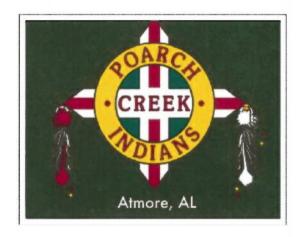
# Poarch Band of Creek Indians





## What is the significance of the Tribal flag and seal?

The Circle represents the circle of life.

The Green Background represents the forest and the green corn from which the Creek's gather their subsistence.

The Four Logs mark the four directions of North, South, East, and West.

The White Feather represents the white, or friendly Creek towns and clans.

The Red Feather represents the red warrior towns and clans.

The Red Stripes represent the blood of the Creeks spent in their efforts to maintain their homelands.

The Red and Yellow Beads represent the trading the Tribe does with their neighbors.

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#### Introduction

This document represents the Tribal Multi-Hazard Mitigation Plan for the Poarch Band of Creek Indians (PBCI) of Alabama. The plan was developed by and for the PBCI. Three of the most critical key concepts incorporated in this plan are:

- 1. The plan is a comprehensive risk and capability assessment that will assist in the formation of a solid foundation for decision-making to guide the identification and implementation of appropriate hazard mitigation actions across tribal lands in coordination with the state of Alabama and other entities.
- 2. Its development included the participation by a wide range of tribal members, and other affected parties including tribal, other local, state and Federal entities.
- 3. It considers cultural and other characteristics unique to the tribe.

The Federal Emergency Management Agency (FEMA) Tribal Multi-Hazard Mitigation Planning Guidance (March 2010) document was used as a guide in this planning process. This guide (based on the requirements of 44 CFR 201.7) was used to help the tribal government:

- identify risks from natural hazards and protect their members and other resources;
- develop and adopt this mitigation plan and will be used in future revisions and updates to meet the requirements of 44 CFR 201.7;
- be able to exercise flexibility in applying for assistance as a grantee or subgrantee under FEMA grant programs with a single plan type; and
- utilize guidance and culturally relevant examples from other tribal entities that already complied with similar planning requirements under 44 CFR 201.7 as local governments.

According to the Department of the Interior, Bureau of Indian Affairs (BIA), there were 565 federally recognized American Indian Tribes and Alaska Natives in the United States and over 52 million acres of land belonging to Indian Tribes and their members across the nation as of May 2011. The Poarch Band of Creek Indians is a federally recognized tribe.

#### Authorities

"In recognition of tribal sovereignty and the government-to-government relationship that FEMA has with Indian Tribal governments, FEMA amended 44 CFR Part 201 at 72 Fed. Reg. 61720, on October 31, 2007, and again at 74 Fed. Reg. 47471, on September 16, 2009, to consolidate and clarify the requirements for Indian Tribal governments, establish Tribal Mitigation Plans separately from State and Local Mitigation Plans, and finalize the Mitigation Planning rule." (Tribal Multi-Hazard Mitigation Planning Guidance, March 2010, page 2)

"Indian Tribal governments with an approved Tribal Mitigation Plan in accordance with 44 CFR 201.7 may apply for assistance from FEMA as a grantee. If the Indian Tribal government coordinates with the State for review of their Tribal Mitigation Plan, then the Indian Tribal government also has the option to apply as a subgrantee through a State or another tribe. A grantee is an entity such as a State, territory, or Indian Tribal government to which a grant is awarded and that is accountable for the funds provided. A subgrantee is an entity, such as an Indian Tribal government to which a sub grant is awarded and that is accountable to the grantee for use of the funds provided." (Tribal Multi-Hazard Mitigation Planning Guidance, March 2010, page 2) The Poarch Band of Creek Indians may choose the option of being a subgrantee of the State of Alabama.

## **Authority for Tribal Options**

"If the Indian Tribal government is eligible as a grantee or subgrantee because it has an approved Tribal Mitigation Plan and has coordinated with the State for review, it can decide which option it wants to take on a case-by-case basis with respect to each Presidential Disaster Declaration, and for each grant program under a Declaration, but not on a project-by-project basis within a grant program. For example, an Indian Tribal government can participate as a subgrantee for Public Assistance (PA), but as a grantee for the Hazard Mitigation Grant Program (HMGP) under the same Declaration. However, the Indian Tribal government would not be able to request grantee status under HMGP for one HMGP project, then request subgrantee status for another HMGP project under the same Declaration." (Tribal Multi-Hazard Mitigation Planning Guidance, March 2010, page 2) Under the Stafford Act and the National Flood Insurance Act, Indian Tribal governments must have an approved, adopted Tribal Mitigation Plan to meet the eligibility requirements for certain types of assistance, which may differ depending on whether the Indian Tribal government intends to apply as a grantee or subgrantee..." Tribal Multi-Hazard Mitigation Planning Guidance, March 2010, page 2)

## Poarch Band of Creek Indians - History

The Poarch Band of Creek Indians are descendants of a segment of the original Creek Nation, which once covered almost all of Alabama and Georgia. Unlike many southeastern Indian tribes, the Poarch Creeks were not removed from their tribal lands, and have lived together for over 150 years.

In the late 1700's, the Creek Confederacy consisted of Alabama land north of current day Stockton, with the heart of the Creek Nation centralized along the intersection of the Coosa and Tallapoosa Rivers near Montgomery. The ancestors of the Poarch Creek Indians lived along the Alabama River, including areas from Wetumpka south to the Tensaw settlement.

In the 1790 Treaty of New York, the Creeks gave the U.S. government permission to use and improve the Indian trail through Alabama to facilitate American settlement following the Louisiana Purchase. After the Treaty, the Creeks were allowed to establish businesses along the Indian trails, to accommodate settlers passing through Indian Territory. This Indian trail was widened and became the Federal Road.

Ancestors of the Poarch Creeks moved down the Alabama River to meet demand for these necessary services to the young American government. These "Friendly Creeks" signed contracts with the new federal government to serve as guides, interpreters, ferrymen and river pilots for those traveling through the Creek Territory. They also operated inns and raised free-range cattle. These families acquired land along the Alabama River from Tensaw to Claiborne and eastward along Little River.

As settlers passing through Indian Territory began to increase, a growing number stopped within the Creek Nation and began settling Indian land. Tensions also increased between Creeks considered "friendly" and those deemed "hostile" towards the U.S. Government. In 1813, a military skirmish at Burnt Corn and the retaliatory attack at Fort Mims resulted in the final battle and defeat of the Creek Nation at Horseshoe Bend. Andrew Jackson took command of Fort Toulouse, renamed it Fort Jackson, and signed the Treaty of Fort Jackson in 1814. As a result of the Treaty of Fort Jackson, the Creeks were illegally forced to cede their territory to the United States and were forcibly removed from their land in Alabama.

Despite the policy of removal of Southeastern Indians to Oklahoma, several Creek families in the Tensaw community who had assisted the United States by providing essential services, including Manac, Hollinger, Sizemore, Stiggins, Bailey, Colbert, and Weatherford, were allowed to retain their land. Others, such as Semoice and Lynn McGhee, had been unable to file their land selections earlier. In 1836, a special act of Congress permitted land grants to Lynn McGhee, Semoice, Susan Marlow and Samuel Smith, or their heirs.

