:39:00 PM
SWR-20120709-007	Choctaw	0.00	6/19/2012 4:24:00 PM
SWR-20120530-006	Choctaw	4.00	5/30/2012 5:33:00 PM
SWR-20120507-001	Choctaw	1.00	5/7/2012 2:11:00 PM
SWR-20120615-001	Choctaw	0.00	5/4/2012 5:05:00 PM
SWR-20120501-034	Choctaw	2.00	5/1/2012 6:56:00 PM
SWR-20120613-001	Choctaw	0.00	4/26/2012 2:45:00 PM
SWR-20120425-004	Choctaw	0.00	4/25/2012 4:12:00 PM

SWR-20120503-011	Choctaw	0.00	4/25/2012 12:43:00 PM
SWR-20120503-010	Choctaw	2.00	4/21/2012 8:29:00 PM
SWR-20120613-002	Choctaw	0.00	4/13/2012 6:25:00 PM
SWR-20120503-009	Choctaw	0.00	3/28/2012 8:41:00 PM
SWR-20120503-008	Choctaw	1.00	3/16/2012 3:04:00 PM
SWR-20120307-005	Choctaw	3.00	3/7/2012 3:26:00 PM
SWR-20120307-003	Choctaw	6.00	3/7/2012 1:59:00 PM
SWR-20120503-007	Choctaw	3.00	3/7/2012 11:20:00 AM
SWR-20120307-001	Choctaw	0.00	3/7/2012 11:17:00 AM
SWR-20120503-005	Choctaw	0.00	2/25/2012 7:55:00 PM
SWR-20120225-001	Choctaw	18.00	2/25/2012 12:51:00 PM
SWR-20120503-006	Choctaw	0.00	2/17/2012 3:10:00 PM
SWR-20120503-004	Choctaw	2.00	2/8/2012 8:12:00 PM
SWR-20120503-003	Choctaw	1.00	1/29/2012 10:05:00 AM
SWR-20120503-002	Choctaw	3.00	1/17/2012 1:15:00 PM
SWR-20120503-001	Choctaw	1.00	1/5/2012 1:54:00 PM
SWR-20120201-001	Choctaw	0.00	12/10/2011 1:52:00 PM
SWR-20111205-002	Choctaw	20.00	12/5/2011 5:45:00 AM
SWR-20120201-002	Choctaw	0.00	12/2/2011 3:45:00 PM
SWR-20120103-008	Choctaw	0.00	11/26/2011 5:15:00 PM
SWR-20111126-001	Choctaw	8.00	11/26/2011 11:50:00 AM
SWR-20111130-002	Choctaw	0.00	11/24/2011 2:15:00 PM
SWR-20111122-002	Choctaw	4.00	11/22/2011 11:44:00 AM
SWR-20120103-007	Choctaw	0.00	11/14/2011 4:40:00 PM
SWR-20120104-001	Choctaw	0.00	11/13/2011 3:45:00 PM
SWR-20120103-006	Choctaw	0.00	11/8/2011 1:20:00 PM
SWR-20111106-007	Choctaw	1.00	11/6/2011 4:04:00 PM
SWR-20111031-003	Choctaw	1.00	10/31/2011 12:45:00 PM
SWR-20111206-003	Choctaw	0.00	10/25/2011 3:03:00 PM
SWR-20111025-002	Choctaw	1.00	10/25/2011 12:19:00 PM
SWR-20111130-001	Choctaw	0.00	10/12/2011 12:25:00 PM
SWR-20111108-004	Choctaw	1.00	9/17/2011 1:30:00 PM
SWR-20110909-001	Choctaw	0.00	9/9/2011 1:22:00 PM
SWR-20111108-003	Choctaw	1.00	9/9/2011 1:15:00 PM
SWR-20110907-001	Choctaw	0.00	9/7/2011 2:38:00 PM
SWR-20110901-004	Choctaw	95.00	9/1/2011 7:50:00 PM

SWR-20110830-006	Choctaw	20.00	8/30/2011 3:20:00 PM
SWR-20110826-003	Choctaw	18.00	8/26/2011 4:52:00 PM
SWR-20110817-001	Choctaw	0.00	8/17/2011 5:25:00 PM
SWR-20110804-001	Choctaw	2.00	8/4/2011 5:46:00 PM
SWR-20110708-004	Choctaw	0.00	7/8/2011 2:08:00 PM
SWR-20110630-003	Choctaw	20.00	6/30/2011 1:31:00 PM
SWR-20110602-007	Choctaw	3.00	6/2/2011 3:11:00 PM
SWR-20110805-003	Choctaw	0.00	5/23/2011 9:16:00 AM
SWR-20110726-002	Choctaw	0.00	5/19/2011 3:35:00 PM
SWR-20110517-002	Choctaw	2.00	5/17/2011 2:28:00 PM
SWR-20110512-005	Choctaw	10.00	5/12/2011 8:40:00 PM
SWR-20110511-002	Choctaw	0.00	5/11/2011 2:19:00 PM
SWR-20110726-001	Choctaw	0.00	5/6/2011 4:18:00 PM
SWR-20110805-002	Choctaw	0.00	4/23/2011 11:00:00 AM
SWR-20110416-002	Choctaw	2.00	4/16/2011 4:35:00 PM
SWR-20110805-001	Choctaw	0.00	4/15/2011 6:00:00 PM
SWR-20110512-004	Choctaw	1.00	3/29/2011 7:57:00 PM
SWR-20110513-006	Choctaw	20.00	3/26/2011 5:40:00 PM
SWR-20110325-009	Choctaw	20.00	3/25/2011 4:11:00 PM
SWR-20110513-005	Choctaw	0.00	3/25/2011 1:03:00 AM
SWR-20110324-014	Choctaw	10.00	3/24/2011 5:07:00 PM
SWR-20110513-004	Choctaw	0.00	3/24/2011 4:24:00 PM
SWR-20110513-007	Choctaw	0.00	3/24/2011 12:15:00 PM
SWR-20110602-001	Choctaw	0.00	3/24/2011 5:55:00 AM
SWR-20110322-009	Choctaw	37.00	3/22/2011 1:10:00 PM
SWR-20110504-004	Choctaw	0.00	3/22/2011 1:00:00 PM
SWR-20110321-013	Choctaw	1.00	3/21/2011 4:03:00 PM
SWR-20110314-001	Choctaw	0.00	3/14/2011 1:10:00 PM
SWR-20110228-008	Choctaw	0.00	2/28/2011 2:40:00 PM
SWR-20110228-009	Choctaw	0.00	2/28/2011 2:40:00 PM
SWR-20110227-002	Choctaw	4.00	2/27/2011 4:00:00 PM
SWR-20110504-003	Choctaw	5.00	2/27/2011 11:29:00 AM
SWR-20110223-005	Choctaw	4.00	2/23/2011 12:20:00 PM
SWR-20110504-001	Choctaw	0.00	2/21/2011 6:14:00 PM
SWR-20110221-012	Choctaw	1.00	2/21/2011 3:18:00 PM
SWR-20110308-002	Choctaw	0.00	2/20/2011 2:45:00 PM

SWR-20110220-001	Choctaw	8.00	2/20/2011 11:26:00 AM
SWR-20110308-001	Choctaw	1.00	2/20/2011 11:04:00 AM
SWR-20110513-010	Choctaw	3.00	2/19/2011 12:38:00 PM
SWR-20110308-003	Choctaw	0.00	2/19/2011 11:55:00 AM
SWR-20110219-002	Choctaw	0.00	2/19/2011 9:36:00 AM
SWR-20110513-009	Choctaw	3.00	2/15/2011 7:00:00 PM
SWR-20110504-002	Choctaw	1.00	2/15/2011 1:28:00 PM
SWR-20110215-001	Choctaw	3.00	2/15/2011 11:30:00 AM
SWR-20110513-008	Choctaw	2.00	2/14/2011 7:24:00 PM
SWR-20110513-002	Choctaw	0.00	2/13/2011 3:45:00 PM
SWR-20110308-006	Choctaw	0.00	2/13/2011 12:58:00 PM
SWR-20110208-006	Choctaw	18.00	2/8/2011 11:14:00 AM
SWR-20110207-007	Choctaw	0.00	2/7/2011 11:30:00 AM
SWR-20110311-002	Choctaw	6.00	1/29/2011 3:50:00 PM
SWR-20110129-004	Choctaw	3.00	1/29/2011 2:25:00 PM
SWR-20110311-003	Choctaw	1.00	1/29/2011 12:59:00 PM
SWR-20110128-004	Choctaw	1.00	1/28/2011 1:39:00 PM
SWR-20110208-005	Choctaw	2.00	1/28/2011 1:27:00 PM
SWR-20110311-004	Choctaw	8.00	1/23/2011 1:00:00 PM
SWR-20110308-005	Choctaw	8.00	1/16/2011 2:05:00 PM
SWR-20110308-004	Choctaw	1.00	1/15/2011 2:15:00 PM
SWR-20110108-007	Choctaw	1.00	1/8/2011 12:56:00 PM
SWR-20110107-004	Choctaw	1.00	1/7/2011 2:36:00 PM
SWR-20110107-002	Choctaw	1.00	1/7/2011 2:06:00 PM
SWR-20110311-001	Choctaw	0.00	1/5/2011 7:40:00 AM
SWR-20110104-005	Choctaw	1.00	1/4/2011 4:54:00 PM
SWR-20110211-004	Choctaw	3.00	12/29/2010 12:06:00 PM
SWR-20110211-003	Choctaw	1.00	12/27/2010 10:20:00 AM
SWR-20110211-002	Choctaw	0.00	12/22/2010 6:25:00 PM
SWR-20110126-002	Choctaw	0.00	12/20/2010 1:45:00 PM
SWR-20110126-003	Choctaw	0.00	12/11/2010 11:10:00 AM
SWR-20101210-005	Choctaw	3.00	12/10/2010 10:36:00 PM
SWR-20101109-004	Choctaw	3.00	11/9/2010 2:55:00 PM
SWR-20110208-004	Choctaw	0.00	10/29/2010 11:17:00 PM
SWR-20101024-004	Choctaw	2.00	10/24/2010 1:47:00 PM
SWR-20110208-003	Choctaw	0.00	10/23/2010 9:27:00 PM

SWR-20101023-011	Choctaw	5.00	10/23/2010 4:50:00 PM
SWR-20101023-008	Choctaw	15.00	10/23/2010 4:17:00 PM
SWR-20101019-008	Choctaw	3.00	10/19/2010 6:23:00 PM
SWR-20110126-001	Choctaw	0.00	10/19/2010 12:48:00 PM
SWR-20101019-003	Choctaw	6.00	10/19/2010 12:24:00 PM
SWR-20101018-003	Choctaw	9.00	10/18/2010 2:18:00 PM
SWR-20101015-012	Choctaw	20.00	10/15/2010 4:42:00 PM
SWR-20101011-010	Choctaw	0.00	10/11/2010 9:20:00 PM
SWR-20101012-001	Choctaw	0.00	10/10/2010 3:00:00 PM
SWR-20101010-001	Choctaw	6.00	10/10/2010 11:50:00 AM
SWR-20101008-002	Choctaw	0.00	10/8/2010 1:14:00 PM
SWR-20110208-002	Choctaw	0.00	10/6/2010 9:21:00 PM
SWR-20101006-005	Choctaw	0.00	10/6/2010 1:24:00 PM
SWR-20101005-004	Choctaw	0.00	10/5/2010 10:50:00 AM
SWR-20101004-003	Choctaw	0.00	10/4/2010 11:42:00 AM
SWR-20110126-004	Choctaw	0.00	10/2/2010 12:43:00 PM
SWR-20110211-001	Choctaw	0.00	10/2/2010 3:05:00 AM
SWR-20100923-002	Choctaw	5.00	9/23/2010 11:56:00 AM
SWR-20100920-008	Choctaw	35.00	9/20/2010 6:13:00 PM
SWR-20100920-002	Choctaw	55.00	9/20/2010 11:41:00 AM
SWR-20100918-002	Choctaw	34.00	9/18/2010 5:49:00 PM
SWR-20100911-003	Choctaw	5.00	9/11/2010 3:11:00 PM
SWR-20100907-004	Choctaw	2.00	9/7/2010 4:58:00 PM
SWR-20100831-001	Choctaw	0.00	8/31/2010 12:58:00 PM
SWR-20100821-001	Choctaw	0.00	8/21/2010 12:26:00 PM
SWR-20100608-001	Choctaw	3.00	6/8/2010 7:55:00 PM
SWR-20100512-002	Choctaw	0.00	5/12/2010 10:20:00 AM
SWR-20100429-004	Choctaw	10.00	4/29/2010 5:37:00 PM
SWR-20100422-003	Choctaw	2.00	4/22/2010 4:53:00 PM
SWR-20100418-004	Choctaw	2.00	4/18/2010 5:48:00 PM
SWR-20100413-006	Choctaw	0.00	4/13/2010 3:16:00 PM
SWR-20100408-001	Choctaw	0.00	4/7/2010 10:09:00 AM
SWR-20100406-003	Choctaw	65.00	4/6/2010 1:57:00 PM
SWR-20100401-012	Choctaw	8.00	4/1/2010 6:04:00 PM
SWR-20100406-001	Choctaw	1.00	4/1/2010 12:14:00 PM
SWR-20100401-001	Choctaw	1.00	3/31/2010 12:05:00 PM

SWR-20100327-002	Choctaw	1.00	3/27/2010 2:51:00 PM
SWR-20100319-003	Choctaw	0.00	3/19/2010 4:44:00 PM
SWR-20100402-002	Choctaw	0.00	3/9/2010 2:45:00 PM
SWR-20100309-002	Choctaw	0.00	3/9/2010 11:38:00 AM
SWR-20100402-003	Choctaw	0.00	3/7/2010 11:16:00 AM
SWR-20100303-001	Choctaw	2.00	3/3/2010 3:10:00 PM
SWR-20100301-003	Choctaw	0.00	3/1/2010 11:06:00 AM
SWR-20100309-003	Choctaw	1.00	2/20/2010 4:55:00 PM
SWR-20100402-001	Choctaw	0.00	2/19/2010 2:45:00 PM
SWR-20100224-002	Choctaw	0.00	2/18/2010 7:30:00 PM
SWR-20100224-001	Choctaw	0.00	2/18/2010 12:06:00 PM
SWR-20100219-002	Choctaw	0.00	2/17/2010 4:20:00 PM
SWR-20100204-001	Choctaw	0.00	1/27/2010 12:48:00 PM
SWR-20100119-003	Choctaw	1.00	1/19/2010 1:55:00 PM
SWR-20091211-001	Choctaw	0.00	12/11/2009 3:27:00 PM
SWR-20091127-001	Choctaw	2.00	11/27/2009 7:00:00 PM
SWR-20090810-001	Choctaw	0.00	8/8/2009 11:40:00 AM
SWR-20090701-002	Choctaw	6.00	7/1/2009 2:58:00 PM
SWR-20090630-005	Choctaw	6.00	6/30/2009 2:26:00 PM
SWR-20090630-004	Choctaw	2.00	6/30/2009 2:24:00 PM
SWR-20090630-001	Choctaw	3.00	6/30/2009 1:29:00 PM
SWR-20090618-005	Choctaw	1.00	6/18/2009 4:11:00 PM
SWR-20090618-001	Choctaw	0.00	6/18/2009 8:48:00 AM
SWR-20090430-001	Choctaw	1.00	4/30/2009 2:00:00 PM
SWR-20090406-001	Choctaw	5.00	4/6/2009 3:00:00 PM
SWR-20090308-009	Choctaw	8.00	3/8/2009 5:30:00 PM
SWR-20090307-013	Choctaw	0.00	3/7/2009 2:01:00 PM
SWR-20090226-004	Choctaw	5.00	2/25/2009 12:30:00 PM
SWR-20090225-010	Choctaw	80.00	2/25/2009 11:30:00 AM
SWR-20090223-002	Choctaw	2.00	2/23/2009 3:25:00 PM
SWR-20090223-007	Choctaw	1.00	2/23/2009 3:15:00 PM
SWR-20090223-006	Choctaw	2.00	2/23/2009 1:25:00 PM
SWR-20090208-012	Choctaw	5.00	2/8/2009 3:21:00 PM
SWR-20090206-015	Choctaw	4.00	2/6/2009 3:45:00 PM
SWR-20090206-013	Choctaw	15.00	2/6/2009 3:16:00 PM
SWR-20090201-003	Choctaw	2.00	2/1/2009 2:48:00 PM