By 1836, the Tensaw settlement was well populated and the timber companies had already purchased large tracts of timberland. This development left little nearby land available for land grants. Those families receiving 1836 land grants moved inland away from the River into the Poarch area near the Head of Perdido (Headapadea) and Huxford area in order to find sufficient tracts of grant land.

Because of close family ties, the Indian families intermarried with each other so that a distinct group emerged. This group, which became the Poarch Creek Indians, was distinguished from whites and the other descendants of Creeks in the area, and in later years became discriminated against by them. These settlements became tightly clustered geographically and became more strongly based on a network of close kinship.

The Poarch settlement remained largely ignored and increasingly impoverished following Removal. As discrimination increased, the Indian families became poorer and more isolated. Most families in the community were farm laborers, and later worked with pulpwood. Indianonly schools and churches developed before the turn of the century and were known from records to have existed as early as 1908. Indians were buried separately from whites in a segregated Indian cemetery, Judson Cemetery, on land donated by a freed slave.

Since the early 1900's, there were some organized efforts to improve the social and economic situation of the Poarch Creeks. The federal government did become involved when it halted the Escambia County Alabama Tax Assessor's illegal taxation of the Federal Trust Land in Poarch in 1920. The federal government also instigated litigation to penalize trespassers illegally cutting timber on grant land, and this litigation continued until 1925. Episcopal missionaries began providing assistance in 1929. Dr. Robert C. Macy and his wife Anna provided basic medical care and assisted in coordinating the construction of St. Anna's Episcopal Church, which is still standing, and St. John's in the Wilderness church, which is no longer standing. The Indians chose the name St. Anna's in honor of Mrs. Anna Macy. These community churches were used as schools for the Indian children. Old photos show these missionaries performing baptisms in the local swimming hole.

A number of actions were taken by the community in the late 1940's to improve community conditions, including a community boycott of the schools. In 1949, Escambia County, Alabama built a small segregated consolidated Indian School in Poarch, to provide Indians a "separate but equal" education, though only through the sixth grade. The community organized a committee that successfully forced local school authorities to provide the bus service that would allow Indian children to attend junior high and high school. Educational opportunities were further improved in 1970 as a result of the Civil Rights movement. In the early 1990's, the Tribe restored the Poarch Consolidated School, which currently houses the Calvin McGhee Cultural Center.

Oral history, church and court records show a variety of clearly recognizable but not formally appointed leaders from at least the 1880's onward until 1950, when more formal leadership was established. The most prominent and widely influential of these leaders was Fred Walker, who was a leader between about 1885 and 1941. The first formal leader in the sense of a single leader with a definite title and a clearly defined role was Calvin McGhee, who was chosen in 1950. A charismatic leader, McGhee led the Poarch community until his death in 1970. He also led a wider land claims movement among Eastern Creek descendants, resulting from the illegal tactics of the Treaty of Fort Jackson.

Calvin McGhee headed the council of the Creek Nation East of the Mississippi, established in 1950, which was based at Poarch and was led by Poarch community leaders. After McGhee's death, under a newer generation of leaders from within the Poarch community, the council gradually evolved into a nine-member formal governing body for the Poarch community alone.

Eddie L. Tullis led the Poarch Creek Indians in their petitioning the United States government to recognize a government-to-government relationship. On August 11, 1984, these efforts culminated in the United States Government, Department of Interior, and the Bureau of Indian Affairs acknowledging that the Poarch Band of Creek Indians exists as an "Indian Tribe." The Tribe is the only Federally recognized Tribe in the State of Alabama. On November 21, 1984, 231.54 acres of land were taken into trust. On April 12, 1985, 229.54 acres were declared a Reservation.

As of 2006, there were about 2,340 members of the Poarch Band of Creek Indians, of which over 1,000 live in the vicinity of Poarch, Alabama (eight miles northwest of Atmore, Alabama, in rural Escambia county, and 57 miles east of Mobile). In June of 2011 Chairman Buford L. Rolin was re-elected as Chairman of the Poarch Band of Creek Indians.

## Approval and Adoption of The Plan - Adoption Resolution

Please note: Once The Plan has been approved by the State of Alabama, and FEMA, the Tribe will adopt a resolution accepting The Plan and the correct information will be inserted in this section and Appendix A.

The approval and adoption process involved development and review of the plan through the coordinated efforts of the PBCI Mitigation Committee, the Tribal Council, the State of Alabama, and the Federal Emergency Management Agency.

The Tribe through Tribal Resolution \_ formally adopted the Plan. The state approved the tribal plan through \_\_\_\_\_\_ including an approval letter from the Director of the Alabama Emergency Management Agency (AEMA), and a letter of endorsement and support from the Governor.

As a possible subgrantee of the State of Alabama, the PBCI Plan was developed in coordination with the Alabama State Hazard Mitigation Plan. The Alabama Plan was approved by the Director of the Alabama Emergency Management Agency, through authority delegated by the Governor.

#### Assurances

The Poarch Band of Creek Indians agree to comply with all applicable Federal statutes and regulations during periods for which it receives grant funding, in compliance with 44 CFR 13.11(c), and will amend this plan whenever necessary to reflect changes in tribal or Federal laws and statutes as required in 44 CFR 13.11(d).

#### Porch Creek Indians Tribal Government Structure

Following federal recognition, the Tribal Council approached the task of developing the infrastructure necessary to provide social and economic programs to tribal members. The Poarch Creek Indians operate under a constitution that was ratified by the electoral process on June 1, 1985. The Constitution includes a preamble and defines membership, rights of members, territory and authority of the government, Council procedures, elections, powers and duties of tribal officers, popular participation in government, branches and amendments.

The Legislative Branch of the Tribal Government is composed of a nine member unilateral Tribal Council, elected by the general membership, who elects from its members a Chairman, which is the Chief Executive Officer of the Triba. The principal function of the Tribal Council is to enact statues consistent with tribal sovereignty, establish policy, and appropriate funds for the use of the government. The Tribal Council delegates most of its executive authority to the Tribal Administrator. Due to the legal concept of tribal sovereignty, which has been upheld by the United States Supreme Court, the Tribal Council has broad powers that include the authority to levy, assess and collect taxes.

The Judicial Branch of the Tribal government consists of a Tribal Court system composed of a lower court and a supreme court that serves as a court of appeals. The Judicial Branch also consists of a fill-time law enforcement staff. The Tribal court system is operated exclusively for the benefit of the Tribal members as an important exercise of sovereignty. In support of the Judicial Branch, the following codes and ordinances have been enacted: criminal, civil, probate, traffic, juvenile, domestic relations, and gaming. The federal court system has judicial authority only over major criminal offenses, which occurs on the reservation and also serves as an appellate system for the Tribal supreme court.

The Executive Branch of the Tribal government is responsible for the overall management of the daily activities of the government. It consists of the following functional departments: Accounting, Community Relations, Chairman's Office, Public Works, Employment and Training, Natural Resources, Health, Social Services, Public Safety, Education, Housing, Administration, Tribal Government Accounting, Personnel and Insurance, and Creek Indian Enterprises.

## Description of the Tribal Community

The Poarch Band of Creek Indians is a segment of the original Creek Nation, which avoided removal and has lived together as a Native American community for nearly 150

years. It is the only federally recognized Indian Tribe within the state of Alabama, and was awarded federal recognition in 1984. It is organized pursuant to 25 CFR, Part 83. Of the approximately 3,002 Tribal members, approximately 1,700 live within the Tribe's legally mandated five-county service area of Escambia, Monroe, Baldwin, and Mobile counties in Alabama and Escambia county in Florida. The Tribe's 2010 Indian Housing Plan (IHP) indicates 913 Tribal member households need housing assistance. A significant and steady increase in population has occurred since the Tribe became federally recognized in 1984. In 2009, 320 new members were added to the official Tribal roll. The Tribe has 984 elders, defined as being Tribal members age 55 and older, which is 33% of the total population.

The overall socioeconomic characteristics of the Poarch Community is a rural population, including both Tribal members and non-Indians with 35 to 51% being recognized as low or very low income in the Indian Housing Plan. The 2010 IHP states that 779 low-income families are below 30 – 50% of the median income.

The Tribal Reservation, which is comprised of approximately 230 acres of Federal Trust Land, supports various Tribal agencies, economic enterprises, and five housing subdivisions. The main reservation is located in western Escambia County, Alabama, just north of Interstate 65, and approximately seven miles north of the Alabama-Florida state line. The geographical features are that of rural uplands, with both sloping and level land. The head of the Perdido Creek creates much of the incline of the nearby sloping wetlands. The land is forested with mixed hardwoods and pine near the Tribal Center although much of the land has been cleared and used for agriculture for over a century. The climate is moderate and humid with an average temperature of 77 degrees Fahrenheit. Winters are mild and summers are excessively humid. (Source: Poarch Band of Creek Indians Planning Office)

The document, "Describing A Place Called Poarch" was developed, as part of the tribal master planning process is included in Appendix G. This document includes maps, descriptions of the community and issues that are important to the Poarch Creek people. The Tribal Multi-Hazard Mitigation Plan will become part of the overall tribal master planning process.

## Plan Requirement

This plan is submitted as the approved Tribal Mitigation Plan, meeting the requirements of 44 CFR 201.7. Hereafter called The Plan, it has been officially approved by the Poarch Band of Creek Indians by resolution (see Appendix A) and is submitted to the Federal Emergency Management Agency (FEMA) through the State of Alabama for final approval as a condition of receiving non-emergency Stafford Act assistance and FEMA Mitigation Grants. As described in 44 CFR 201.7 The Plan will be valid for 5 years, but will undergo regular review and updates as described later in this document.

## Application as a Sub-grantee of the State

As previously mentioned, the PBCI may choose to apply as a sub-grantee of the state. Therefore, this plan was developed in coordination with the State of Alabama and its State Hazard Mitigation Plan.

#### Multi-jurisdictional Plans

The Tribal Mitigation Plan requirements under 44 CFR 201.7 specifically allow for multijurisdictional mitigation plans. The Poarch Band of Creek Indians elected not to participate as a Local/Tribal Multi-Jurisdictional Plan. However, the Tribe did participate in the development of the Escambia County Alabama Plan through attendance at meetings and input at planning meetings as evidenced in the sign in sheet in Appendix B. Additionally the Tribe worked closely with the State of Alabama Emergency Management Agency in the coordination and development of this tribal plan.

## **Planning Process**

The plan was developed in coordination with Tribal departments, local jurisdictions, the state of Alabama, and appropriate Federal agencies. The Plan is integrated with other appropriate plans. This integration will be elaborated on in appropriate sections of The Plan. Meetings were held with entities listed below for their input to the plan. Tribal community involvement has been included as a result of information gained through open community meetings, meetings at churches and through distribution of information to the public. The public was encouraged to provide input and be involved in discussions with Tribal Emergency Management staff.

B. Kevin Molloy, R.E.S, M.S.E.H., Director, Tactical Management, LLC managed the planning process and coordinated meetings, compiled information and worked with tribal authorities to develop the plan. Captain Molloy (U.S. Public Health Service, retired) has over thirty years of experience working with tribes on emergency management issues. He has worked with the Poarch Band of Creek Indians for over twenty-four years. Mr.

Molloy worked with tribal Emergency Management staff to review public comments, comments from Federal, state and local agencies, historic information on risks and hazard events, and consolidate them into the planning process. Goals, objectives and action items were developed from this planning process. The following is a list of agencies, and their representatives, involved in the planning process:

The Poarch Band of Creek Indians Tribal Emergency Management Office took the lead in the planning process. Each tribal department was canvassed for input to the plan.

The State of Alabama provided review and input through Kelli Alexander, Senior Mitigation Planner of the Alabama Emergency Management Agency and David Coggins, State EMA Regional Coordinator. This input was through face-to-face meetings as well as formal reviews and phone calls.

- U.S. Department of Health and Human Services, Indian Health Service, Nashville Area Office, Captain Mickey Rathsam, Director, Division of Emergency Management, Nashville Area Office provided input through discussions with Kevin Molloy and PBCI EMA personnel.
- U.S. Department of Interior, Indian Affairs, Eastern Regional Office, Nashville, TN provided input through several staff members in the Forestry, Safety, Environmental Affairs, and Hydrology Departments and nationally through the All Hazards Emergency Management Office. (See table below)

The Federal Emergency Management Agency, Linda L. Byers, Lead Planning Specialist, FEMA Region IV provided guidance and input in the development of the plan through reviews and direct meetings with Tribal and State of Alabama representatives.

#### Agencies and Representatives Involved in Development of the Plan

Agency	Name	Title
Poarch Creek Indians	April Sells	Emergency Management Director
Poarch Creek Indians	Ronnie Jackson	Fire Chief
Tactical Management, LLC	B. Kevin Molloy	Director, Tactical Management, LLC (Consultant)
Alabama Emergency Management Agency	Kelli Alexander	Senior Mitigation Planner

Agency	Name	Title		
Alabama Emergency	David Coggins	Regional Coordinator,		
Management Agency		Alabama EMA		
Bureau of Indian Affairs	William Wiley	All Hazards Emergency		
		Manager		
Indian Health Service	Captain Mickey Rathsam	Emergency Management		
		Director		
Poarch Creek Indians	Multiple	Department Heads		
Federal Emergency	Linda Byers	Lead Planning Specialist		
Management Agency				

#### **Public Comments**

For the purposes of this Plan, PBCI defines "public" as tribal members, individuals of tribal descent, tribal staff and the surrounding communities. Public meetings were held to discuss the plan as it was being drafted and to allow public input to the plan. In addition to the meetings that were held for the initial development of the plan, regular meetings will be held to continue public involvement in the plan. A public meeting was held at the Calvin McGhee Cultural Day on August 27, 2011. Additionally the Tribal Emergency Management Director met with tribal members at community churches in August of 2011. Meetings were held at the Annual Celebration on September 3, 2011 and the Annual Thanksgiving Day Pow Wow on November 24 and 25, 2011 and annually thereafter to provide continuous opportunities for the public to review the plan and provide continuous input for future revisions. Attendees at these meetings are tribal people. Small gifts were given out to invite attendance to the booth and sign-in sheets were utilized to record actual contact. Sign-in sheets are kept on file at the Emergency Management Office.