SWR-20090130-002	Choctaw	1.00	1/30/2009 2:36:00 PM
BAY-20081223-001	Choctaw	12.00	12/23/2008 10:55:00 AM
BAY-20081121-010	Choctaw	40.00	11/21/2008 6:07:00 PM
BAY-20081109-001	Choctaw	0.00	11/9/2008 1:04:00 PM
BAY-20081108-001	Choctaw	6.00	11/8/2008 12:10:00 AM
BAY-20081105-001	Choctaw	0.00	11/5/2008 11:12:00 AM
Bay-20081021-001	Choctaw	0.00	10/21/2008 3:30:00 PM
BAY-20080809-001	Choctaw	0.00	8/9/2008 2:52:08 PM
BAY-20080522-001	Choctaw	0.00	5/22/2008 5:42:22 PM
BAY-20080415-002	Choctaw	2.00	4/15/2008 12:02:00 PM
BAY-20080325-009	Choctaw	0.00	3/25/2008 7:31:00 PM
BAY-20080325-007	Choctaw	1.00	3/25/2008 2:58:00 PM
Bay-20080323-011	Choctaw	4.00	3/23/2008 9:30:00 PM
BAY-20080322-003	Choctaw	0.00	3/22/2008 3:54:47 PM
BAY-20080319-001	Choctaw	0.00	3/19/2008 3:54:16 PM
BAY-20080318-002	Choctaw	0.00	3/18/2008 4:47:28 PM
BAY-20080317-005	Choctaw	0.00	3/17/2008 3:56:22 PM
BAY-20080317-003	Choctaw	2.00	3/17/2008 2:18:13 PM
BAY-20080317-001	Choctaw	5.00	3/17/2008 11:50:22 AM
Bay-20080315-002	Choctaw	3.00	3/15/2008 9:36:21 AM
BAY-20080304-001	Choctaw	0.00	3/4/2008 4:12:00 PM
BAY-20080219-003	Choctaw	1.00	2/19/2008 2:01:11 PM
BAY-20080213-001	Choctaw	0.00	2/13/2008 12:13:00 PM
Bay-20080212-004	Choctaw	1.00	2/12/2008 3:12:00 PM
BAY-20080211-007	Choctaw	0.00	2/11/2008 3:30:41 PM
BAY-20080211-005	Choctaw	2.00	2/11/2008 2:31:09 PM
BAY-20080209-004	Choctaw	0.00	2/9/2008 3:34:24 PM
BAY-20080108-001	Choctaw	0.00	1/8/2008 1:50:58 PM
BAY-20071219-001	Choctaw	20.00	12/19/2007 10:00:00 AM
BAY-20071106-001	Choctaw	0.00	11/6/2007 12:25:00 PM
BAY-20071105-002	Choctaw	0.00	11/5/2007 11:05:15 AM
BAY-20071102-001	Choctaw	0.00	11/2/2007 1:46:16 PM
BAY-20071017-003	Choctaw	0.00	10/17/2007 3:07:43 PM
BAY-20071012-001	Choctaw	0.00	10/12/2007 4:00:53 PM
BAY-20071002-003	Choctaw	0.00	10/2/2007 4:20:27 PM
Bay-20070905-002	Choctaw	5.00	9/5/2007 8:00:00 PM

BAY-20070905-001	Choctaw	1.00	9/5/2007 12:28:44 PM
BAY-20070824-003	Choctaw	1.00	8/24/2007 2:14:00 PM
BAY-20070816-001	Choctaw	9.00	8/16/2007 10:19:05 AM
BAY-20070804-001	Choctaw	14.00	8/4/2007 12:25:00 PM
Bay-20070701-004	Choctaw	0.00	7/1/2007 7:40:00 PM
BAY-20070701-003	Choctaw	10.00	7/1/2007 6:10:00 PM
BAY-20070624-001	Choctaw	1.00	6/24/2007 5:16:00 PM
BAY-20070615-001	Choctaw	1.00	6/15/2007 2:00:00 PM
BAY-20070614-002	Choctaw	1.00	6/14/2007 12:10:31 PM
BAY-20070612-003	Choctaw	0.00	6/12/2007 5:15:20 PM
BAY-20070607-001	Choctaw	4.00	6/7/2007 2:14:12 PM
BAY-20070605-003	Choctaw	1.00	6/5/2007 2:14:00 PM
Bay-20070526-002	Choctaw	2.00	5/26/2007 7:50:53 PM
BAY-20070515-001	Choctaw	2.00	5/15/2007 5:30:33 PM
BAY-20070514-001	Choctaw	1.00	5/14/2007 9:17:00 PM
BAY-20070511-001	Choctaw	0.00	5/11/2007 1:19:07 PM
BAY-20070510-002	Choctaw	1.00	5/10/2007 2:05:14 PM
BAY-20070503-001	Choctaw	1.00	5/3/2007 6:40:00 AM
BAY-20070420-001	Choctaw	0.00	4/20/2007 11:40:00 AM
BAY-20070412-002	Choctaw	8.00	4/12/2007 3:04:01 PM
BAY-20070405-003	Choctaw	8.00	4/5/2007 4:30:39 PM
BAY-20070405-002	Choctaw	0.00	4/5/2007 3:00:00 PM
BAY-20070330-004	Choctaw	4.00	3/30/2007 2:35:11 PM
BAY-20070328-005	Choctaw	4.00	3/28/2007 3:57:00 PM
BAY-20070328-004	Choctaw	0.00	3/28/2007 3:23:00 PM
BAY-20070325-009	Choctaw	4.00	3/25/2007 7:00:00 PM
BAY-20070325-001	Choctaw	10.00	3/25/2007 2:21:48 PM
BAY-20070324-001	Choctaw	35.00	3/24/2007 10:52:06 AM
BAY-20070321-002	Choctaw	0.00	3/21/2007 3:15:29 PM
BAY-20070320-007	Choctaw	3.00	3/20/2007 4:38:12 PM
BAY-20070320-008	Choctaw	8.00	3/20/2007 1:04:11 PM
BAY-20070318-003	Choctaw	10.00	3/18/2007 2:00:00 PM
Bay-20070317-006	Choctaw	0.00	3/17/2007 5:05:00 PM
BAY-20070317-003	Choctaw	5.00	3/17/2007 4:17:00 PM
BAY-20070317-001	Choctaw	2.00	3/17/2007 11:53:00 AM
BAY-20070312-003	Choctaw	0.00	3/12/2007 1:20:00 PM

BAY-20070311-005	Choctaw	5.00	3/11/2007 3:11:07 PM
BAY-20070308-004	Choctaw	6.00	3/8/2007 1:58:00 PM
BAY-20070306-003	Choctaw	12.00	3/6/2007 2:37:30 PM
BAY-20070306-001	Choctaw	3.00	3/6/2007 1:50:28 PM
BAY-20070305-006	Choctaw	10.00	3/5/2007 3:00:14 PM
BAY-20070305-004	Choctaw	0.00	3/5/2007 2:00:19 PM
BAY-20070305-001	Choctaw	8.00	3/5/2007 12:15:19 PM
BAY-20070228-001	Choctaw	0.00	2/28/2007 2:00:00 PM
BAY-20070224-004	Choctaw	4.00	2/24/2007 1:27:37 PM
BAY-20070224-002	Choctaw	0.00	2/24/2007 7:42:46 AM
BAY-20070223-009	Choctaw	0.00	2/23/2007 4:00:28 PM
BAY-20070223-007	Choctaw	0.00	2/23/2007 3:53:00 PM
BAY-20070223-006	Choctaw	2.00	2/23/2007 3:25:00 PM
BAY-20070223-004	Choctaw	6.00	2/23/2007 1:24:00 PM
BAY-20070219-002	Choctaw	0.00	2/19/2007 1:45:37 PM

Table 11 - Fires in Choctaw County (source: Alabama Forestry Commission)

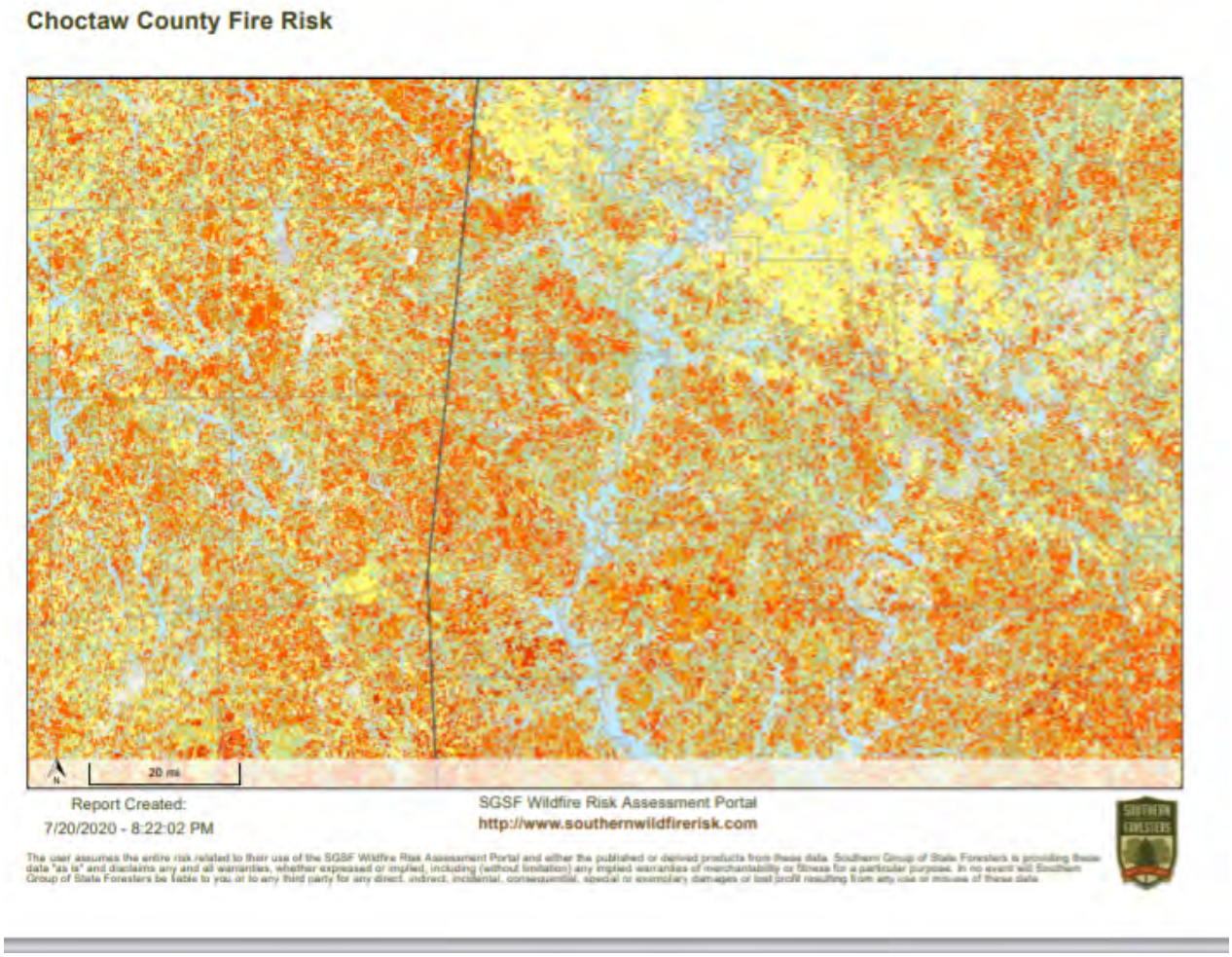
Community Impact - Wildfires can cause considerable damage and loss of life especially in areas where there is an interface between wild land and urban development. Choctaw County has multiple fuel sources and is prone to drought and thunderstorms; therefore, wildfires are a significant risk. Furthermore, 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 Choctaw County, however the risk is higher in rural forested areas. All of the jurisdictions within Choctaw County including unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey have the same chances of being damaged by a wildfire.

Probability of Future Occurrences: Based on historical information, Choctaw 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 wild fire occurring and the location of damage appear to be random.

Map 7 - Choctaw County Fire Risk – Source SOUTHERN GROUP OF STATE FORESTERS

WILDFIRE RISK ASSESSMENT PORTAL



As you can see from this map, the risk of fire in Choctaw County is not high and negligible in the flood plain areas. Areas of higher elevation had a greater risk, however the risk is about the same throughout most areas of Choctaw County including incorporated and unincorporated areas.

i. 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 combing the effects of temperature and humidity. Temperatures that hove 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 ad drought is very dangerous to human life and the environment.

Hazard History - There have been 2 major extreme heat events since 1996 and no droughts in the National Climate Data Center database.

Location	County/Zone	St.	Date	Time	T.Z.	Type	PrD	CrD
CHOCTAW (ZONE)	CHOCTAW (ZONE)	AL	07/01/2000	00:01	CST	Heat	0.00K	0.00K
CHOCTAW (ZONE)	CHOCTAW (ZONE)	AL	08/08/2007	08:00	CST-6	Heat	0.00K	0.00K

Table 12. Excessive Heat events in Choctaw County, Alabama. (source: NCDC Database)

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

- Heatstroke is considered a medical emergency and is often fatal. It exists when rectal temperature rises above 105°F as a result 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 suffe1ing from heat exhaustion may complain of dizziness, weakness or fatigue. The primary cause of heat exhaustion is fluid and electrolyte imbalance. The normalization of fluids will typically alleviate the situation.
- Heat Syncope is typically associated with exercise by people who are not acclimated to exercise. The symptom is a sudden loss of consciousness. Consciousness returns promptly when the person lies down. The cause is primarily associated with circulatory instability as a result of heat. The condition typically causes little or no harm to the individual.
- Heat Cramps are typically a problem for individuals who exercise outdoors but arc unaccustomed to heat. Similar to heat exhaustion it is thought to be a result of a mild imbalance of t1uids and electrolytes.

Risks associated with drought include effects to 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. According to the U.S. Drought Monitor effective December 27, 2011, Choctaw County is currently under a moderate drought condition.

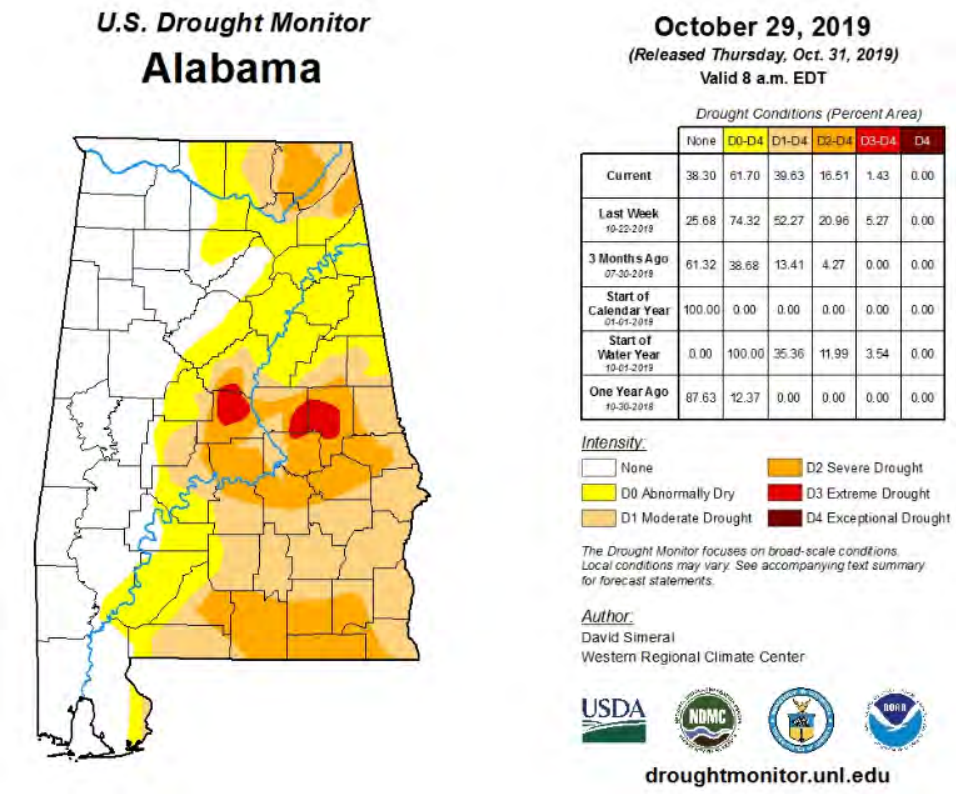


Figure 7 – U.S. Drought Monitor – October 29, 2019 Source: www.droughmonitor.unl.edu

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 have been 3 events in the past 11 years, resulting in a probability of 27% these events can occur on annual basis. There is not a summary of impact of costs as not data was collected during previous events, however losses are expected to be minimal. These 3 extensive droughts occurred in 2000, 2007, and 2017. The damage from these droughts can be associated with lost timber and crops. These droughts were severe, and local foresters suffered from increased fire risks during these years.

Location and Extent - All of Choctaw County is susceptible to droughts equally. There were severe droughts in 20020, 2007 and 2017. During these times the County was in exceptional drought and severe drought to very dry summers.

j. 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 results in wind chills then cause bodily injury such as frostbite and death. Severe winter and ice storms can cause unusually heavy rain or snowfall, high wind, extreme cold and ice storms throughout Choctaw 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 arc 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 – According to the NCDC database, there have been four Winter Storm events since 1950.

Location	St.	Date	Time	T.Z.	Type	CrD
Totals:						0.00K
CHOCTAW (ZONE)	AL	12/21/2000	05:00	CST	Winter Storm	0.00K
CHOCTAW (ZONE)	AL	01/01/2001	03:00	CST	Winter Storm	0.00K
CHOCTAW (ZONE)	AL	01/02/2002	00:00	CST	Winter Storm	0.00K
CHOCTAW (ZONE)	AL	01/28/2014	13:00	CST-6	Winter Storm	0.00K
Totals:						0.00K

Table 13. Winter Storm events in Choctaw County, Alabama. (source: NCDC Database)

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 of Choctaw County is susceptible to a winter storms or freezes. All of the jurisdictions within Choctaw County including unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey have the same chance 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, Choctaw County does not have a considerable risk of a winter storm occurring and it has a high threat of a winter storm adversely affecting the area. This is a direct result to the area's ability to handle a severe winter storm. Although they are rare, Choctaw County is susceptible to winter storms. It is estimated they occur once every 10-12 years.

k. Levee/Dam Failures

Hazard Description – A dam is barriers constructed across a water course in order to store, control, or divert water. Dams are usually constructed of earth, rock, concrete, or mine tailings. The water impounded behind a dam is referred to as the reservoir and is measured in acre-feet, with one-afoot being the volume of water that covers one acre of land to a depth of one foot. Due to topography, even a small dam may have a reservoir containing many acre-feet of water. A dam failure is the collapse, breach or other failure of a dame that causes downstream flooding. Dam failures may result from natural events, human-caused events, or a combination thereof. Due to the lack of advance warning, failures resulting from natural events, such as hurricanes, earthquakes, or landslides, may be particularly severe. Prolonged rainfall that produces flooding is the most common cause of dame failure, according to FEMA.

Dam failures usually occur when the spillway capacity if inadequate and water overtops the dam or when internal erosion through the dam 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 rushed downstream, damaging or destroying whatever is in its path.

Hazard History – No dam/levee failure events have ever been reported in Choctaw County.