## Booths for public involvement were set up at the following events.

Event	Date	Approximate Attendance
Calvin McGhee Day	August 27, 2011	1,000
Annual Celebration	Labor Day Weekend	3,100
Pow Wow	Thanksgiving Weekend	1,000

## Opportunities for non-PBCI Stakeholders to Provide Input

David Adams, Escambia County Alabama EMA Director was contacted by the Tribal Emergency Management Director for input to the plan as a non-PBCI Stakeholder. Additionally Ronnie Jackson, PBCI Fire Chief, April Sells, PBCI Emergency Management Director, and Chris McGhee, PBCI Inspector & Training Officer participated in the Escambia County Stakeholder Meetings, took surveys and met with the Escambia County Mitigation Planning Contractor to provide tribal input and linkages to the Escambia County Plan and the Tribal Mitigation Plan. The Escambia County Mitigation Plan is kept at the Poarch Band of Creek Indians Fire Station #1 for reference.

#### Review and Incorporation of Existing Plans, Studies and Reports

The following plans, studies and reports were reviewed and utilized in the development of the tribal plan:

- Escambia County Alabama Mitigation Plan
- Alabama State Mitigation Plan
- National Climatic Data Center Reports and other National Oceanic and Atmospheric Administration and National Weather Service Reports
- Tornado History Project
- CDG Engineers & Associates Storm Drainage Study for the Poarch Band of Creek Indians
- "Describing A Place Called Poarch" Tribal Master Plan

## **Program Integration**

A Mitigation Planning Meeting was held on July 19, 2011 for input to the plan. The following table shows tribal representatives who participated in the meeting.

Name	Tribal Department
Tim Manning	Tribal Member Benefits
Lon Stinson	Legal
Doyle Lee	Police
Vera Ramer	Human Resources

Tribal Department
Planning
Public Works
Health Department
Fire/Rescue
Family Services

The Tribal Emergency Management Director met with the Tribal Departments on 8/11/2011 and 8/12/2011 for their input to the plan. Departmental Directors had the opportunity to provide input and integrate the mitigation plan with other tribal plans and initiatives. Review of The Plan and the mitigation strategies developed, will be a part of regular tribal administration meetings as described under the Plan Maintenance section of The Plan.

Since this is the first Poarch Band of Creek Indians Mitigation Plan, the Tribe is just starting the process of working with FEMA on mitigation activities. The Tribal Plan integrates with the FEMA mitigation programs and initiatives through its coordination with the Alabama State Plan. The Tribe works closely with the Alabama EMA program on both mitigation and response activities and is therefore a part of the overall mitigation process. Additionally, representatives from the Tribe met with the Region IV FEMA Lead Planning Specialist in the development of this plan, to start the integration with FEMA mitigation programs and initiatives.

#### Risk Assessment

#### Identifying and Profiling Hazards – Overall Summary

Requirement 201.7(c)(2)(i), requires that the risk assessment shall include a description of the location and extent of all natural hazards that can affect the tribal planning area and the plan shall include information on previous occurrences of hazard events and on the probability of future hazard events. For the purposes of this Plan, the location shall include the tribal lands and their immediate surrounding areas. It shall not include the entire state of Alabama, since in different regions of the state, the physiographic, geologic and meteorological characteristics are different. The PBCI have land in Escambia, Elmore, Mobile, Monroe, Montgomery and Baldwin counties in Alabama and in Escambia County, Florida. It should be noted that although portions of Baldwin County

are subject to storm surge, this is not the case for the tribal areas since they are too far inland for the storm surge to have an impact.

A Tribal Risk Assessment Team was formed to complete the Hazard Vulnerability Assessment and discuss the risks to the tribe. The Core Team consisted of the Tribal Emergency Management Director, the Fire Chief, and the Emergency Management Consultant. Other members of the larger risk assessment team included representatives from Tribal Administration, Tribal Law Enforcement, Tribal Utilities, FEMA, the Alabama Emergency Management Agency, the Indian Health Service and the Bureau of Indian Affairs. Initially the Core Team met and went through the Hazard Vulnerability Assessment that was used to define hazards that could impact the tribal community and to look at the Tribe's level of preparedness and possible outside support. Historical information was used to guide this process. This included information derived from the Alabama state plan, Internet searches of disaster history databases, and personal knowledge, expertise and experience. All of this, combined with the Team's knowledge of the tribe's capabilities, was used to form the goals, objectives and actions for each hazard. Hazards identified in the Tribal Hazard Vulnerability Assessment that would not impact the tribe, because they were not a threat, are identified in the HVA with a zero (which stands for not applicable) in each section. These are considered hazards that were rejected and are therefore not discussed further.

The following is a ranking order of the top ten natural hazards, with the highest risk listed first. This ranking was developed by use of a community Hazard Vulnerability Analysis. More detail can be found in the actual HVA that can be found in Appendix C.

- Lightening
- Tornadoes
- Windstorm/High Winds
- Extreme Temperatures (Heat)
- Thunderstorms
- · Wild Fires
- Flood
- Hurricane/Coastal Storm
- Drought
- Hail

Earthquakes and Winter Storms ranked 11th and 12th, respectively and due to their relatively low risk, they were not profiled. Those with no risk, Landslides, Dam Failures, Tsunamis, and Sinkholes/Land Subsidence were not profiled either. Actions were developed to address the hazards in ranking order of the hazard threat.

Since the tribe may be a sub-grantee of the state, the hazards listed are consistent with hazards found in the state plan, however as mentioned elsewhere in this document, the tribal areas were assessed based on their location and other vulnerability factors, (such as tribal capabilities, availability of outside assistance, historical knowledge, etc.). Historical information derived by the state planning process, as well as other sources, was used to help identify hazards specific to tribal locations.

## Disaster History and Hazard Vulnerability

From February 1961 until March 28, 2011, there have been 61 Major Disaster Declarations in Alabama. <a href="http://www.fema.gov/news/disasters">http://www.fema.gov/news/disasters</a> state.fema?id=1 - fire

Of those, almost one third were declared in either Baldwin or Escambia Counties, or both. These incidents involved tropical storms, other severe storms, hurricanes, tornadoes, straight-line winds, and floods. This tribal mitigation plan will not attempt to describe every hazard event that occurred in Alabama. Instead, it will concentrate on a few that have had direct impact on tribal lands and tribal members.

## **Identifying Tribal Structures**

Tribal properties include not only individual homes, but also tribal buildings, utilities such as water and sewer systems, and equipment such as farm equipment, tribal vehicles, rescue and fire fighting equipment, and recreational facilities including ballparks, a swimming pool and other recreational assets. A table of tribal buildings, including their addresses, type of structure, insurance value and other pertinent information is located in Appendix F. Individual homes are not included since they are privately owned and that information is not available. Potential losses of tribal structures could be minor to total loss depending on the situation. Each scenario is not speculated in this plan, but potential loss information could be derived from Appendix F.

#### Future Development and Development Trends

As of the time of the writing of this plan, the Tribal Master Plan was still under development. Because of this, as well as economic factors, tribal needs, cultural aspects, and other factors, there is not a definitive plan that delineates exact future development. In lieu of this, and based on past experience, the tribe has adopted building codes as a mitigating factor in construction of buildings. These codes are listed later in this

mitigation plan. Since the mitigation plan will be integrated with management of the Tribe and its influence will be a part of regularly scheduled tribal meetings, it will influence future development. This integration into tribal meetings and operations is further discussed in the Plan Maintenance section of this plan. It should be noted, that all recent commercial and administrative structures the Tribe has built have been of reinforced concrete to mitigate storm damage. This is an example of how the Tribe has integrated mitigation strategies into its operations.

Even though the Tribe has chosen to develop its own mitigation plan, the Tribe remains in contact and works with surrounding communities and the state. The Tribe is still included in the Escambia County plan and will work in cooperation with it and other counties as well. However, the counties do not necessarily consult the tribe regarding county development plans and therefore the Tribe may have no input as to county development in identified hazard boundary areas. The Tribe does encourage open communication with the surrounding communities and will consider how development outside Tribal Lands may impact the Tribe.

## Community Hazard Vulnerability Assessment (HVA)

A Hazard Vulnerability Assessment was conducted to delineate hazards and vulnerabilities for the tribal community. The HVA is included as Appendix C. The HVA considers hazards from naturally occurring events, technologic events and human related events, however, due to the requirements and scope of this plan, only natural hazards will be addressed in detail. For Natural Hazards, the risk is considered highest for Lightening, and Tornadoes, closely followed by Wind Storms, Extreme Temperatures and Hurricanes/Coastal Storms. The following section discusses each hazard in a ranked order. The highest risk or relative threat events as delineated in the HVA are discussed first and the remainder, are discussed in descending order.

## Lightening

Background - In the United States, there are about 25 million lightning flashes every year. Each of those 25 million flashes is a potential killer. While lightning fatalities have decreased over the past 30 years, lightning continues to be one of the top three storm-related killers in the United States. In addition, lightning injures many more people than it kills and leaves some victims with life-long health problems. (Source: National Weather Service) According to the website

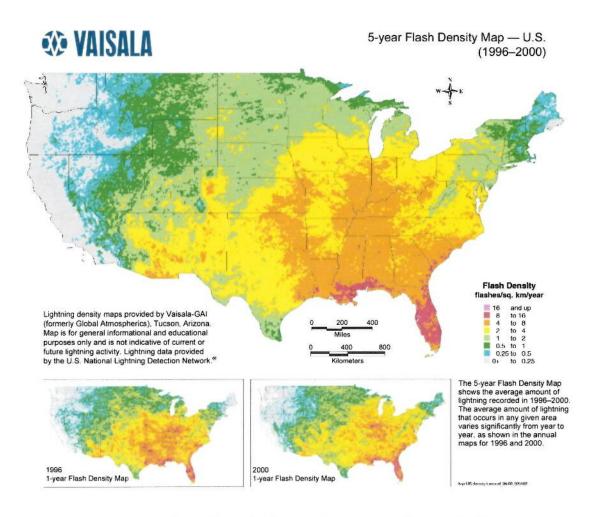
#### The Tribe's Vulnerability to Lightening

The Tribe has a number of outdoor venues that it operates. They include ball fields, parks, swimming pools and swimming areas as well as cattle and farming operations. Lightening

was considered one of the top two risks with a score of 94% relative risk in the Tribal HVA for the entire tribal area. The National Oceanic and Atmospheric Administration considers Alabama the fourth most lightning prone state. The Lightning Strike Map below shows the reservation in the next to highest zone that equates to 8-16 flashes/sq.km/year. This makes the tribal area very vulnerable to lightning strikes and historic data from NOAA indicates the probability of future strikes is high.

## Impact to the Tribe

There have been numerous lightening strikes on the reservation and tribal property, but no reported injuries or fatalities. In addition to human and animal injury, lightening can cause damage to electrical systems resulting in electric utility outages, damage to communications equipment and other electronics and can also cause wild land fires that will be discussed later in this plan.



Five Year Lightning Flash Density Map – Source NOAA

Note the Reservation is in the 8-16 flashes/sq.km/year area near the tip of Florida's Panhandle.

## High Wind Events (Tornadoes, Hurricanes, and Windstorms)

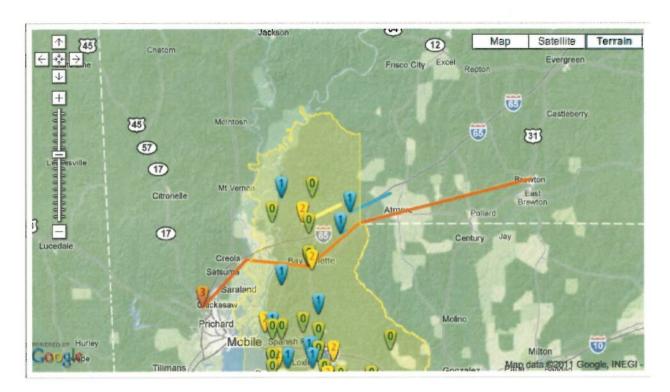
#### Tornadoes

Tornadoes can stir up the fastest winds ever found at the Earth's surface. These wind speeds can reach as much as 300 miles per hour, destroying even very strong structures in their path.

#### The Tribe's Vulnerability to Tornadoes

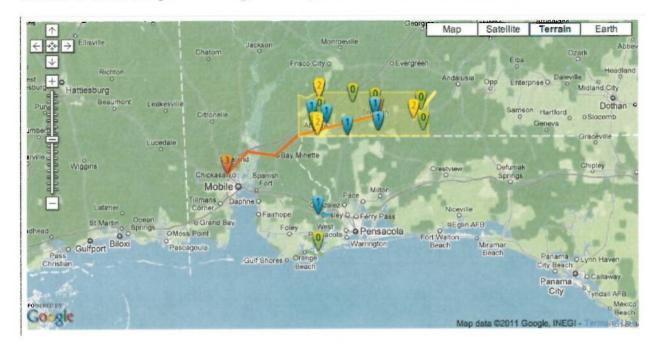
All Tribal areas are vulnerable to tornadoes and history has shown this. The illustrations below address some of the tornadoes that have passed on or near tribal land. Tornadoes were considered one of the top two risks with a score of 94% relative risk in the Tribal HVA. Based upon historical information, the probability of future tornadoes is high.

The following tornado data were derived from the Tornado History Project, which is a free, searchable database of all reported U.S. tornadoes from 1950-2010. There are over 53,000 tornadoes currently in the database, each with its own map and forum. The project's main goal is to combine historical data with user submitted items (eyewitness memories, photos, videos, etc.) to recreate the history of as many tornadoes as possible. The Tornado History Project was launched in 2005. Development has continued ever since with periodic updates to features and data. Data within the database has been pulled from the Storm Prediction Center's and NCDC's historical tornado data files. Symbols on the following maps indicate approximate tornado locations, intensity and paths. Tornadoes are classified by the National Weather Service (NWS) according to their intensity and damage. Until 2007, the Fujita Scale (F) was used, but as of February 1, 2007, the Enhanced Fujita Scale (EF) was implemented. In both systems, the least damaging tornadoes are rated as F0, while the most damaging tornadoes are rated as F5. The number on the tornado icon simply represents the F Scale or EF Scale. In some cases tornadoes were not assigned F or EF number. In those cases, the tornado icon contains a "?" instead of a number. All tornadoes of the same F or EF rating are of the same color.