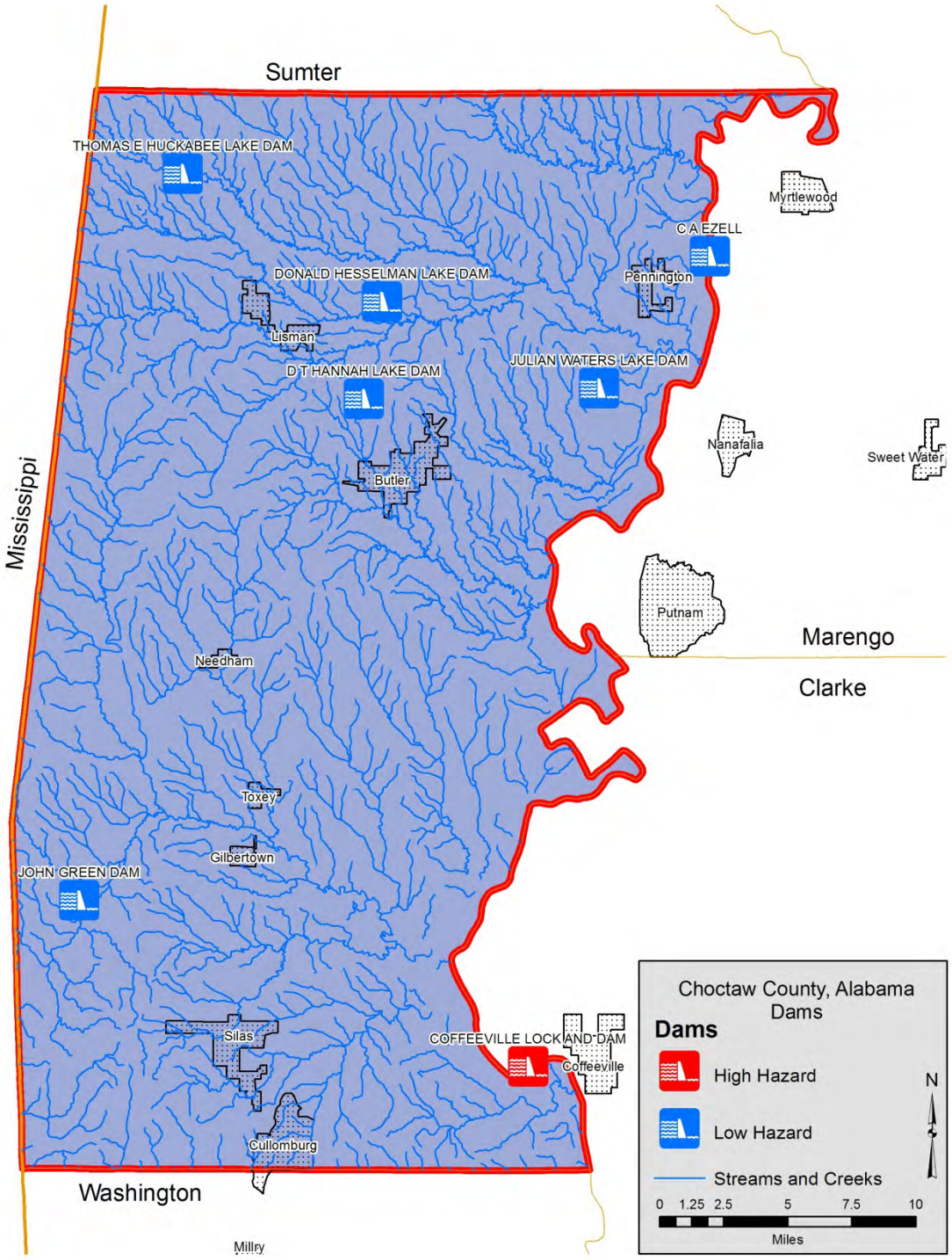
Community Impact – When a dam fails, a large quantity of water is suddenly released downstream, destroying anything in its path. The area impacted by the water emitted by dame failure would encounter the same risks as those in a flood zone during periods of flooding. The area directly affected by the water released during a dam failure is not county wide. The only high risk dame is the Claiborne Lock and Dam on the Alabama River.

Location and Extent: There are none.

Probability of Future Occurrences: There are none

Community Impacts. When a dam fails, a gigantic quantity of water is suddenly released downstream, destroying anything in its path.

Location and Extents. Map 9 below depicts the locations of dams in Choctaw County. According to HAZUS there are 16 identified dams in Choctaw County; the Claiborne Lock and Dam has a "high" hazard classification, three dams have a "significant" hazard classification, and the remaining 12 have a "low" hazard classification. These classifications are assigned to a dam.



Map 8 – Dams in Choctaw County

Probability of Future Occurrences - The risks associated with dam-levee failure are the same as those risks associated with flooding. Risks to Choctaw County are minimal. The probability of future occurrences cannot be characterized on a countywide basis because of the lack of information available.

l. Landslides

Hazard Description - A "landslide" is the downward and outward movement of slopes. The terms refers 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. A "landslide" is the downward and outward movement of slope - 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, hill and mountains; incised stream channels; and slopes excavated for buildings and roads. Slid potentials are enhanced where slopes are destabilized by construction or river erosion. Road cut s and other altered ore excavated areas are particularly susceptible to landslides and debris flows. Rainfall and seismic shaking by earthquakes or blasting can trigger landslides.

Debris flows (also referred to as mudslides) generally occur during intense rainfall on water saturated 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 down slope particularly hazardous. Surface runoff channels along roadways and below culverts are common sites of debris flows and other landslides.

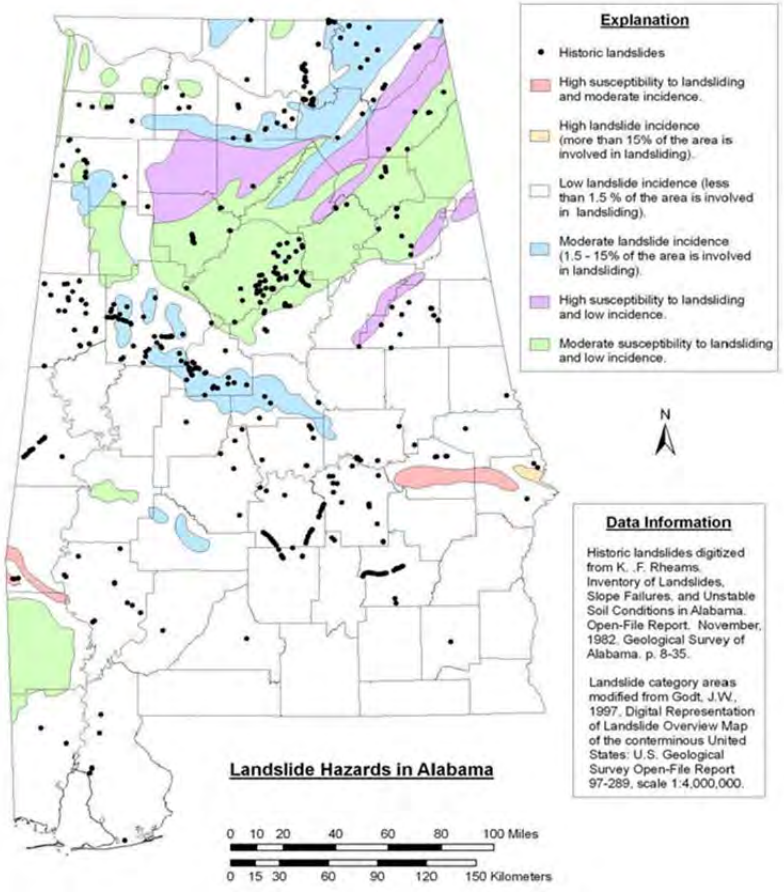
Hazard History – only one instance of landslides were reported by the planning committee or revealed by an Internet search. However, there are higher elevation areas in the County that have higher risk.

Community Impact - The effects of landslides are often misrepresented as being the result of the landslide's trigger event, such as a 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 – Only one recorded landslide event has occurred in Choctaw County. However, there is no data associated with this event as it occurred a long time ago. The southern area of the county lies in an area of moderate incidence, according to the Geological Survey of Alabama. This area is depicted on Map 10. There is no additional data available on landslides.

Probability of Future Occurrences: The probability of future occurrences of landslides in Choctaw County is " low incidence (less than 1.5% of the area is involved in landsliding.)



Map 9 – Statewide Landslide Incidence in and Susceptibility by County. Source: Geological Survey of Alabama

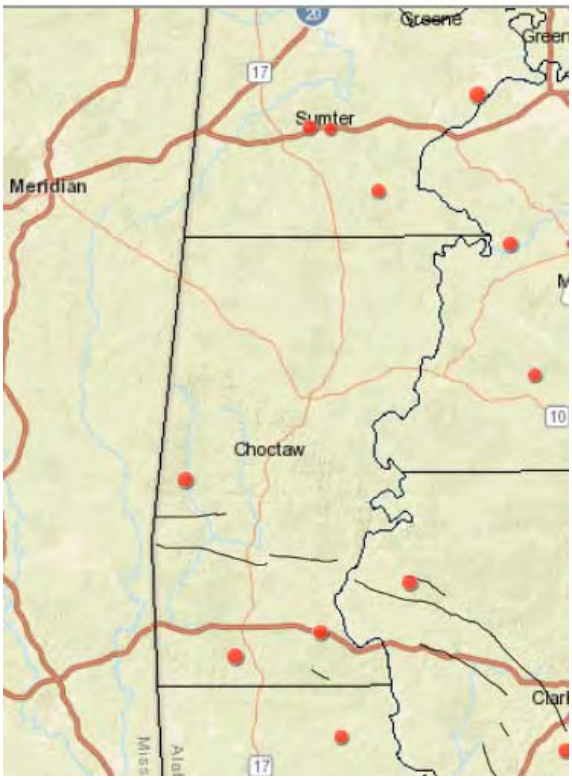
m. Earthquakes

Hazard Description - An earthquake is a sudden, rapid shaking of the earth caused by the breaking and shifting of rock beneath the earth's surface. An earthquake is "… a sudden motion or trembling caused by an abrupt release of accumulated strain in the tectonic plates that comprise the earth's crust". These rigid plates, known as tectonic plates, are some 5—60 miles in thickness and move slowly and continuously over the earth's interior. The plates meet along their edges were they move away, past or under each other at rates varying form less than a fraction of an inch up to five inches per year. While this sounds small, at a rate of two inches per year, a distance of 20 miles would be covered in approximately one million years.

The tectonic plates continually bump, slide, catch, and hold as they move past each other which causes stress to accumulate along faults. When this stress exceeds the elastic limit of the rock, an earthquake occurs, immediately causing sudden ground motion and seismic activity. Secondary hazards may also occur, such as surface faulting, sinkholes and landslides. While the majority of earthquake occur near the edges of the tectonic plates, eathquakes may also occur at the interior of plates.

Hazard History – There are only 3 incidents of an earthquake in Choctaw County. Map 11 depicts historical earthquake occurrences in Choctaw County.

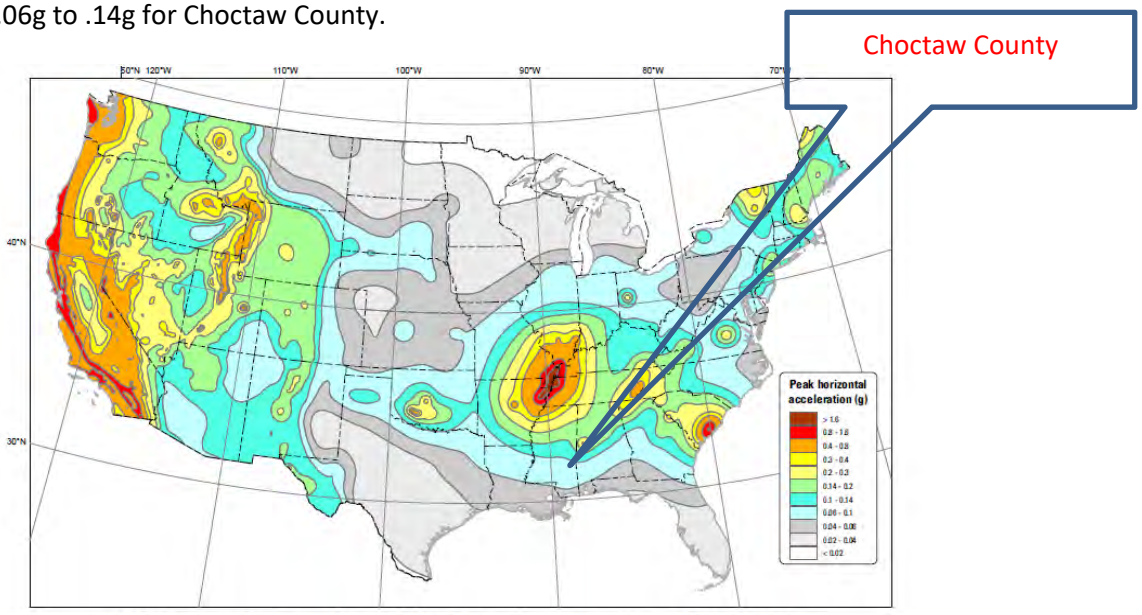
Map 10 – Historical Incidence of Earthquakes in Choctaw County



Community Impact - The USGS has developed a methodology for identifying an area's vulnerability to the occurrence of an earthquake. Areas are identified by their relative seismic risk. Choctaw County is located in an area with a probability of exceedence between 2% and 3% in 50 years. This is an area of slight risk as illustrated in Map 4-8.

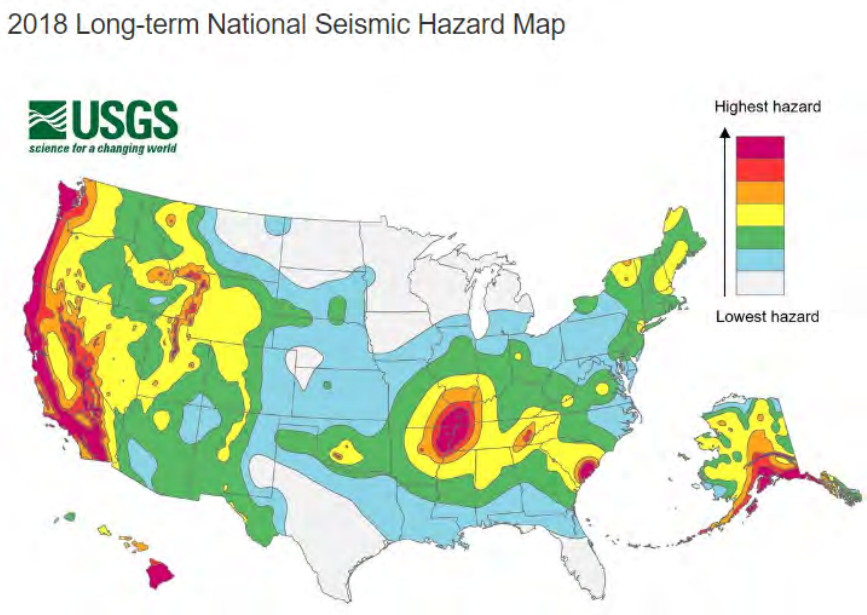
Location and Extent - All of Choctaw County is not very susceptible to earthquakes as there isn't any geological activity. All of the jurisdictions within Choctaw County including unincorporated Choctaw County and City of Butler, Town of Lisman, Town of Gilbertown, Town of Needham, Town of Silas, Town of Pennington, and Town of Toxey have the same chances of being impacted by an earthquake. The Town of Butler is most at risk since this area has the most densely populated areas. There is only one building over 3 floors and it provides public housing for disabled adults and seniors. Further, the County Courthouse is located in Butler and all of the county records are housed in the town square. The Wastewater treatment plant is located south of town and is not surrounded by any residential areas.

Probability of Future Occurrences - The risk of a significant, damage causing earthquake in the Choctaw 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 Choctaw County.



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_{s30} = 760 m/s)

Earthquake hazard map showing peak ground accelerations having a 2 percent probability of being exceeded in 50 years, for a firm rock site. The map is based on the most recent USGS models for the conterminous U.S. (2018), Hawaii (1998), and Alaska (2007). The models are based on seismicity and fault-slip rates, and take into account the frequency of earthquakes of various magnitudes. Locally, the hazard may be greater than shown, because site geology may amplify ground motions.



Map 11 – Probability of Incidences of Earthquakes from 2018.
Source: United States Geological Survey

n. Vulnerability Assessment and Identification of Assets

This section assesses vulnerability of types and numbers of existing buildings and critical facilities (including infrastructure) located within each identified hazard area. The only identified hazard, which is area specific within the county, is flooding. Consequently, all buildings and critical facilities are exposed to all remaining hazards. The building counts and values are taken from the HAZUS databases. These are not current counts, but data availability is limited. Dollar values are not adjusted to current values. Designation of a facility as critical is based on the HAZUS definitions, as follows:

- Essential Facilities. These facilities are critical to the health and welfare of the entire county population and are essential following hazard events, including emergency response facilities (police, fire, and emergency management), medical care facilities (hospitals and other care facilities), schools, and shelters for evacuation.

- Lifeline Utility Systems. These facilities are essential lifelines that include potable water, wastewater, natural gas, electric, and communications systems.
- Transportation Systems. These facilities include highways, bridges, railways, and waterways.
- High Potential Loss Facilities. These facilities include military installations and high potential loss dams.
- Hazardous Materials Facilities. These facilities may pose a threat if disrupted by natural hazards and include hazardous industrial chemicals, explosives, flammables, toxins, and radioactive materials.

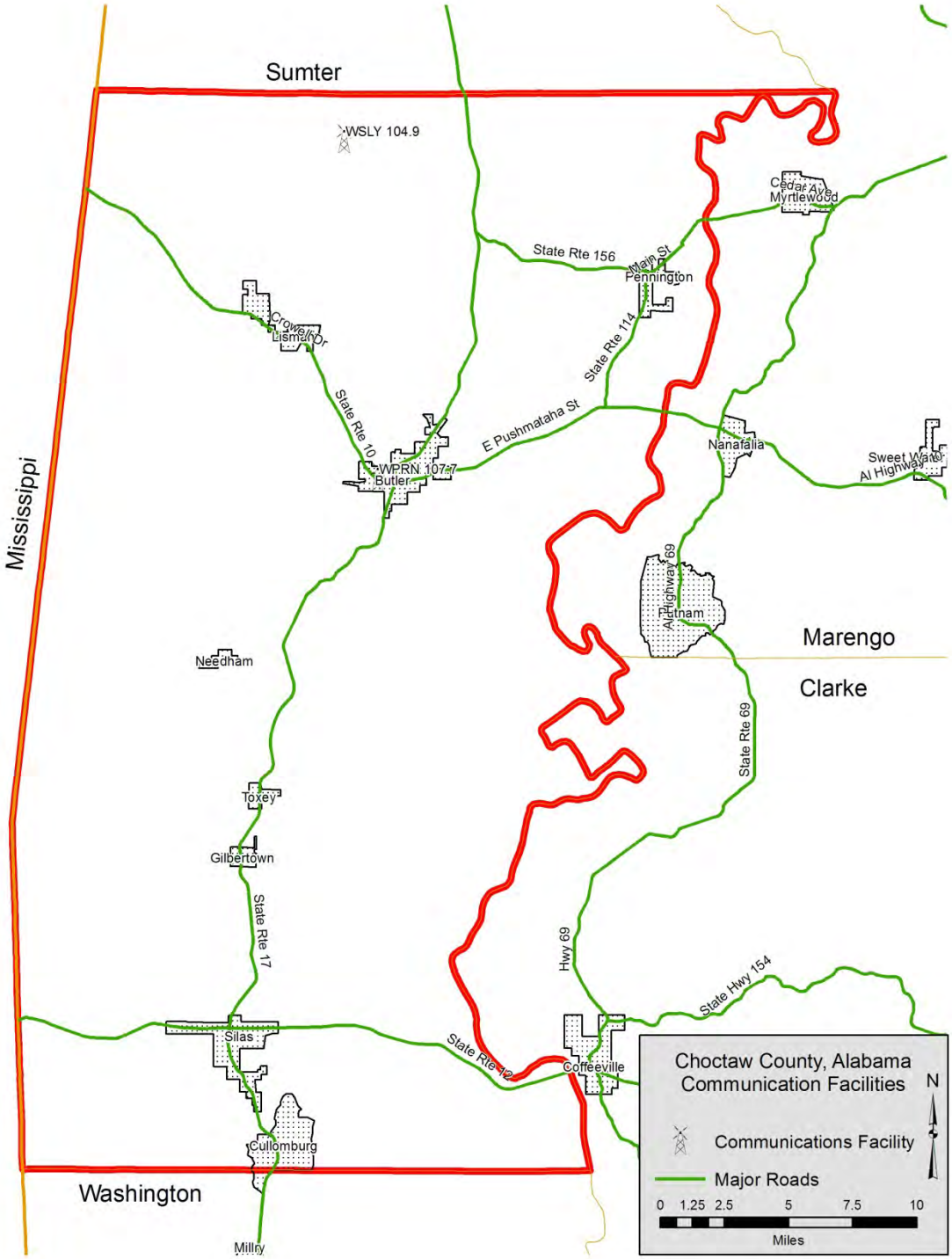
i. Building Assets – Choctaw County has over 5400 buildings valued at over $600 million. All of the buildings are at risk for natural hazards damages.

Number of Buildings by Type							
Residential	Commercial	Industrial	Agriculture	Religious	Government	Education	Total
4450	200	40	647	29	16	18	5400
Source: Choctaw County Revenue Commission							

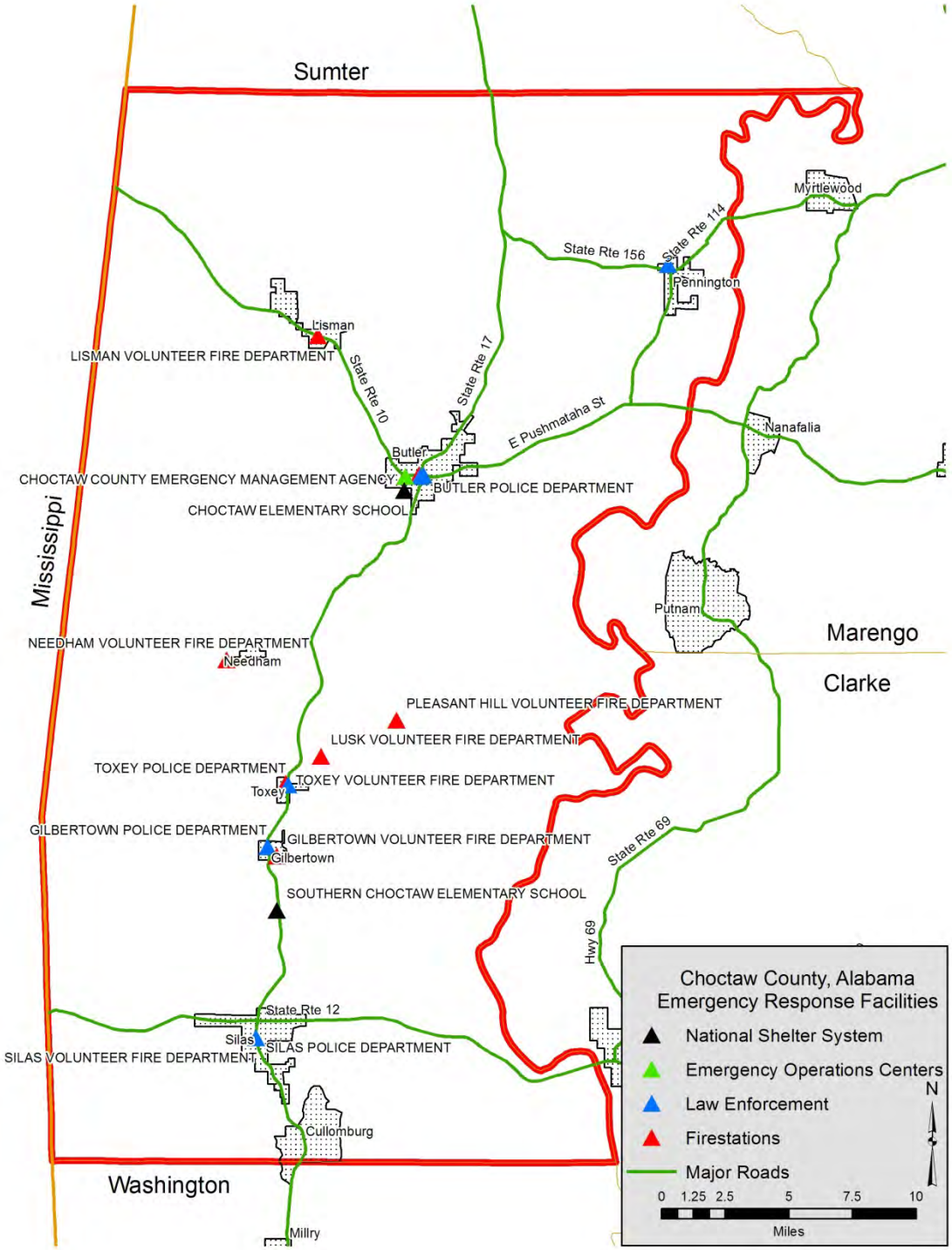
Value by Type of Building							
Residential	Commercial	Industrial	Agriculture	Religious	Government	Education	Total
$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00	$91,162,877.00

Source: FEMA HAZUS and Choctaw County Revenue Commission

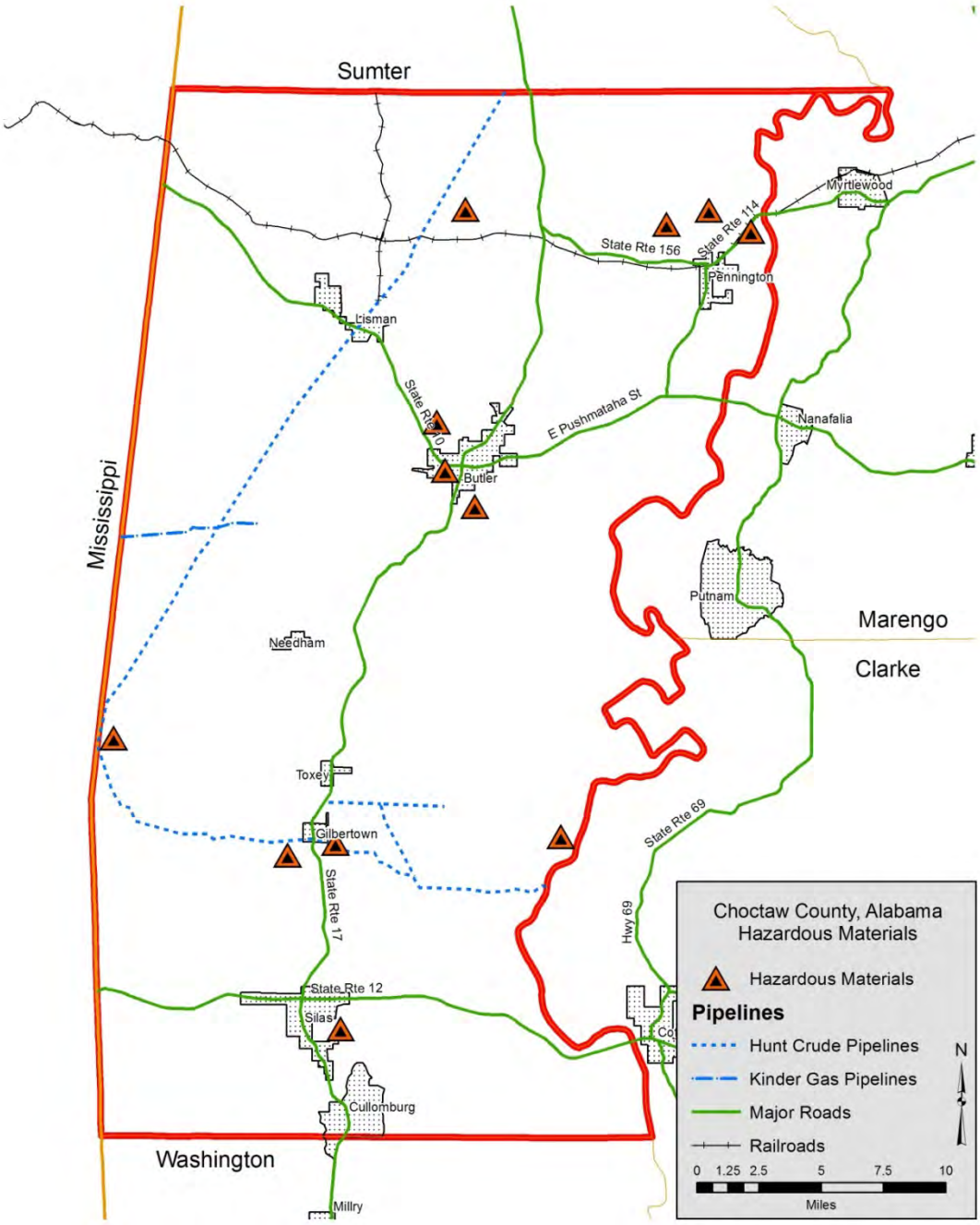
ii. Critical Facilities – The Hazard Mitigation Planning Committee updated this list of critical facilities in Choctaw County included in the 2014 and 2019 Hazard Mitigation Plan. The groups of critical facilities include communication facilities, emergency response facilities, hazardous material sites, medical care facilities, and schools. Other critical facilities identified were the Choctaw County Ferry along with the Historic Choctaw County Courthouse. Maps of each of these facilities are depicted in Maps 13-17.



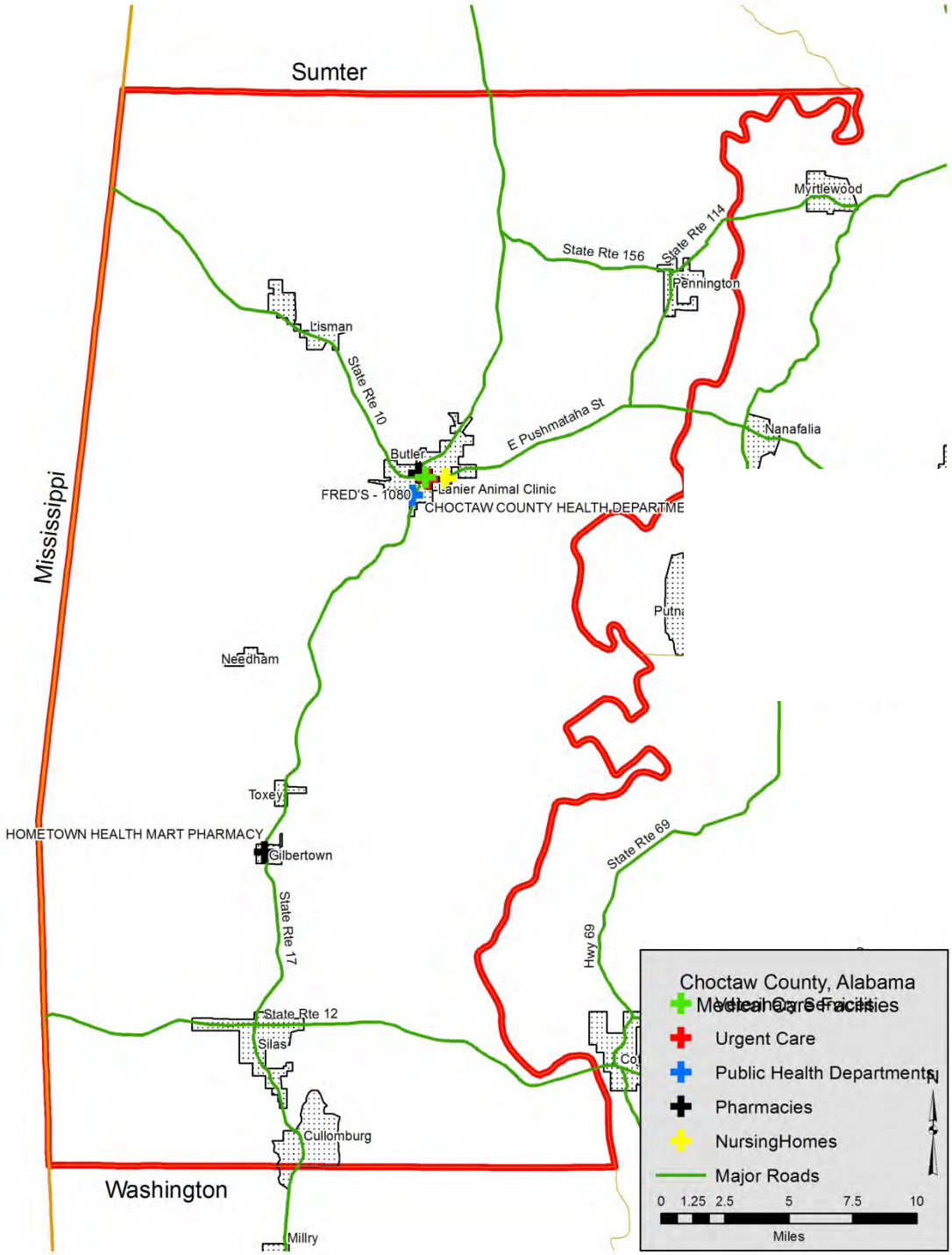
Map 12 – Choctaw County Communication Facilities



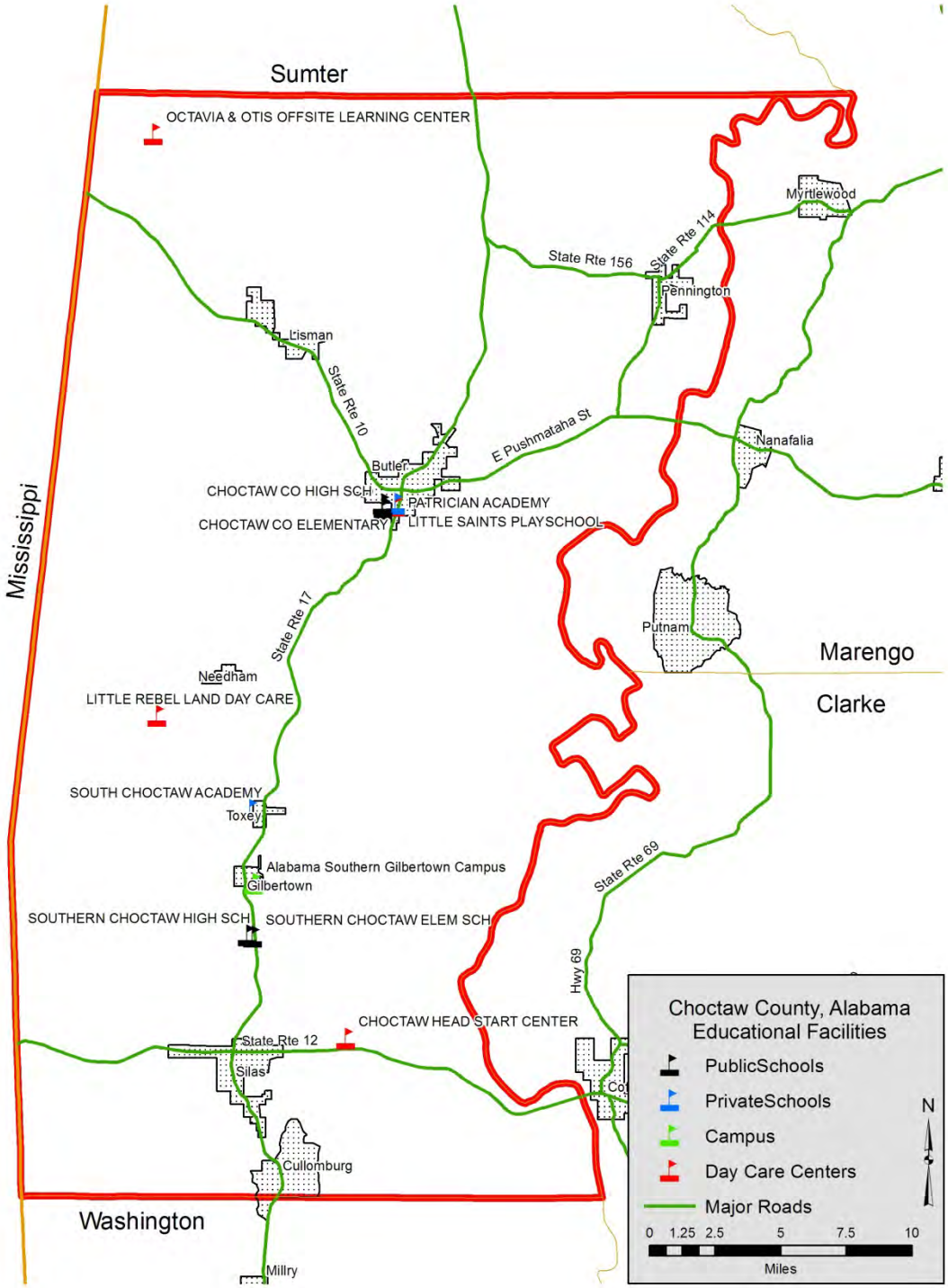
Map 13 – Choctaw County Emergency Facilities