Map of Tornado History - Baldwin County, Alabama

From 4-18-1950 through 10-24, 2010 there were 88 tornadoes in Baldwin County. Although no fatalities were reported, 99 people were injured, with 62 of those injuries occurring in Bay Minette, Alabama during the February 16, 1975 F 2 Tornado that had a track of 75 miles and passed through Atmore, Alabama and near the tribal lands.



## Map of Tornado History, Escambia County, Alabama

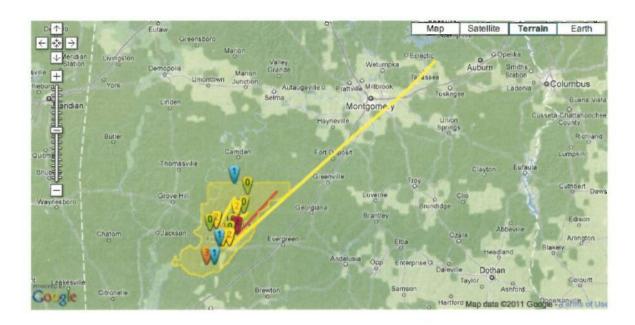
During the period of February 26, 1958 through March 26, 2009, there were 26 tornadoes in Escambia County, Alabama with 23 people injured and no fatalities. For reference, the tribal headquarters and much of the tribal lands are located near the town of Atmore, Alabama. It is clear from the above maps and statistics, that tornadoes are a threat to the tribal area.

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Map of Tornado History, Mobile County, Alabama

During the period of April 18, 1950 through October 25, 2010, there were 75 tornadoes in Mobile County, Alabama with 56 people injured and one fatality.



Map of Tornado History, Monroe County, Alabama

During the period of December 23, 1956 through April 14, 2007, there were 19 tornadoes in Monroe County, Alabama with 43 people injured and no fatalities.



Map of Tornado History, Elmore County, Alabama

During the period of March 12, 1976 through November 30, 2010, there were 30 tornadoes in Elmore County, Alabama with 127 people injured and 5 fatalities.



Map of Tornado History, Montgomery County, Alabama

During the period of June 28, 1957 through April 19, 2009, there were 41 tornadoes in Elmore County, Alabama with 121 people injured and 9 fatalities.

## Impact to the Tribe from Tornadoes

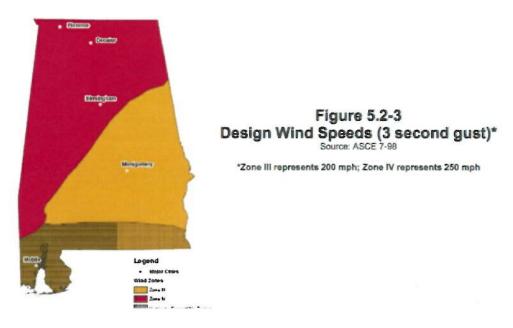
The tribe has had tornado activity on and near the reservation. These storms cause property damage and potentially loss of human life. Previous storms have caused roof damage, loss of buildings, severe tree damage, loss of electrical utility systems and crop damage.

## Other High Wind Events (Such as Straight Line Winds and Downbursts)

Figure 5.2-3 (shown below) of the State of Alabama Plan shows the different wind zones throughout the state of Alabama used by the American Society of Civil Engineers (ASCE) for determining design wind speeds. Design wind speeds are used by engineers to determine what type of winds (i.e., how strong) a building should be designed to withstand.



## **Alabama State Hazard Mitigation Plan**



#### The Tribe's Vulnerability to High Wind Events

The main tribal lands are in the Hurricane Sensitive Region and are therefore subject to intense winds from tropical storms. Severe thunderstorms can also yield high winds through straight-line winds, gust fronts and downbursts. The entire tribal region is vulnerable to sever thunderstorms and high wind events, whether they are from severe thunderstorms, hurricanes or tornadoes. The Tribe's HVA ranked Windstorms and High Wind Events at 89% Relative Risk and based on historical information and location, the probability of future high wind events is high.

## Impact to the Tribe from High Wind Events

Impact to tribal facilities include damage or entire loss of facilities, blocked roads from downed trees, power lines and debris, loss of electrical services due to wind damage to electrical systems, loss of water and sewer services and loss of stored foods that need refrigeration (from the loss of power). The tribe has also lost communications towers due to high wind events. These losses severely compromised police and emergency services communications and activities. Loss of facilities due to high winds can also render people homeless and without a place to work. Crop and livestock damage is also probable. All of these losses can and have had a severe impact on the tribe.

#### Hurricanes

Hurricanes and tropical storms frequently occur in the Gulf Region. These storms bring sustained high winds and intense rainfall as well as tidal surge. Storms may at times "stall out" and dump tremendous amounts of rain on the area. They may also create tornadoes within the larger storm.

## The Tribe's Vulnerability to Hurricanes

Located approximately 53 miles from the coast of the Gulf of Mexico, the Poarch Creek Reservation is subject to impact from hurricanes and tropical storms. The major impact at this distance from the Gulf Coast is from high winds and sustained rains. The reservation is not subject to tidal influence or storm surge. The Tribal HVA ranked Hurricanes at 83% Relative Risk. Based on historical information and location, the probability of future high wind events is high. The reason this event rated out as a lesser risk than some of the others is because the tribe has taken substantial measures to prepare and respond to hurricanes. This will be further discussed below.

## Impact to the Tribe from Hurricanes

In recent years, both Hurricanes Ivan and Dennis had significant impact on the tribe, resulting in their inclusion in disaster declarations as noted below. Impact is similar to that described for High Wind Events above.

## Hurricane History in Alabama

Since 1960, Alabama has been declared under 14 presidential disaster declarations caused by hurricanes and tropical storms. All of these storms had some impact on the reservation.

Disaster Declarations from Hurricanes in Alaban	ama	a	A	in	es	ican	urr	rom	ons	larati	Dec	saster	Ð
---	-----	---	---	----	----	------	-----	-----	-----	--------	-----	--------	---

Date	Name
November 1969	Camille
September 1979	Frederic
September 1985	Elena
July 1994	Alberto
October 1995	Opal
July 1997	Danny

September 1998	Georges
September 2002	Isidore
September 2004	Ivan
July 2005	Dennis
August 2005	Katrina
September 2008	Gustav
September 2008	Ike
December 2009	Ida

Source FEMA 2010

In 2004 and 2005, Hurricanes Ivan and Dennis inflicted damage directly on the tribal community. In both cases, the area was part of the respective FEMA Disaster Declarations.

FEMA-1549-DR, Alabama Disaster Declaration as of 12/03/2004 - Individual and Public Assistance as a result of Hurricane Ivan.

FEMA-1593-DR, Alabama Disaster Declaration as of 08/04/2005 - Individual and Public Assistance as a result of Hurricane Dennis.

The tribe suffered damage to buildings, communications towers, trees, and utilities and had a tremendous amount of debris to clear. There was also local flooding as well as water damage to building from loss of roofing materials. Some people had to seek shelter due to damage to their homes.