Map 14 – Choctaw County Hazardous Materials



Map 15 – Choctaw County Medical Facilities



Map 16 – Choctaw County Schools

iii. Estimated Losses by Hazard – Table 13 list the population of each jurisdiction and the estimated number of people vulnerable to the hazard for each jurisdiction in Choctaw County. Note it is estimated that 5% of the land area is in a flood zone in Choctaw County. Therefore, it is assumed 5% of the population is vulnerable to flooding. Table 14 analyzes the number of building exposed to each hazard type and Table 15 lists the amount of value of property exposed to hazards. The methodology used to determine the value used data from the HAZUS database along the property assessments made available from the Choctaw County Revenue Commission. Table 16 lists the number future buildings and Table 16 lists the value of future structures. Each jurisdiction is vulnerable for all of the hazard equally. All of the entities in Choctaw County participate in the National Flood Insurance Program (NFIP) including unincorporated Choctaw County, City of Butler, Town of Pennington, Town of Silas, and Town of Gilbertown. The Town of Lisman, Neeham and Toxey do not participate in the National Flood Insurance Program because there are not houses constructed in the flood zones. According to FEMA's Policy Statistics updated 1/31/2012, there have been 9 policies issued since 1980 for both all active entities in Choctaw County and the associated jurisdictions. The value of all the policies written in-force is $27,907.88 for Choctaw County and all of the County's jurisdictions as well.

Community Name	Initial Identification Flood Hazard Boundary Map	Revisions	Effective Date FIRM	Revisions Date
Unincorporated Choctaw County	01/27/78	09/30/88	09/03/10	09/30/88
Butler	04/21/78	09/11/09	9/11/2009	09/11/09
Gilbertown	10/15/76	07/03/86	09/03/10(M)	07/03/86
Lisman Not participating		08/03/89	09/03/10	08/03/89
Needham Not participating		09/03/10	09/03/10	09/03/2011
Pennington	03/03/78	09/18/85	09/03/10(M)	09/18/85
Silas	9/30/88	09/30/88	9/03/10(M)	2/27/06
Toxey Not participating	02/18/77	09/03/10	09/03/10	2/18/78

Table 20. NFIP Community Participation

	Unincorporated Choctaw County	Butler	Gilbertown	Lisman	Needham	Pennington	Silas	Toxey
Hurricane/Tropical Storm	10302	1894	215	539	99	221	452	137
Flood	515	95	10	27	0	0	0	0
Severe Storm	10302	1894	215	539	99	221	452	137
Tornadoes	10302	1894	215	539	99	221	452	137
Wildfire	10302	1894	215	539	99	221	452	137
Drought/Heat Waves	10302	1894	215	539	99	221	452	137
Winter Storms/Freezes	10302	1894	215	539	99	221	452	137
Levee/Dam Failures	10302	1894	215	539	99	221	452	137
Landslides	10302	1894	215	539	99	221	452	137
Earthquakes	10302	1894	215	539	99	221	452	137

Table 14. Population vulnerable to hazards in Choctaw County, Alabama

Number of Buildings Exposed to Hazards							
	Residential	Commercial	Industrial	Agriculture	Religious	Government	Education
Hurricane/Tropical Storm	9087	127	78	14	38	14	15
Flood	454	6	4	1	2	1	1
Severe Storm	9087	127	78	14	38	14	15
Tornadoes	9087	127	78	14	38	14	15
Wildfire	9087	127	78	14	38	14	15
Drought/Heat Waves	9087	127	78	14	38	14	15
Winter Storms/Freezes	9087	127	78	14	38	14	15
Levee/Dam Failures	9087	127	78	14	38	14	15
Landslides	9087	127	78	14	38	14	15
Earthquakes	9087	127	78	14	38	14	15

Table 15. Number of building exposed to hazards in Choctaw County, Alabama. Source HAZUS database and Choctaw County Commission.

Value of Property Exposed to Hazards							
	Residential	Commercial	Industrial	Agriculture	Religious	Government	Education
Hurricane/Tropical Storm	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Flood	$3,925,600.00	$227,538.70	$171,282.80	$49,237.70	$162,937.25	$9,260.05	$12,287.35
Severe Storm	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Tornadoes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Wildfire	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Drought/Heat Waves	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Winter Storms/Freezes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Levee/Dam Failures	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Landslides	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Earthquakes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00

Table 16 – Value of Property exposed to Hazards in Choctaw County, Alabama (source HAZUS and Choctaw County Commission

	Residential	Commercial	Industrial	Agriculture	Religious	Government	Education
Hurricane/Tropical Storm	4450	200	40	647	29	16	18
Flood	454	6	4	1	2	1	1
Severe Storm	4450	200	40	647	29	16	18
Tornadoes	4450	200	40	647	29	16	18
Wildfire	4450	200	40	647	29	16	18
Drought/Heat Waves	4450	200	40	647	29	16	18
Winter Storms/Freezes	4450	200	40	647	29	16	18
Levee/Dam Failures	4450	200	40	647	29	16	18
Landslides	4450	200	40	647	29	16	18
Earthquakes	4450	200	40	647	29	16	18

Table 17: Vulnerability of the types and number of future buildings, infrastructure, and critical facilities located in Hazard Areas (Note – this analysis assumes a 0% growth rate)

Value of Property Exposed to Hazards – Future Buildings							
	Residential	Commercial	Industrial	Agriculture	Religious	Government	Education
Hurricane/Tropical Storm	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Flood	$3,925,600.00	$227,538.70	$171,282.80	$49,237.70	$162,937.25	$9,260.05	$12,287.35
Severe Storm	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Tornadoes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Wildfire	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Drought/Heat Waves	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00

Winter Storms/Freezes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Levee/Dam Failures	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Landslides	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00
Earthquakes	$78,512,000.00	$4,550,774.00	$3,425,656.00	$984,754.00	$3,258,745.00	$185,201.00	$245,747.00

Table 18 – Value of Future Property exposed to Hazards in Choctaw County, Alabama (source HAZUS and Choctaw County Commission

iv. Analysis of Development Trends – Development Trends, particularly population shifts and land use changes created by major economic development expansion and infrastructure improvements of countywide significance, are important considerations to effective mitigation planning. These trends must be continually monitored and analyzed to keep abreast of changing vulnerabilities of jurisdictions and the natural hazards. As growth and development patterns change over time, the risk to property damage and lives also change. This section examines the project growth trend and other impacts of countywide significance that are expected to affect the location and extent of natural hazard vulnerability overtime.

Choctaw County is mostly rural with minor areas of development in Butler and Gilbertown. This area has experienced very little growth over the past 20 years. There has been negative growth of industries and jobs. Specifically with the closing of downsizing of the Georgia Pacific Plan during the mid 2000s. Choctaw County's population decreased 1.5% during the decade 1990-2000. Only the Town of Silas showed positive growth in population. Little population change in the county is forecast out to year 2025. New residential developments in Choctaw County are minimal. However, growth and development could accelerate with the possible expansion of U.S. Highway 84 from two to four lanes. U.S. Highway 84 runs through Choctaw County, and, with the expansion completed, would serve as a major east-west transportation route. In recent history, county initiatives have encouraged the growth of small businesses within Choctaw County.

v. Risk Assessment by Jurisdiction – Table 16 lists each jurisdiction in Choctaw County ranked in terms of risk of natural hazards (1= highest risk, 1O=lowest risk). All jurisdictions are equally at risk for tornadoes, severe storms, earthquakes, wildfires, extreme cold, winter storms, drought and extreme heat. The jurisdictions have varying degrees of risk pertaining to flooding and landslides. Unincorporated Choctaw County is most at risk for flooding and is the only jurisdiction with special flood hazard areas mapped. The risk associated with each of these hazards depends upon topography, geology and density of development.

The vulnerability of each of the jurisdictions mimics the unincorporated areas of Choctaw County. Due to the rural nature of the county – each jurisdiction shares the same vulnerability.

	Unincorporated Choctaw County	Butler	Gilbertown	Lisman	Needham	Pennington	Silas	Toxey
Hurricane/Tropical Storm	1	1	1	1	1	1	1	1
Flood	2	2	2	2	2	2	2	2
Severe Storm	3	3	3	3	3	3	3	3
Tornadoes	4	4	4	4	4	4	4	4
Wildfire	5	5	5	5	5	5	5	5
Drought/Heat Waves	6	6	6	6	6	6	6	6
Winter Storms/Freezes	7	7	7	7	7	7	7	7
Levee/Dam Failures	8	8	8	8	8	8	8	8
Landslides	9	9	9	9	9	9	9	9
Earthquakes	10	10	10	10	10	10	10	10

Table 19 Multi-Jurisdictional Risk Assessment

o. What has changed in the Plan Update – the Risk Assessment used more available data available since 2010 and 2014.

5. Mitigation Strategies

a. Purpose of Mitigation Goals Strategies - These mitigation strategies provide a blueprint for each participating jurisdiction to reduce the potential losses identified in the risk assessment through a comprehensive plan of goals, objectives, and policies. It guides the communities that have participated in its preparation through the Hazard Mitigation Planning Committee (HMPC). These communities have adopted this plan and committed their resources to achieve its goals.

b. Identification and Analysis of Mitigation Measures - The Hazard Mitigation Planning Committee guided the preparation of these strategies. The Committee first reviewed the risk assessment to determine the most critical hazard threats to each jurisdiction (see Chapter 4. Risk Assessment). Next, the Committee reviewed existing authorities, policies, programs, and resources through an exercise to rate the capabilities of each jurisdiction to implement mitigation measures. Finally, the HMPC analyzed a broad range of available mitigation measures. On this basis, the Committee evaluated the ability of each jurisdiction to expand on and improve these tools. The Committee recommends those measures that might best respond to the vulnerability concerns within the existing and potential capabilities of each jurisdiction.

c. Types of Mitigation Activities – The planning approach presented here follows the six categories of a comprehensive hazard mitigation program. These program categories have been developed by FEMA for managing a successful mitigation program and are used here as guidelines for identifying and selecting among alternative mitigation measures:

1. Prevention. Adopting and administering ordinances, regulations, and programs that manage the development of land and buildings to minimize risks of loss due to natural hazards.
2. Property Protection. Protecting structures and their occupants and contents from the damaging effects of natural hazard occurrences, including retrofitting existing structures to increase their resistance to damage and exposure of occupants to harm; relocating vulnerable structures and occupants from hazard locations; and conversion of developed land to permanent open space through acquisition and demolition of existing structures.
3. Public Education and Outreach. Educating and informing the public about the risks of hazards and the techniques available to reduce threats to life and property.

4. Natural Resources Protection. Preserving and restoring the beneficial functions of the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.
5. Emergency Services. Responding to and recovering from a natural hazard disaster.
6. Structural Projects. Engineering structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of a hazard on a community.

d. Existing Hazard Mitigation Activities –This plan expands on and improves existing mitigation activities

The Choctaw County Emergency Management Agency was established via a resolution of the Choctaw County Commission. The AEMA was established through Section 4 of the Alabama Emergency Management Act of 1955 (Public Law 31-9), Act 47, June 1955. Section 10, Alabama Law, 1955 Act No. 47, directs the establishment of local organization for emergency management in accordance with the state emergency management plan and programs. The local organizations have the responsibility for coordinating the disaster preparedness, mitigation, response and recovery efforts of local government. Under this legislation, each county is required to have an emergency management organization, either individual or jointly. Appropriate ordinance and/or resolution are required to establish each local organization and must provide for the organization, powers, duties, divisions, services and staff of the agency.

One of the most significant state enabling statutes related to hazard mitigation can be found in the Title 11, Chapter 52, Planning, Zoning, and Subdivision of the Code of Alabama. Section 11-52 et seq is the state planning enabling legislation for municipalities only. First enacted in 1935, the statue provides municipalities broad powers for comprehensive planning, capital improvements programming and the regulation of land use, development, and conservation of land areas through zoning ordinance and subdivision regulations. It permits municipalities to create planning commission to oversee planning and land use controls, and Boards of Adjustments to hear appeals. It is the basis for floodplain management regulations within all municipalities and provides additional powers to control the location and types of development activities that might be affected by other natural hazards, including landslides and land subsidence.

Unincorporated areas of the counties in Alabama are severely restricted by the lack of a state planning enabling statute. Only three counties statewide – Baldwin, Jefferson and parts of Shelby County – are permitted to establish zoning ordinance by special acts adopted by Title 11, Chapter 24 of the Code of Alabama. County commissions are

permitted to regulate the subdivision of land and the construction of streets and utilities with the advice of an advisory board. Municipalities may enforce subdivision regulations with its police jurisdiction which can extend two miles beyond the municipal boundaries within unincorporated areas of a county. Code of Alabama, Title 11, Chapter 19 Sections 11-19-1 through 11-19-24, entitled the Comprehensive Land Use Management Act was enacted to prevent economic and human loss in flood-prone areas and permit counties to manage floodplain development within unincorporated areas. This act provides the established county commissions the authority to create a comprehensive land-use management program floodplain management, in accordance the NFIP criteria. As a result, unincorporated communities are eligible for flood insurance through the NFIP. This program helps mitigate damages cause by floods by controlling land use and development and improve the long-range management of flood prone areas. The statue authorizes each county commission to adopt floodplain management ordinance for unincorporated areas. County Planning Commissions are granted broad authority to control development in flood prone zone by adopting ordinances and Flood Insurance Rate Maps that delineate the various flood zones controlled by the adopted ordinances. Each county must appoint and administrator of the program and provide for a Board of Adjustment to hear appeals to the ordinance requirements.

e. Mitigation Issues and Opportunities – The policies of this plan respond to the mitigation issues and opportunities presented in this section. These are derived from the findings of the risk assessment and capability assessment and discussions with members of the HMPC.

Prevention

- Tornadoes, severe storms and hurricanes are the most threatening hazards to Choctaw County communities.
- No Choctaw County municipalities practice comprehensive planning.
- The county expects a slight population increase of 1.1% out to year 2025.
- A large number of areas depicted on the Flood Insurance Rate Maps are designated "Approximate" zones where no detailed studies and flood elevation data exist.
- Unincorporated Choctaw County, Town of Butler, Town of Gilbertown, and Town of Pennington are the only jurisdictions that participate in the NFIP.
- The municipalities of Lisman, Needham, Toxey and Silas are exempt.

Property Protection

- Standard homeowner and business insurance policies do not cover flood damages.
- Many older homes and buildings located in flood plains are not protected from flooding.

Public Education and Outreach

- Real estate agents and property owners have a continuing need for flood map information.
- The public is generally unaware of risks associated with hazards and the mitigation measures available for property protection.
- Local libraries are available to serve as repositories for information on hazards and methods of protection.
- Technical assistance materials are available through FEMA to assist property owners on alternative property protection measures.
- School environmental education programs provide excellent opportunities for public education on hazard mitigation alternatives.
- A multitude of public outreach opportunities and resources are available.
- Public information activities are among the least expensive mitigation measures but often the most effective.

Natural Resources Protection

- Stream and river banks and riparian zones help manage floods and filter runoff.
- Accidental or intentional dumping of household and commercial, such as household garbage, tires, shopping carts, and landscape debris, can obstruct flows.
- Storm-damaged trees - resulting from hurricanes, tornadoes, severe thunderstorms, and wind storms- can clog streets and access during periods of disaster response, obstruct the natural discharge of flood waters, disrupt utility services, increase debris removal, damage property, and increase disaster recovery costs.

Emergency Services

1. Weather radios in homes and businesses provide inexpensive means for advance warning.
2. Further, an extensive outdoor siren system should be installed in Choctaw County due the high frequency and intensity of tornadoes.

Structural Projects

1. Regular maintenance of streams and drainage ways is critical to their effective operation for storm water discharge.

f. Mitigation Policies Plan

This section presents the long-term, comprehensive plan for mitigation of natural hazards. Each of these mitigation actions will be carried out by the Choctaw County Emergency Management in coordination with local, state, federal, and other agencies. 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 policies 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.

Over the last 6 years, Choctaw County has had success in implementing actions form the 2010 plan. Some of the actions have been completed; however most are processes and have not yet been completed. Also, some mitigation measures have been deleted from the plan as they were determined by the Hazard Mitigation Planning Committee to be no longer relevant or current or have been completed.

Completed Mitigation Strategies from 2010 Plan

- Seek a countywide update of all FIRMs in digital format, with an emphasis on detailed studies of developed and developing areas with elevations provided and floodways delineated. Note FEMA published new FIRM maps for Choctaw County on 9/30/2010.

Mitigation Strategies deleted from 2012 Plan:

- Distribute FEMA Publication 320- Taking Shelter From the Storm: Building a Safe Room in Your House- to local homebuilders – the committee deleted this mitigation strategy as social media and internet based communication is more effective in 2013.
- Distribute hazard mitigation brochures to area schools for distribution to students– the committee deleted this mitigation strategy as social media and internet based communication is more effective in 2013.
- Obtain free publications from FEMA, NWS, USGS, and other federal and state agencies and deposit these materials with local libraries– the committee deleted this mitigation strategy as social media and internet based communication is more effective in 2013.
- Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding – the committee deleted this mitigation strategy as there are very few homes vulnerable to flooding in Choctaw County.
- Seek funding sources, such as Community Development Block Grant funds, to assist low income home owners with building retrofits to protect against flood damage – The committee deleted this mitigation measure because CDBG funds are scarce and do not prioritize these types of projects.
- Promote mitigation and severe weather awareness, through an annual severe weather awareness event. – The committee deleted this mitigation strategy because they opted for internet based and social media to best communicate weather safety to the County’s residents.

The following table is a listing of new and/or continued mitigation measures adopted for each jurisdiction. Each item is prioritized by Low, Medium, and High. Items listed high priority have been ranked by the HMPC to me 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 10 years and low should take place in the next 15-20 years. The mitigation strategies did not change from the 2014 plan as there was very little growth and/or changes that took place in Choctaw County. The mitigation plan did not integrate during the last planning cycle for any of the eligible jurisdictions. None of the priorities changed in the plan update for Choctaw County or any of the jurisdictions.

Mitigation Measures for Unincorporated Choctaw County (New and Continued from 2013 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
4	Prevention	All	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding				
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	10 years
9	Prevention	Hurricane Tornado	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year

			feasible					
10	Prevention	Tornado, Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP ADECA	5 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	5 years
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Flood, Hurricane, Tornado	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	2 years
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
16	Property Protection	Tornado, Hurricane,	Promote good construction practices	HMGP grants, General Fund,	Medium	Choctaw County EMA	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding				
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Choctaw County EMA	HMGP	Ongoing

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years
23	Property Protection	Tornadoes and hurricanes	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	Ongoing
25	Public Education and Outreach	Flood	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	1 year
26	Public Education	All	Conduct regular public meetings of hazards	HMGP grants, General Fund,	Low	Choctaw County EMA	HMGP	1 year

	and Outreach		and mitigation measures	other grant				
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Choctaw County EMA	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	5 years
30	Natural Resource Protection	Fire, Landslide	Enact and enforce erosion and sedimentation control regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	1 year

31	Natural Resource Protection	Flood	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	10 years
32	Natural Resource Protection	All	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	10 years
36	Structural Projects	Flood, Huricane and	Continue to improve and maintain county road system	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP	5 years

		Tornado, landslide and Earthquake		funding				
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years

			Courthouse, and all water and sewer facilities throughout Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years

Town of Butler Mitigation Measures (New and Continued from 2013 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA, Butler Police Chief	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Butler Building Official	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding				
5	Prevention	Flood	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	10 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	1 year

			feasible					
10	Prevention	Hurricane and Tornado	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP ADECA	5 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	5 years
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Flood	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	2 years
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	2 years
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	Butler Police Chief	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding				
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	2 years
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	2 years
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Butler Police Chief	HMGP	Ongoing

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	5 years
23	Property Protection	Hurricane Tornado	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	5 years
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	Ongoing
25	Public Education and Outreach	Flood	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	Butler Police Chief	HMGP	1 year
26	Public Education	All	Conduct regular public meetings of hazards	HMGP grants, General Fund,	Low	Butler Police Chief	HMGP	1 year

	and Outreach		and mitigation measures	other grant				
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Butler Police Chief	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Butler Police Chief	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Butler Police Chief	HMGP	5 years
30	Natural Resource Protection	Fire, Landslide and Earthquak	Enact and enforce erosion and sedimentation control regulations	HMGP grants, General Fund, other grant funding	Low	Butler Police Chief	HMGP	1 year

		e						
31	Natural Resource Protection	Fire	Seek technical assistance through hthe Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Butler Police Chief	HMGP	10 years
32	Natural Resource Protection	Fire	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Butler Police Chief	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	10 years
36	Structural	All	Continue to improve	HMGP grants,	High	Butler Police	HMGP	5 years

	Projects		and maintain county road system	General Fund, other grant funding		Chief		
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Butler Police Chief	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all water and sewer	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	5 years

			facilities throughout Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication infrastructure	HMGP grants, General Fund, other grant funding	High	Butler Police Chief	HMGP	

i. Town of Gilbertown Mitigation Measures (New and Continued from 2013 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Town of Gilbertown	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP and ADECA	1 year

			the State and Federal level.	funding				
4	Prevention	Flood	Continue to participate in the NFIP and participate in the future even if not a currently enrolled.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Town of Gilbertown	HMGP and ADECA	Ongoing
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Town of Gilbertown	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	10 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public	HMGP grants, General Fund, other grant	High	Gilbertown Clerk and Police Chief	HMGP	1 year

			buildings, such as new schools, libraries, community centers and other public buildings when feasible	funding				
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP ADECA	5 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	5 years
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Flood	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	2 years
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	Ongoing
15	Property	All	Provide back-up	HMGP grants,	High	Gilbertown	HMGP	2 years

	Protection		power for critical facilities and fire stations	General Fund, other grant funding		Clerk and Police Chief		
16	Property Protection	Flood, Fire	Promote good construction practices and proper code enforcement to eliminate most structural problems during natural hazard events	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	2 years
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	2 years
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	2 years
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	Ongoing

			high-risk flooding areas.					
21	Property Protection	All	Continue to send law enforcement and fire personnel to emergency response training	HMGP grants, General Fund, other grant funding	Low	Gilbertown Clerk and Police Chief	HMGP	Ongoing
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	5 years
23	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	5 years
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	Ongoing
25	Public Education and Outreach	Flood	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper	HMGP grants, General Fund, other grant funding	Medium	Gilbertown Clerk and Police Chief	HMGP	1 year

			announcements.					
26	Public Education and Outreach	All	Conduct regular public meetings of hazards and mitigation measures	HMGP grants, General Fund, other grant	Low	Gilbertown Clerk and Police Chief	HMGP	1 year
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Landslide, Fire, Earthquake	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Gilbertown Clerk and Police Chief	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Gilbertown Clerk and Police Chief	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Gilbertown Clerk and Police Chief	HMGP	5 years
30	Natural	Fire and	Enact and enforce	HMGP grants,	Low	Gilbertown	HMGP	1 year

	Resource Protection	Flood	erosion and sedimentation control regulations	General Fund, other grant funding		Clerk and Police Chief		
31	Natural Resource Protection	Flood	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Gilbertown Clerk and Police Chief	HMGP	10 years
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Gilbertown Clerk and Police Chief	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	10 years

36	Structural Projects	All	Continue to improve and maintain county road system	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	5 years
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Gilbertown Clerk and Police Chief	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	5 years

			water and sewer facilities throughout Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Gilbertown Clerk and Police Chief	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Mayor and Town Clerk	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Mayor and Town Clerk	HMGP	5 years

ii. Town of Lisman Mitigation Measures (New and Continued from 203 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	2 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and City of Lisman	FEMA flood maps, HMGP, ADECA	Ongoing
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County EMA and City of	HMGP and ADECA	1 year

			future even if not a currently enrolled.	funding		Lisman		
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and City of Lisman	HMGP and ADECA	5 years
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	10 years
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	5 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	5 years

			feasible					
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP ADECA	10 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	2 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Flood	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	2 years
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	2 years
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	2 years
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	Lisman Mayor and	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding		Town Clerk		
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	Completed
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	Ongoing
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	Ongoing
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	5 years
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Lisman Mayor and Town Clerk	HMGP	5 years

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	
23	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	1 year
25	Public Education and Outreach	All	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	Lisman Mayor and Town Clerk	HMGP	
26	Public Education	All	Conduct regular public meetings of hazards	HMGP grants, General Fund,	Low	Lisman Mayor and	HMGP	5 years

	and Outreach		and mitigation measures	other grant		Town Clerk		
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Lisman Mayor and Town Clerk	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Lisman Mayor and Town Clerk	HMGP	1 year
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Lisman Mayor and Town Clerk	HMGP	10 years
30	Natural Resource Protection	Fire and Landslie	Enact and enforce erosion and sedimentation control regulations	HMGP grants, General Fund, other grant funding	Low	Lisman Mayor and Town Clerk	HMGP	5 years

31	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Lisman Mayor and Town Clerk	HMGP	
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Lisman Mayor and Town Clerk	HMGP	
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	10 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	5 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	5 years
36	Structural Projects	All	Continue to improve and maintain county road system	HMGP grants, General Fund, other grant	High	Lisman Mayor and Town Clerk	HMGP	

				funding				
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Lisman Mayor and Town Clerk	HMGP	1 year
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	2 years
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	5 years
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	10 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all water and sewer facilities throughout Choctaw County.	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	3 years

42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Lisman Mayor and Town Clerk	HMGP	5 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	Ongoing
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	Ongoing

iii. Town of Needham (New and Continued from 2013 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding				
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	10 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	1 year

			feasible					
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP ADECA	5 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	5 years
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Tornado and Hurricane	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	2 years
14	Property Protection	Flood	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	2 years
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	Choctaw EMA	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding				
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	2 years
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	2 years
19	Property Protection	Floodl	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Choctaw EMA	HMGP	Ongoing

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	5 years
23	Property Protection	All	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	5 years
Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Choctaw EMA	HMGP	
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	Ongoing
25	Public Education and Outreach	All	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	1 year

			announcements.					
26	Public Education and Outreach	All	Conduct regular public meetings of hazards and mitigation measures	HMGP grants, General Fund, other grant	Low	Choctaw EMA	HMGP	1 year
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Choctaw EMA	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Choctaw EMA	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw EMA	HMGP	5 years
30	Natural	Fire and	Enact and enforce	HMGP grants,	Low	Choctaw	HMGP	1 year

	Resource Protection	Landslide and Earthquake	erosion and sedimentation control regulations	General Fund, other grant funding		EMA		
31	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Choctaw EMA	HMGP	10 years
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Choctaw EMA	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant	High	Choctaw EMA	HMGP	10 years

				funding				
36	Structural Projects	All	Continue to improve and maintain county road system	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	5 years
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Choctaw EMA	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	5 years

			Courthouse, and all water and sewer facilities throughout Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Choctaw EMA	HMGP	5 years

iv.

v. Town of Pennington Mitigation Measures (New and Continued from 2010 Plan)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	Ongoing
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Town Clerk	FEMA flood maps, HMGP, ADECA	Ongoing
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP and ADECA	Ongoing
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	County EMA and Town Clerk	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding				
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP and ADECA	Ongoing
6	Prevention	All	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP and ADECA	Ongoing
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP and ADECA	Ongoing
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	County EMA and Town Clerk	HMGP and ADECA	Ongoing
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing

			feasible					
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP ADECA	Ongoing
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP	Ongoing
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP	Ongoing
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Flood	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	Ongoing
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	County EMA and Town	HMGP	Ongoing

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding		Clerk		
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	County EMA and Town Clerk	HMGP	Ongoing

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
23	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Choctaw EMA	HMGP	Ongoing
25	Public Education and Outreach	All	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	County EMA and Town Clerk	HMGP	Ongoing

26	Public Education and Outreach	All	Conduct regular public meetings of hazards and mitigation measures	HMGP grants, General Fund, other grant	Low	County EMA and Town Clerk	HMGP	Ongoing
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire, Landslide and Earthquake	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	County EMA and Town Clerk	HMGP	Ongoing
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	County EMA and Town Clerk	HMGP	Ongoing
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	County EMA and Town Clerk	HMGP	Ongoing
30	Natural Resource	Fire and Lanslide	Enact and enforce erosion and	HMGP grants, General Fund,	Low	County EMA and Town	HMGP	Ongoing

	Protection		sedimentation control regulations	other grant funding		Clerk		
31	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	County EMA and Town Clerk	HMGP	Ongoing
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	County EMA and Town Clerk	HMGP	Ongoing
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
36	Structural	Flood	Continue to improve	HMGP grants,	High	County EMA	HMGP	Ongoing

	Projects		and maintain county road system	General Fund, other grant funding		and Town Clerk		
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	County EMA and Town Clerk	HMGP	Ongoing
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all water and sewer	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing

			facilities throughout Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	County EMA and Town Clerk	HMGP	Ongoing

vi. Town of Silas Mitigation Measures (New and Continued from 2010)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP and ADECA	1 year
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County EMA and Silas	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding		Town Clerk		
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP and ADECA	1 year
7	Prevention	Flood	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA and Silas Town Clerk	HMGP and ADECA	10 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	1 year

			feasible					
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP ADECA	5 years
11	Prevention	All	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
12	Prevention	All	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Tornado and Hurricane	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	2 years
14	Property Protection	Flood	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	2 years
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	Choctaw County EMA	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding		and Silas Town Clerk		
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	2 years
18	Property Protection	Tornado and Hurricane	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	2 years
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Choctaw County EMA and Silas	HMGP	Ongoing

			emergency response training	funding		Town Clerk		
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
23	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	Ongoing
25	Public Education and Outreach	All	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	1 year
26	Public Education	All	Conduct regular public meetings of hazards	HMGP grants, General Fund,	Low	Choctaw County EMA	HMGP	1 year

	and Outreach		and mitigation measures	other grant		and Silas Town Clerk		
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Choctaw County EMA and Silas Town Clerk	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
30	Natural Resource Protection	Lanslide, Fire and Earthquake	Enact and enforce erosion and sedimentation control regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA and Silas Town Clerk	HMGP	1 year

31	Natural Resource Protection	Fire	Seek technical assistance through hthe Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA and Silas Town Clerk	HMGP	10 years
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	10 years
36	Structural Projects	Flood	Continue to improve and maintain county	HMGP grants, General Fund,	High	Choctaw County EMA	HMGP	5 years

			road system	other grant funding		and Silas Town Clerk		
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA and Silas Town Clerk	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all water and sewer facilities throughout	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years

			Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA and Silas Town Clerk	HMGP	5 years

vii.

viii. Town of Toxey Mitigation Measures (New and Continued from 2010)

Mitigation Measure Number	Program Objective	Hazards Addressed	Mitigation Measure	Funding Resources	Priority	Responsible Department	Existing Potential Resources	Timeframe
Goal: Maintain a comprehensive database of hazard locations, socio economic data, infrastructure, and critical facilities inventories								
1	Prevention	All	Maintain a centralized countywide natural hazards and risk assessment database in GIS that is accessible to all personnel including flood zones, geohazards, major drainage structures, dams/levees; tornado tracks,	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	Virtual Alabama, GIS Data, HMGP	5 years
Goal: Manage the development of land and buildings to minimize the risks of loss due to natural hazards								
2	Prevention	Flood	Effectively administer and enforce local floodplain management regulations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	FEMA flood maps, HMGP, ADECA	2 years
3	Prevention	Flood	Train local floodplain managers through programs offered at the State and Federal level.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	1 year
4	Prevention	Flood	Continue to participate in the NFIP and participate in the	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP and ADECA	Ongoing

			future even if not a currently enrolled.	funding				
5	Prevention	All	Maintain a library of technical assistance and guidance materials for local floodplain managers and use Choctaw County EMA website for implementation	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
6	Prevention	Flood	Promote adoption of uniform flood hazard prevention ordinance among all of the NFIP communities in Choctaw County.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP and ADECA	1 year
7	Prevention	All	Acquire GIS software for marinating risk assessment data	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP and ADECA	5 years
8	Prevention	All	Prepare and adopt a comprehensive plan	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP and ADECA	10 years
9	Prevention	Tornado and Hurricane	Require the construction of Safe Rooms in new public buildings, such as new schools, libraries, community centers and other public buildings when	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year

			feasible					
10	Prevention	Tornado and Hurricane	Construct free-standing public Safe Rooms in existing vulnerable locations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP ADECA	5 years
11	Prevention	Tornado and Hurricane	Apply for funding to update/revise mitigation plan when needed	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	5 years
12	Prevention	Tornado and Hurricane	Conduct special studies as needed to identify hazard risks and mitigation measures	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	10 years
Goal: Protect structures and their occupants and contents from damaging effects of natural hazards								
13	Property Protection	Fl;ood	Encourage retrofits of older homes constructed before the enactment of floodplain regulations	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	2 years
14	Property Protection	All	Maintain insurance riders on existing properties	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	Ongoing
15	Property Protection	All	Provide back-up power for critical facilities and fire stations	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
16	Property Protection	All	Promote good construction practices	HMGP grants, General Fund,	Medium	Choctaw County EMA	HMGP	2 years

			and proper code enforcement to eliminate most structural problems during natural hazard events	other grant funding				
17	Property Protection	Tornado and Hurricane	Encourage the construction of safe rooms within new public buildings, such as new schools, libraries, community centers, and other public buildings where feasible.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
18	Property Protection	Tornado and Hurricane l	Retrofit public schools with community Safe Rooms.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
19	Property Protection	Flood	Increase access to Flood Insurance Rate Maps.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	Completed
20	Property Protection	Flood	Promote the purchase of flood insurance coverage by property owners and renters in high-risk flooding areas.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	Ongoing
21	Property Protection	All	Continue to send law enforcement and fire personnel to	HMGP grants, General Fund, other grant	Low	Choctaw County EMA	HMGP	Ongoing

			emergency response training	funding				
22	Property Protection	Fire	Install water infrastructure and Fire hydrants in rural areas	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years
23	Property Protection	All	Encourage the construction of safe rooms in new and existing construction.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years
Goal: Education and inform the public about the risk of hazards and the techniques available to reduce threats to life and property.								
24	Public Education and Outreach	All	Maintain appropriate media relationships to ensure the public is informed of hazard threats and means to mitigate property damages and loss of life.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	Ongoing
25	Public Education and Outreach	All	Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through local trade publications and newspaper announcements.	HMGP grants, General Fund, other grant funding	Medium	Choctaw County EMA	HMGP	1 year
26	Public Education	All	Conduct regular public meetings of hazards	HMGP grants, General Fund,	Low	Choctaw County EMA	HMGP	1 year

	and Outreach		and mitigation measures	other grant				
Goal: Preserve and restore the beneficial functions of natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.								
27	Natural Resource Protection	Fire	Maintain a healthy forest that can help mitigation the damaging impacts of flooding, erosion, landslides, and wild fires within urban and rural areas	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP	5 years
28	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System and/or the Alabama Forestry Commission with Best Management Practices (BMPs) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant	Medium	Choctaw County EMA	HMGP	10 years
20	Natural Resource Protection	Fire	Enact and enforce dumping regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	5 years
30	Natural Resource Protection	All	Enact and enforce erosion and sedimentation control regulations	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	1 year