## **Extreme Temperatures**

Extreme temperatures can cause problems with people, crops, livestock, water delivery systems, electrical systems and other utilities.

#### The Tribe's Vulnerability to Extreme Temperatures

Due to the geographic location of the tribe, the most likely temperature extreme is from heat. Heat stress is especially dangerous for the elderly and those with compromised health. The Tribal HVA ranked Extreme Temperatures at 89% relative risk. Based on geographic location, the probability of future high heat events is high. "The Heat Wave during the summer of 2011 was record-breaking across the United States. At its height

during the second half of July, 132 million Americans were under a Heat Alert. For the month through July 23rd, 1,966 record daily high temperatures were set across the country. Due to extremely high humidity levels, overnight temperatures didn't drop as normal and as a result an amazing 4,376 highest minimum temperature records were tied or broken." (Source: Dan Baker, Interesting U.S. weather Facts Website http://web2.airmail.net/danb1/usrecords.htm) Although the developers of this plan could find no official data specific to the tribe on extreme temperatures, personal knowledge of tribal staff from living in the area indicated that vulnerability to extreme temperatures was a real issue for the tribe.

#### Impact to the Tribe from Extreme Temperatures

Heat stress can be fatal for livestock and people. The tribe has a substantial cattle operation and heat stress could be devastating to the heard. As mentioned above, those with compromised health conditions, infants and the elderly can be especially susceptible to heat stress. Heat can cause an overload of electrical systems, leading to blackouts and brownouts, with further raise the potential threat due to loss of air conditioning. Electrical system losses can also compromise water and sewer systems due to the inability of pumping stations to function without power. These utility system losses can impact the tribe by compromising health and safety. They may result in contaminated water and property from sewer overflows and loss of fire protection from inadequate water flows due to electrical system failures and loss of pumping capabilities.

#### Thunderstorms

The National Weather Service considers a thunderstorm severe if it produces damaging winds gusts of 58 miles per hour or higher, large hail, ¾ inch in diameter (penny size) or larger or tornadoes.

#### The Tribe's Impact from and Vulnerability to Thunderstorms

According to the National Climatic Data Center (NCDC) data, between 08/24/1984, when the tribe became Federally Recognized and 03/31/2011, there were 83 Thunderstorm Wind Events in Escambia County, Alabama. These storms yielded 2 injuries and 2.415 million dollars in damages to property. Thunderstorms cause wind and hail damage to tribal property, flash flooding, and lightening hazards.

The Storm Prediction Center ranked Escambia County Alabama as number 6 of the top 10 counties with the highest number of severe thunderstorm watches per year as shown in the

table below. Note in the table below that other nearby counties in Alabama also ranked high in severe thunderstorm watches. Based on historical information and location, the probability of future severe thunderstorms is high.

Note: Table is on next page.

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Thunderstor	with highest # of Sev m Watches per year d is from 1999 - 2008	ere
County	Location in State	#
1. Washington, AL	Southwest	16.2
2. Covington, AL	South	16.0
3. Baldwin, AL	Southwest	15.7
4. Mobile, AL	Southwest	15.7
5. Clarke, AL	Southwest	15.6
6. Escambia, AL	South	15.6
7. Greene, MS	Southeast	15.6
8. Monroe, AL	South	15.5
9. Jones, MS	South	15.5
10. Perry, MS	Southeast	15.5

Escambia County Alabama ranks number 6 in the top 10 counties with the highest number of severe thunderstorm watches per year

Source: <a href="http://web2.airmail.net/danb1/usrecords.htm">http://web2.airmail.net/danb1/usrecords.htm</a>
Based on data from the Storm Prediction Center

83 THUNDERSTORM WINDS event(s) were reported in Escambia County, Alabama between 08/24/1984 and 03/31/2011.

Mag: Magnitude Dth: Deaths Inj: Injuries

PrD: Property Damage CrD: Crop Damage

Click on Location or County to display Details.

#### Alabama

Alabama									
Location or County	Date	Time	Туре	Mag	Dth	Inj	PrD	CrI	
1 ESCAMBIA	05/18/1986	1740	Tstm Wind	0 kts.	0	0	0	0	
2 ESCAMBIA	07/14/1986	1430	Tstm Wind	0 kts.	0	0	0	0	
3 ESCAMBIA	08/02/1986	1525	Tstm Wind	0 kts.	0	0	0	0	
4 ESCAMBIA	02/10/1990	0412	Tstm Wind	0 kts.	0	0	0	0	
5 ESCAMBIA	04/01/1990	1700	Tstm Wind	0 kts.	0	0	0	0	
6 ESCAMBIA	08/19/1990	1600	Tstm Wind	0 kts.	0	0	0	0	
7 ESCAMBIA	12/03/1990	0930	Tstm Wind	0 kts.	0	0	0	0	
8 ESCAMBIA	08/05/1991	1300	Tstm Wind	0 kts.	0	0	0	0	
9 ESCAMBIA	05/26/1992	1440	Tstm Wind	0 kts.	0	0	0	0	
10 ESCAMBIA	03/13/1993	0500	Thunderstorm Winds	0 kts.	0	0	0	0	
11 Dixonville	04/15/1994	1945	Thunderstorm Winds	0 kts.	0	0	500K	0	
12 Pollard	05/15/1994	1930	Thunderstorm Winds	0 kts.	0	0	5K	0	
13 Mccullough	02/03/1995	1750	Thunderstorm Winds	0 kts.	0	0	5K	0	
14 Atmore	02/03/1995	1815	Thunderstorm Winds	0 kts.	0	0	1K	0	
15 Atmore	05/09/1995	2330	Thunderstorm Winds	0 kts.	0	0	70K	0	
16 Central And East Port	05/10/1995	0050	Thunderstorm Winds	0 kts.	0	0	30K	0	
17 Atmore	07/08/1995	1549	Thunderstorm Winds	0 kts.	0	0	1K	0	
18 Brewton	07/18/1995	1840	Thunderstorm Winds	0 kts.	0	0	1K	0	
19 Flomaton	07/18/1995	1845	Thunderstorm Winds	0 kts.	0	0	3K	0	

20 Atmore	10/04/1995	1120	Thunderstorm Winds	0 kts.	0	0	5K	0
21 Southwest Alabama	11/11/1995	0500	Thunderstorm Winds	0 kts.	0	0	50K	0
22 Atmore	05/24/1996	02:30 PM	Tstm Wind	60 kts.	0	0	8K	0
23 Wallace	07/28/1996	02:00 PM	Tstm Wind	55 kts.	0	0	2K	0
24 Brewton	12/16/1996	08:15 PM	Tstm Wind	50 kts.	0	0	2K	0
25 Atmore	01/24/1997	09:30 AM	Tstm Wind	50 kts.	0	0	2K	0
26 Mc Cullough	01/24/1997	09:30 AM	Tstm Wind	50 kts.	0	0	2K	0
27 Atmore	04/22/1997	08:45 PM	Tstm Wind	50 kts.	0	0	1K	0
28 Brewton	06/20/1997	12:35 PM	Tstm Wind/hail	45 kts.	0	0	1K	0
29 Robinsonville	11/21/1997	07:55 PM	Tstm Wind	70 kts.	0	0	25K	0
30 Little Rock	11/21/1997	08:15 PM	Tstm Wind	70 kts.	0	0	35K	0
31 <u>Dixonville</u>	11/21/1997	09:40 PM	Tstm Wind	80 kts.	0	0	40K	0
32 Brewton	01/07/1998	08:45 AM	Tstm Wind	50 kts.	0	0	3K	0
33 Brewton	01/07/1998	09:15 AM	Tstm Wind	50 kts.	0	0	3K	0
34 Brewton	01/22/1998	08:40 AM	Tstm Wind	50 kts.	0	0	3K	0
35 Countywide	06/05/1998	11:45 PM	Tstm Wind	60 kts.	0	0	50K	0
36 Huxford	07/05/1998	02:45 PM	Tstm Wind	50 kts.	0	0	3K	0
37 Nokomis	07/26/1998	07:10 PM	Tstm Wind	50 kts.	0	0	5K	0