31	Natural Resource Protection	Fire	Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel and drainage system maintenance.	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	10 years
32	Natural Resource Protection	Fire and Flood	Encourage land acquisition programs to acquire habitat throughout Choctaw County	HMGP grants, General Fund, other grant	High	Choctaw County EMA	HMGP	5 years
Goal: Apply engineered structural modifications to natural systems and public infrastructure to reduce potentially damaging impacts of hazards, where feasible, cost effective, and environmentally suitable								
33	Structural Projects	Flood	Improve maintenance programs for streams and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
34	Structural Projects	Flood	Implement drainage improvement in watersheds throughout Choctaw County	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
35	Structural Projects	Flood	Continue to clear debris from roads and drainage ways	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	10 years
36	Structural Projects	Flood	Continue to improve and maintain county	HMGP grants, General Fund,	High	Choctaw County EMA	HMGP	5 years

			road system	other grant funding				
37	Structural Projects	Flood	Prepare and implement standard operation procedures for drainage system maintenance	HMGP grants, General Fund, other grant funding	Low	Choctaw County EMA	HMGP	5 years
Goal: Improve the Efficiency, timing, and effectiveness of response and recovery for natural hazard disasters								
38	Emergency Services	All	Improve public warning systems	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year
39	Emergency Services	All	Improve public access to weather alerts	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	1 year
40	Emergency Services	All	Use social media to provide information about the public about dangerous weather	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	2 years
41	Emergency Services	All	Purchase emergency generators for post-disaster mitigation as needed. In particular for the Volunteer Fire Departments, Choctaw County Courthouse, and all water and sewer facilities throughout	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years

			Choctaw County.					
42	Emergency Services	All	Install an automated weather monitoring system that transmit data to the County EMA and the NWS, including all-weather stations, precipitation gauges, wind gauges, and temperature gauges	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	10 years
43	Emergency Services	All	Promote the use of weather radios in households and businesses.	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	3 years
44	Emergency Services All	All	Upgrade Critical Communication Infrastructure	HMGP grants, General Fund, other grant funding	High	Choctaw County EMA	HMGP	5 years

6. Plan Maintenance – The Choctaw County Emergency Management Agency is responsible for maintaining the local Hazard Mitigation Plan, including all monitoring, evaluation, and updating activities. As part of this plan update process, the EMA reviewed the status detailed in the 2014 Plan for monitoring, evaluating, and updating the plan and compared it to the plan maintenance activities that took place since plan adoption in 2014.

   Regular plan monitoring will be achieved through Choctaw County EMA's efforts to track mitigation activities. The annual review will take place in June of each year and will be initiated by the Choctaw County EMA Director. The Director will e-mail a survey to each member of the Hazard Mitigation Planning Committee. The survey will request input on the following items:

   1. Changes in the level or risk to the county and its citizens
   2. Changes in laws, policies, or regulations at the local or state level
   3. Changes in the state or local agencies or their procedures that will affect how mitigation programs or funds are administered
   4. Significant changes in funding sources or capabilities
   5. Changes in the composition of Hazard Mitigation Planning Committee
   6. Progress on mitigation actions and new mitigation actions
   7. Major changes to the multi-jurisdictional hazard mitigation plan.

   The Choctaw County Natural Hazards Mitigation Plan will be updated every five years as required by FEMA. At the beginning of the fifth year, the EMA director will begin making arrangements for the plan's update. The process of updating the plan will be undertaken in the same way as the development of the plan. The public participation component will also be included. At least two advertised public meetings will be held to involve the public in the update process. Drafts of the updated plan will also be available for public comment. Within the five-year cycle, a jurisdiction may request to update the plan. If the jurisdiction would like to update only a jurisdiction specific portion, such as mitigation goals/strategies it may do so. Any jurisdiction MUST contact the EMA director in order to ensure he has an amended copy of their part of the plan. Private citizens and/or local businesses may request an update within the five- year planning cycle also. All request made by private citizens and/or local businesses must be made directly to the EMA.

In the event modifications to the plan are warranted as a result of the annual review or other conditions, the Committee will oversee and approve all revisions to the plan. Before any revisions are submitted to the jurisdictions for adoption, a notice will be placed in the local newspaper, allowing an opportunity for the public to review the proposed amendments at the EMA offices, submit written comments, and present comments at a public meeting. The Committee will then submit all revisions for adoption by all of the jurisdictions. A copy of the plan revisions will be submitted to all holders of the original plan in a timely manner.

At the end of the five-year cycle of the Action Program, the Committee will oversee a major update to the plan that follows the federal planning criteria in effect at the time of the update. The updated plan will again be submitted to the AEMA and FEMA for approval.

A critical part of maintaining an effective and relevant natural hazards mitigation plan is ongoing public review and comment. Consequently, the Hazard Mitigation Planning Committee is dedicated to direct involvement of its citizens in providing feedback and comments on the plan throughout the five-year implementation cycle. To this end, a hard copy of the plan will be available for viewing at all appropriate agencies throughout the County; including, at a minimum, the Choctaw County Emergency Management Agency Office, the office of the County Commission, the offices of the Mayors, and the main public library.

The Choctaw County Hazard Mitigation Plan will be incorporated into existing planning mechanisms in all participating jurisdictions. However, since Choctaw County is rural with negligible growth, there are few existing planning mechanisms available. Those jurisdictions with building codes or zoning ordinances will incorporate hazard mitigation strategies into existing codes. These updates will occur as budgets and time allow. Those jurisdictions without building codes or zoning ordinances, that decide to adopt new ordinances, will be required to reflect the goals and objectives they set forth in the plan. Those jurisdictions updating comprehensive plans will also have to reflect their hazard mitigation goals and objectives in their plan. The Choctaw County EMA will also incorporate the plan in the Emergency Operations Plan at the next update. The mitigation plan was reviewed to ensure that any proposed changes (i.e. land use) would not conflict with strategies identified in the plan. The mitigation plan will also be consulted to ensure that no hazards (i.e. landslides, subsidence, and

expansive soil) are present when permits or variances are granted. Strategies and goals identified in the mitigation plan will also be incorporated into other planning mechanisms' strategies and goals. As other jurisdictions update their plans, the same steps will be followed. The municipalities did not integrate the plan with normal operations as these communities are very small and little change occurs. Since the last plan was approved by FEMA, there has been no changes in development in unincorporated Choctaw County and each of the County's jurisdictions. Thus, the vulnerability of each jurisdiction has not changed during this planning cycle.

7. Approval and Adoption – After preliminary review by FEMA, each jurisdiction in Choctaw County will adopt the plan via resolution. The Choctaw County plan update applies to all local agencies, board, commission, and departments assigned mitigation responsibilities, and to others as deigned by the Choctaw County Commission or Director or the Choctaw County Emergency Management Agency.

   The Choctaw County Multi-Hazard Mitigation Plan Update was prepared in compliance with Public Law 106-390, Disaster Mitigation Act of 2000, as amended. This plan update implements hazard mitigation measures intended to eliminate or reduce the effects of further disaster throughout Choctaw County, and was developed in a joint and cooperate venture by members of the Choctaw County Hazard Mitigation Planning Committee. No hazard mitigation priorities changed since the last plan update.

   Choctaw County will comply with all application state and federal statutes and regulations in effect with respect to the periods for which it received grant funding, in compliance with 44 Code of Federal Regulations (CDF) 113.11c. Choctaw County will amend its plan whenever necessary to reflect changes in local/state and/or federal laws and statutes required in 44 CFR, 12,11d. At a minimum, the Choctaw County Emergency Management Agency will review and if necessary, update the plan every five years from the date of approval in accordance with 44 CRF, 201.6 (5) (d0 (3) in order to continue program eligibility.

7. Appendices
    a. Appendix A – 44 CFR 201 Hazard Mitigation Planning

SUBCHAPTER D—DISASTER ASSISTANCE

PART 200 [RESERVED]

PART 201—MITIGATION PLANNING

Sec.
201.1 Purpose.
201.2 Definitions.
201.3 Responsibilities.
201.4 Standard State Mitigation Plans.
201.5 Enhanced State Mitigation Plans.
201.6 Local Mitigation Plans.
201.7 Tribal Mitigation Plans.

AUTHORITY: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121 through 5207; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; Homeland Security Act of 2002, 6 U.S.C. 101; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; E.O. 13286, 68 FR 10619, 3 CFR, 2003 Comp., p. 166.

SOURCE: 67 FR 8848, Feb. 26, 2002, unless otherwise noted.

§201.1 Purpose.

(a) The purpose of this part is to provide information on the polices and procedures for mitigation planning as required by the provisions of section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) The purpose of mitigation planning is for State, local, and Indian tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources.

§201.2 Definitions.

Administrator means the head of the Federal Emergency Management Agency, or his/her designated representative.

Flood Mitigation Assistance (FMA) means the program authorized by section 1366 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4104c, and implemented at parts 78 and 79.

Grantee means the government to which a grant is awarded, which is accountable for the use of the funds provided. The grantee is the entire legal entity even if only a particular component of the entity is designated in the grant award document. Generally, the State is the grantee. However, after a declaration, an Indian tribal government may choose to be a grantee, or may act as a subgrantee under the State. An Indian tribal government acting as grantee will assume the responsibilities of a "state", as described in this part, for the purposes of administering the grant.

Hazard mitigation means any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards.

Hazard Mitigation Grant Program (HMGP) means the program authorized under section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5170c, and implemented at part 206, subpart N of this chapter.

Indian Tribal government means any Federally recognized governing body of an Indian or Alaska Native Tribe, band, nation, pueblo, village, or community that the Secretary of Interior acknowledges to exist as an Indian Tribe under the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a. This does not include Alaska Native corporations, the ownership of which is vested in private individuals.

Local government is any county, municipality, city, town, township, public authority, school district, special district, intrastate district, council of governments (regardless of whether the council of governments is incorporated as a nonprofit corporation under State law), regional or interstate government entity, or agency or instrumentality of a local government; any Indian tribe or authorized tribal organization, or Alaska Native village or organization; and any rural community, unincorporated town or village, or other public entity.

Managing State means a State to which FEMA has delegated the authority to administer and manage the HMGP under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c). FEMA may also delegate authority to tribal governments to administer and manage the HMGP as a Managing State.

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Pre-Disaster Mitigation Program (PDM) means the program authorized under section 203 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5133.

Regional Administrator means the head of a Federal Emergency Management Agency regional office, or his/her designated representative.

Repetitive Flood Claims (RFC) program means the program authorized under section 1323 of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4011, which provides funding to reduce flood damages to individual properties for which 1 or more claim payments for losses have been made under flood insurance coverage and that will result in the greatest savings to the National Flood Insurance Program (NFIP) in the shortest period of time.

Severe Repetitive Loss (SRL) program means the program authorized under section 1361(a) of the National Flood Insurance Act of 1968, as amended, 42 U.S.C. 4102a, and implemented at part 79 of this chapter.

Severe Repetitive Loss properties are defined as single or multifamily residential properties that are covered under an NFIP flood insurance policy and:

(1) That have incurred flood-related damage for which 4 or more separate claims payments have been made, with the amount of each claim (including building and contents payments) exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or

(2) For which at least 2 separate claims payments (building payments only) have been made under such coverage, with cumulative amount of such claims exceeding the market value of the property.

(3) In both instances, at least 2 of the claims must be within 10 years of each other, and claims made within 10 days of each other will be counted as 1 claim.

Small and impoverished communities means a community of 3,000 or fewer individuals that is identified by the State as a rural community, and is not a remote area within the corporate boundaries of a larger city; is economically disadvantaged, by having an average per capita annual income of residents not exceeding 80 percent of national, per capita income, based on best available data; the local unemployment rate exceeds by one percentage point or more, the most recently reported, average yearly national unemployment rate; and any other factors identified in the State Plan in which the community is located.

The Stafford Act refers to the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended (42 U.S.C. 5121–5206).

State is any State of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

State Hazard Mitigation Officer is the official representative of State government who is the primary point of contact with FEMA, other Federal agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act.

Subgrantee means the government or other legal entity to which a subgrant is awarded and which is accountable to the grantee for the use of the funds provided. Subgrantees can be a State agency, local government, private nonprofit organizations, or Indian tribal government. Indian tribal governments acting as a subgrantee are accountable to the State grantee.

[67 FR 8848, Feb. 26, 2002, as amended at 72 FR 61747, Oct. 31, 2007; 74 FR 15344, Apr. 3, 2009; 74 FR 47481, Sept. 16, 2009]

§201.3 Responsibilities.

(a) *General.* This section identifies the key responsibilities of FEMA, States, and local/tribal governments in carrying out section 322 of the Stafford Act, 42 U.S.C. 5165.

(b) *FEMA.* The key responsibilities of the Regional Administrator are to:

(1) Oversee all FEMA related pre- and post-disaster hazard mitigation programs and activities;

(2) Provide technical assistance and training to State, local, and Indian tribal governments regarding the mitigation planning process;

(3) Review and approve all Standard and Enhanced State Mitigation Plans;

(4) Review and approve all local mitigation plans, unless that authority has been delegated to the State in accordance with §201.6(d);

(5) Conduct reviews, at least once every three years, of State mitigation activities, plans, and programs to ensure that mitigation commitments are fulfilled, and when necessary, take action, including recovery of funds or denial of future funds, if mitigation commitments are not fulfilled.

(c) *State.* The key responsibilities of the State are to coordinate all State and local activities relating to hazard evaluation and mitigation and to:

(1) Prepare and submit to FEMA a Standard State Mitigation Plan following the criteria established in §201.4 as a condition of receiving non-emergency Stafford Act assistance and FEMA mitigation grants. In addition, a State may choose to address severe repetitive loss properties in their plan as identified in §201.4(c)(3)(v) to receive the reduced cost share for the Flood Mitigation Assistance (FMA) and Severe Repetitive Loss (SRL) programs, pursuant to §79.4(c)(2) of this chapter.

(2) In order to be considered for the 20 percent HMGP funding, prepare and submit an Enhanced State Mitigation Plan in accordance with §201.5, which must be reviewed and updated, if necessary, every three years from the date of the approval of the previous plan.

(3) At a minimum, review and update the Standard State Mitigation Plan every 3 years from the date of the approval of the previous plan in order to continue program eligibility.

(4) Make available the use of up to the 7 percent of HMGP funding for planning in accordance with §206.434.

(5) Provide technical assistance and training to local governments to assist them in applying for HMGP planning grants, and in developing local mitigation plans.

(6) For Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c), review and approve local mitigation plans in accordance with §201.6(d).

(d) *Local governments.* The key responsibilities of local governments are to:

(1) Prepare and adopt a jurisdiction-wide natural hazard mitigation plan as a condition of receiving project grant funds under the HMGP, in accordance with §201.6.

(2) At a minimum, review and update the local mitigation plan every 5 years from date of plan approval of the previous plan in order to continue program eligibility.

(e) *Indian tribal governments.* The key responsibilities of the Indian tribal government are to coordinate all tribal activities relating to hazard evaluation and mitigation and to:

(1) Prepare and submit to FEMA a Tribal Mitigation Plan following the criteria established in §201.7 as a condition of receiving non-emergency Stafford Act assistance as a grantee. This plan will also allow Indian tribal governments to apply through the State, as a subgrantee, for any FEMA mitigation project grant. Indian tribal governments with a plan approved by FEMA on or before October 1, 2008 under §201.4 or §201.6 will also meet this planning requirement. All Tribal Mitigation Plans approved after that date must follow the criteria identified in §201.7. In addition, an Indian Tribal government applying to FEMA as a grantee may choose to address severe repetitive loss properties as identified in §201.4(c)(3)(v) as a condition of receiving the reduced cost share for the FMA and SRL programs, pursuant to §79.4(c)(2) of this chapter.

(2) Review and update the Tribal Mitigation Plan at least every 5 years from the date of approval of the previous plan in order to continue program eligibility.

(3) In order to be considered for the increased HMGP funding, the Tribal Mitigation Plan must meet the Enhanced State Mitigation Plan criteria identified in §201.5. The plan must be reviewed and updated at least every 3 years from the date of approval of the previous plan.

[67 FR 8848, Feb. 26, 2002, as amended at 67 FR 61515, Oct. 1, 2002; 69 FR 55096, Sept. 13, 2004; 72 FR 61748, Oct. 31, 2007; 74 FR 47482, Sept. 16, 2009]

§ 201.4 Standard State Mitigation Plans.

(a) *Plan requirement.* States must have an approved Standard State Mitigation Plans meeting the requirements of this section as a condition of receiving non-emergency Stafford Act assistance and FEMA mitigation grants. Emergency assistance provided under 42 U.S.C. 5170a, 5170b, 5173, 5174, 5177, 5179, 5180, 5182, 5183, 5184, 5192 will not be affected. Mitigation planning grants provided through the Pre-disaster Mitigation (PDM) program, authorized under section 203 of the Stafford Act, 42 U.S.C. 5133, will also continue to be available. The mitigation plan is the demonstration of the State's commitment to reduce risks from natural hazards and serves as a guide for State decision makers as they commit resources to reducing the effects of natural hazards.

(b) *Planning process.* An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

(c) *Plan content.* To be effective the plan must include the following elements:

(1) Description of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

(2) *Risk assessments* that provide the factual basis for activities proposed in the strategy portion of the mitigation plan. Statewide risk assessments must characterize and analyze natural hazards and risks to provide a statewide overview. This overview will allow the State to compare potential losses throughout the State and to determine their priorities for implementing mitigation measures under the strategy, and to prioritize jurisdictions for receiving technical and financial support in developing more detailed local risk and vulnerability assessments. The risk assessment shall include the following:

(i) An overview of the type and location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate;

(ii) An overview and analysis of the State's vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in local risk assessments as well as the State risk assessment. The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned or operated critical facilities located in the identified hazard areas shall also be addressed;

(iii) An overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State shall estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.

(3) A *Mitigation Strategy* that provides the State's blueprint for reducing the losses identified in the risk assessment. This section shall include:

(i) A description of State goals to guide the selection of activities to mitigate and reduce potential losses.

(ii) A discussion of the State's pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; a discussion of State funding capabilities for hazard mitigation projects; and a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.

(iii) An identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local

plans, where specific local actions and projects are identified.

(iv) Identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.

(v) A State may request the reduced cost share authorized under §79.4(c)(2) of this chapter for the FMA and SRL programs, if it has an approved State Mitigation Plan meeting the requirements of this section that also identifies specific actions the State has taken to reduce the number of repetitive loss properties (which must include severe repetitive loss properties), and specifies how the State intends to reduce the number of such repetitive loss properties. In addition, the plan must describe the strategy the State has to ensure that local jurisdictions with severe repetitive loss properties take actions to reduce the number of these properties, including the development of local mitigation plans.

(4) A section on the *Coordination of Local Mitigation Planning* that includes the following:

(i) A description of the State process to support, through funding and technical assistance, the development of local mitigation plans.

(ii) A description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.

(iii) Criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures. Further, that for non-planning grants, a principal criterion for prioritizing grants shall be the extent to which benefits are maximized according to a cost benefit review of proposed projects and their associated costs.

(5) A *Plan Maintenance Process* that includes:

(i) An established method and schedule for monitoring, evaluating, and updating the plan.

(ii) A system for monitoring implementation of mitigation measures and project closeouts.

(iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.

(6) A *Plan Adoption Process.* The plan must be formally adopted by the State prior to submittal to us for final review and approval.

(7) *Assurances.* The plan must include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c) of this chapter. The State will amend its plan whenever necessary to reflect changes in State or Federal statutes and regulations as required in 44 CFR 13.11(d) of this chapter.

(d) *Review and updates.* Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Administrator every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible. We also encourage a State to review its plan in the post-disaster timeframe to reflect changing priorities, but it is not required.

[67 FR 8848, Feb. 26, 2002, as amended at 67 FR 61515, Oct. 1, 2002; 69 FR 55096, Sept. 13, 2004; 72 FR 61565, 61738, Oct. 31, 2007]

§201.5 Enhanced State Mitigation Plans.

(a) A State with a FEMA approved Enhanced State Mitigation Plan at the time of a disaster declaration is eligible to receive increased funds under the HMGP, based on twenty percent of the total estimated eligible Stafford Act disaster assistance. The Enhanced State Mitigation Plan must demonstrate that a State has developed a comprehensive mitigation program, that the State effectively uses available mitigation funding, and that it is capable of managing the increased funding. In order for the State to be eligible for the 20 percent HMGP funding, FEMA must have approved the plan within three years prior to the disaster declaration.

(b) Enhanced State Mitigation Plans must include all elements of the Standard State Mitigation Plan identified in

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§201.4, as well as document the following:

(1) Demonstration that the plan is integrated to the extent practicable with other State and/or regional planning initiatives (comprehensive, growth management, economic development, capital improvement, land development, and/or emergency management plans) and FEMA mitigation programs and initiatives that provide guidance to State and regional agencies.

(2) Documentation of the State's project implementation capability, identifying and demonstrating the ability to implement the plan, including:

(i) Established eligibility criteria for multi-hazard mitigation measures.

(ii) A system to determine the cost effectiveness of mitigation measures, consistent with OMB Circular A–94, Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs, and to rank the measures according to the State's eligibility criteria.

(iii) Demonstration that the State has the capability to effectively manage the HMGP as well as other mitigation grant programs, including a record of the following:

(A) Meeting HMGP and other mitigation grant application timeframes and submitting complete, technically feasible, and eligible project applications with appropriate supporting documentation;

(B) Preparing and submitting accurate environmental reviews and benefit-cost analyses;

(C) Submitting complete and accurate quarterly progress and financial reports on time; and

(D) Completing HMGP and other mitigation grant projects within established performance periods, including financial reconciliation.

(iv) A system and strategy by which the State will conduct an assessment of the completed mitigation actions and include a record of the effectiveness (actual cost avoidance) of each mitigation action.

(3) Demonstration that the State effectively uses existing mitigation programs to achieve its mitigation goals.

(4) Demonstration that the State is committed to a comprehensive state mitigation program, which might include any of the following:

(i) A commitment to support local mitigation planning by providing workshops and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and Floodplain Management certifications.

(ii) A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private partnerships, and/or other executive actions that promote hazard mitigation.

(iii) The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.

(iv) To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.

(v) A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations.

(vi) A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.

(c) *Review and updates.* (1) A State must review and revise its plan to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities, and resubmit it for approval to the appropriate Regional Administrator every three years. The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(2) In order for a State to be eligible for the 20 percent HMGP funding, the Enhanced State Mitigation plan must be approved by FEMA within the three years prior to the current major disaster declaration.

§ 201.6 Local Mitigation Plans.

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

reducing the effects of natural hazards. Local plans will also serve as the basis for the State to provide technical assistance and to prioritize project funding.

(a) *Plan requirements.* (1) A local government must have a mitigation plan approved pursuant to this section in order to receive HMGP project grants. The Administrator may, at his discretion, require a local mitigation plan for the Repetitive Flood Claims Program. A local government must have a mitigation plan approved pursuant to this section in order to apply for and receive mitigation project grants under all other mitigation grant programs.

(2) Plans prepared for the FMA program, described at part 79 of this chapter, need only address these requirements as they relate to flood hazards in order to be eligible for FMA project grants. However, these plans must be clearly identified as being flood mitigation plans, and they will not meet the eligibility criteria for other mitigation grant programs, unless flooding is the only natural hazard the jurisdiction faces.

(3) Regional Administrator's may grant an exception to the plan requirement in extraordinary circumstances, such as in a small and impoverished community, when justification is provided. In these cases, a plan will be completed within 12 months of the award of the project grant. If a plan is not provided within this timeframe, the project grant will be terminated, and any costs incurred after notice of grant's termination will not be reimbursed by FEMA.

(4) Multi-jurisdictional plans (*e.g.* watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process and has officially adopted the plan. State-wide plans will not be accepted as multi-jurisdictional plans.

(b) *Planning process.* An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:

(1) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;

(2) An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and non-profit interests to be involved in the planning process; and

(3) Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.

(c) *Plan content.* The plan shall include the following:

(1) Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

(2) A *risk assessment* that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessments must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment shall include:

(i) A description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

(ii) A description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:

(A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;

(B) An estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the methodology used to prepare the estimate;

(C) Providing a general description of land uses and development trends within the community so that mitigation

options can be considered in future land use decisions.

(iii) For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

(3) *A mitigation strategy* that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

(i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

(ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.

(iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

(iv) For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

(4) A *plan maintenance process* that includes:

(i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

(ii) A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

(iii) Discussion on how the community will continue public participation in the plan maintenance process.

(5) *Documentation* that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council). For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

(d) *Plan review.* (1) Plans must be submitted to the State Hazard Mitigation Officer (SHMO) for initial review and coordination. The State will then send the plan to the appropriate FEMA Regional Office for formal review and approval. Where the State point of contact for the FMA program is different from the SHMO, the SHMO will be responsible for coordinating the local plan reviews between the FMA point of contact and FEMA.

(2) The Regional review will be completed within 45 days after receipt from the State, whenever possible.

(3) A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for mitigation project grant funding.

(4) Managing States that have been approved under the criteria established by FEMA pursuant to 42 U.S.C. 5170c(c) will be delegated approval authority for local mitigation plans, and the review will be based on the criteria in this part. Managing States will review the plans within 45 days of receipt of the plans, whenever possible, and provide a copy of the approved plans to the Regional Office.

[67 FR 8843, Feb. 26, 2002, as amended at 67 FR 61515, Oct. 1, 2002; 68 FR 61370, Oct. 28, 2003; 69 FR 55096, Sept. 13, 2004; 72 FR 61748, Oct. 31, 2007; 74 FR 47482, Sept. 16, 2009]

§ 201.7 Tribal Mitigation Plans.

The Indian Tribal Mitigation Plan is the representation of the Indian tribal government's commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards.

(a) *Plan requirement.* (1) Indian tribal governments applying to FEMA as a grantee must have an approved Tribal

Mitigation Plan meeting the requirements of this section as a condition of receiving non-emergency Stafford Act assistance and FEMA mitigation grants. Emergency assistance provided under 42 U.S.C. 5170a, 5170b, 5173, 5174, 5177, 5179, 5180, 5182, 5183, 5184, 5192 will not be affected. Mitigation planning grants provided through the PDM program, authorized under section 203 of the Stafford Act, 42 U.S.C. 5133, will also continue to be available.

(2) An Indian Tribal government applying to FEMA as a grantee may choose to address severe repetitive loss properties in their plan, as identified in §201.4(c)(3)(v), to receive the reduced cost share for the FMA and SRL programs.

(3) Indian Tribal governments applying through the State as a subgrantee must have an approved Tribal Mitigation Plan meeting the requirements of this section in order to receive HMGP project grants and, the Administrator, at his discretion may require a Tribal Mitigation Plan for the Repetitive Flood Claims Program. A Tribe must have an approved Tribal Mitigation Plan in order to apply for and receive FEMA mitigation project grants, under all other mitigation grant programs. The provisions in §201.6(a)(3) are available to Tribes applying as subgrantees.

(4) Multi-jurisdictional plans (*e.g.* county-wide or watershed plans) may be accepted, as appropriate, as long as the Indian tribal government has participated in the process and has officially adopted the plan. Indian tribal governments must address all the elements identified in this section to ensure eligibility as a grantee or as a subgrantee.

(b) An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other tribal agencies, appropriate Federal agencies, adjacent jurisdictions, interested groups, and be integrated to the extent possible with other ongoing tribal planning efforts as well as other FEMA mitigation programs and initiatives.

(c) *Plan content.* The plan shall include the following:

(1) Documentation of the *planning process* used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved. This shall include:

(i) An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval, including a description of how the Indian tribal government defined "public;"

(ii) As appropriate, an opportunity for neighboring communities, tribal and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia, and other private and nonprofit interests to be involved in the planning process;

(iii) Review and incorporation, if appropriate, of existing plans, studies, and reports; and

(iv) Be integrated to the extent possible with other ongoing tribal planning efforts as well as other FEMA programs and initiatives.

(2) A *risk assessment* that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Tribal risk assessments must provide sufficient information to enable the Indian tribal government to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards. The risk assessment shall include:

(i) A description of the type, location, and extent of all natural hazards that can affect the tribal planning area. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

(ii) A description of the Indian tribal government's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the tribe. The plan should describe vulnerability in terms of:

(A) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;

(B) An estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(ii)(A) of this section and a description of the

methodology used to prepare the estimate;

(C) A general description of land uses and development trends within the tribal planning area so that mitigation options can be considered in future land use decisions; and

(D) Cultural and sacred sites that are significant, even if they cannot be valued in monetary terms.

(3) A *mitigation strategy* that provides the Indian tribal government's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

(i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

(ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure.

(iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the Indian Tribal government.

(iv) A discussion of the Indian tribal government's pre- and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: An evaluation of tribal laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas; and a discussion of tribal funding capabilities for hazard mitigation projects.

(v) Identification of current and potential sources of Federal, tribal, or private funding to implement mitigation activities.

(vi) An Indian Tribal government applying to FEMA as a grantee may request the reduced cost share authorized under §79.4(c)(2) of this chapter of the FMA and SRL programs if they have an approved Tribal Mitigation Plan meeting the requirements of this section that also identifies actions the Indian Tribal government has taken to reduce the number of repetitive loss properties (which must include severe repetitive loss properties), and specifies how the Indian Tribal government intends to reduce the number of such repetitive loss properties.

(4) A *plan maintenance process* that includes:

(i) A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan.

(ii) A system for monitoring implementation of mitigation measures and project closeouts.

(iii) A process by which the Indian tribal government incorporates the requirements of the mitigation plan into other planning mechanisms such as reservation master plans or capital improvement plans, when appropriate.

(iv) Discussion on how the Indian tribal government will continue public participation in the plan maintenance process.

(v) A system for reviewing progress on achieving goals as well as activities and projects identified in the mitigation strategy.

(5) *Plan Adoption Process.* The plan must be formally adopted by the governing body of the Indian tribal government prior to submittal to FEMA for final review and approval.

(6) *Assurances.* The plan must include assurances that the Indian tribal government will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with §13.11(c) of this chapter. The Indian tribal government will amend its plan whenever necessary to reflect changes in tribal or Federal laws and statutes as required in §13.11(d) of this chapter.

(d) *Plan review and updates.* (1) Plans must be submitted to the appropriate FEMA Regional Office for formal review and approval. Indian tribal governments who would like the option of being a subgrantee under the State must also submit their plan to the State Hazard Mitigation Officer for review and coordination.

(2) The Regional review will be completed within 45 days after receipt from the Indian tribal government, whenever possible.

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(3) Indian tribal governments must review and revise their plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within 5 years in order to continue to be eligible for non-emergency Stafford Act assistance and FEMA mitigation grant funding, with the exception of the Repetitive Flood Claims program.

[72 FR 61749, Oct. 31, 2007, as amended at 74 FR 47482, Sept. 16, 2009]

PARTS 202–203 [RESERVED]

PART 204—FIRE MANAGEMENT ASSISTANCE GRANT PROGRAM

Subpart A—General

Subpart B—Declaration Process

Subpart C—Eligibility

Subpart D—Application Procedures

Subpart E—Grant Administration

AUTHORITY: Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. 5121–5207; Reorganization Plan No. 3 of 1978, 43 FR 41943; 3 CFR, 1978 Comp., p. 329; E.O. 12127, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148, 44 FR 43239, 3 CFR, 1979 Comp., p. 412; and E.O. 12673; 54 FR 12571, 3 CFR, 1989 Comp., p. 214.

SOURCE: 66 FR 57347, Nov. 14, 2001, unless otherwise noted.

Subpart A—General

§ 204.1 Purpose.

This part provides information on the procedures for the declaration and grants management processes for the Fire Management Assistance Grant Program in accordance with the provisions of section 420 of the Stafford Act. This part also details applicant eligibility and the eligibility of costs to be considered under the program. We (FEMA) will actively work with State and Tribal emergency managers and foresters on the efficient delivery of fire management assistance as directed by this part.

§ 204.2 Scope.

This part is intended for those individuals responsible for requesting declarations and administering grants under the Fire Management Assistance Grant Program, as well as those applying for assistance under the program.

§ 204.3 Definitions used throughout this part.

Applicant. A State or Indian tribal government submitting an application to us for a fire management assistance grant, or a State, local, or Indian tribal government submitting an application to the Grantee for a subgrant under an approved fire management assistance grant.

Declared fire. An uncontrolled fire or fire complex, threatening such destruction as would constitute a major disaster, which the Administrator has approved in response to a State's request for a fire management assistance declaration and in accordance with the criteria listed in § 204.21.

Appendix B – Sign in sheets for May 7, 2019 Hazard Mitigation Kickoff Meeting

Choctaw County Hazard Mitigation Plan update meeting

Please sign in MAY 7, 2019

	Name	Organization/ Affiliation	Contact information (address, e-mail address and telephone)
1	Robbie Ruse	BWEMC	334-353-2080 robbie ruse @ blackwarrior-emc.com
2	Buddy Landrum	BWEMC	334-341-2366
3	Allan Johnson	AFC	[redacted] 0551 251-231- Curtis.Johnson@choctawcountyalabama.gov
4	Angela Phillips	Choctaw Co. BOE	107 Tom Orr Drive, Butler, AL 369. aphillips@choctawal.org 459-3031
5	Mike Barnett	Washington county EMA	652al.EMA@gmail.com 251-802-9641
6	Leigh Ann Cobb	BRett Willow Tr	662-889-0932
7	Michelle Hurt	BRWS	205-574-9484
8	Amy McDonald	BRWS	205-604-8068
9	Derek Combs	Willow Trace BVFD	maintenance@willowtrace.care 205.457.3377
10	Sammy Bonner		205-457-9764

	Name	Organization/ Affiliation	Contact Information (address, e-mail address and telephone)
11	AL Nix	Choctaw Co. Rescue Squad	~~USA Volunteer Fire Dept~~ 865 712 7430
12	Leaton Davis	Black Warrior	80242 2580
13	Cunningham Houston	Choctaw C	205-454-463~
14	Regina Davis	Choctaw Co. B.O.E.	107 Tom Orr Drive, Butler 205-459-3081 rldavis@choctawal.org
15	Dorothy Banks	Choctaw Co. B.O.E	dbanks@choctawal.org 205-459-3031 107 Tom Orr Drive, Butler
16	Mechelle Cornett	Legacy Hospice	251-654-3657 mechelle.cornett@legacyhospice.net
17	Sandi Boyd	Legacy Hospice	251 843 5355 Sandi.boyd@legacyhospice.net
18	Horace Mealy	Dist. 4 Commission	251-847-5504 601-989-8202
19	Angela A Bulljor	Silas/Calvinburg Representative	P.O. Box 394 Silas, AL 205-457-3580 (Text Please)
20	Teagan Jenkins	Extension Coordinator	218 E Hamburg St Butler AL 36904 205 459 2133
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23			

Appendix C – Resolutions by each entity adopting the Plan Update

Will be updated after approval from FEMA

b. Appendix D Local Mitigation Plan Review Tool.