38 Mc Cullough	01/02/1999	10:45 AM	Tstm Wind	50 kts.	0	0	5K	0
39 Flomaton	03/09/1999	02:55 AM	Tstm Wind	50 kts.	0	0	10K	0
40 Dixonville	05/23/1999	03:50 PM	Tstm Wind	50 kts.	0	0	1K	0
41 Brewton	07/23/1999	06:00 PM	Tstm Wind	60 kts.	0	0	15K	0
42 Atmore	08/19/1999	03:15 PM	Tstm Wind	60 kts.	0	0	2K	0
43 Atmore	08/19/1999	03:30 PM	Tstm Wind	50 kts.	0	0	3K	0
44 Appleton	03/19/2000	05:10 PM	Tstm Wind	55 kts.	0	0	10K	0
45 Brewton	06/25/2000	06:30 PM	Tstm Wind	55 kts.	0	0	7K	0
46 Atmore	07/20/2000	06:00 PM	Tstm Wind	55 kts.	0	0	5K	0
47 Brewton	07/22/2000	03:00 PM	Tstm Wind	55 kts.	0	0	5K	0
48 <u>Huxford</u>	03/12/2001	11:55 AM	Tstm Wind	90 kts.	0	1	1.0M	0
49 <u>Dixie</u>	03/12/2001	12:55 PM	Tstm Wind	60 kts.	0	0	15K	0
50 Atmore	04/04/2001	11:45 AM	Tstm Wind	55 kts.	0	0	0	0
51 Huxford	06/14/2001	01:00 PM	Tstm Wind	55 kts.	0	0	5K	0
52 Atmore	10/13/2001	02:30 PM	Tstm Wind	60 kts.	0	0	10K	0
53 Brewton	10/13/2001	02:40 PM	Tstm Wind	60 kts.	0	0	10K	0
54 Appleton	10/13/2001	05:55 PM	Tstm Wind	60 kts.	0	0	10K	0
55 Atmore	10/13/2001	07:45 PM	Tstm Wind	55 kts	0	0	20K	0

56 Mc Cullough	10/13/2001	12:15 PM	Tstm Wind	50 kts.	0	0	10K	0
57 <u>Dixie</u>	04/29/2002	03:30 PM	Tstm Wind	50 kts.	0	0	7K	0
58 Mc Cullough	07/28/2002	12:45 PM	Tstm Wind	50 kts.	0	0	8K	0
59 Wallace	12/24/2002	04:35 AM	Tstm Wind	50 kts.	0	0	5K	0
60 Flomaton	04/25/2003	04:10 AM	Tstm Wind	50 kts.	0	0	15K	0
61 Appleton	01/26/2004	05:00 AM	Tstm Wind	50 kts.	0	0	8K	0
62 Brewton	01/26/2004	05:40 AM	Tstm Wind	50 kts.	0	0	5K	0
63 Little Rock	06/12/2004	05:30 PM	Tstm Wind	50 kts.	0	0	8K	0
64 Huxford	06/24/2004	02:30 PM	Tstm Wind	50 kts.	0	0	10K	0
65 Boykin	06/27/2004	01:15 PM	Tstm Wind	50 kts.	0	0	5K	0
66 Atmore	05/24/2005	08:10 PM	Tstm Wind	50 kts.	0	0	10K	0
67 Brewton	08/15/2006	07:20 PM	Tstm Wind	50 kts.	0	0	10K	0
68 Brewton	08/30/2006	04:55 PM	Tstm Wind	50 kts.	0	0	12K	0
69 Flomaton	11/15/2006	07:40 AM	Thunderstorm Wind	50 kts.	0	0	10K	OK
70 Brewton	02/12/2008	18:00 PM	Thunderstorm Wind	50 kts.	0	0	12K	0K
71 Brewton	02/12/2008	18:10 PM	Thunderstorm Wind	56 kts.	0	0	0K	0K
72 Brewton	02/17/2008	14:43 PM	Thunderstorm Wind	50 kts.	0	0	12K	0K
73 Brewton	03/26/2009		Thunderstorm Wind	52 kts.	0	0	12K	0K

74 Brewton	03/27/2009	03:58 AM	Thunderstorm Wind	60 kts.	0	0	35K	0K
75 <u>Dixie</u>	03/27/2009	04:10 AM	Thunderstorm Wind	60 kts.	0	0	25K	0K
76 Robinsonville	04/13/2009	03:55 AM	Thunderstorm Wind	60 kts.	0	0	70K	0K
77 Flomaton	05/11/2009	19:00 PM	Thunderstorm Wind	52 kts.	0	0	20K	OK
78 Brewton	07/02/2009	17:10 PM	Thunderstorm Wind	52 kts.	0	1	100K	OK
79 Roberts	07/26/2009	16:01 PM	Thunderstorm Wind	52 kts.	0	0	10K	0K
80 Appleton	08/04/2010	16:24 PM	Thunderstorm Wind	52 kts.	0	0	0K	0K
81 Roberts	10/24/2010	22:00 PM	Thunderstorm Wind	52 kts.	0	0	0K	0K
82 Flomaton	03/09/2011	09:30 AM	Thunderstorm Wind	52 kts.	0	0	5K	0K
83 Brewton	03/09/2011	09:40 AM	Thunderstorm Wind	52 kts.	0	0	5K	0K
TOTALS:					0	2	2.415M	0

#### Wildfires

#### The Tribe's Vulnerability to Wildfires

The Tribe is seeing an increase in the wild land/urban interface. More and more people are building homes and other structures in wooded areas. Many of these areas do not have adequate water for fire fighting. In early June of 2011, the tribe assisted other fire fighting units in several wild fires that burned 1800 acres in Escambia County Alabama. Twenty fire departments were involved with over 100 firefighters in fighting fire in four areas near the reservation. The Tribal HVA ranked wildfires at 83% Relative Risk. Due to the combination of drought conditions severe thunderstorms with lightning, and the increased wild land/urban interface, the probability of future wildfires is high.

#### The Tribe's Impact from Wildfires

The most immediate and obvious impact from wildfires is loss of timber and crops. Wildfires also damage and destroy structures, kill wildlife, pollute streams from increased runoff due to loss of vegetation and pose a threat to residents and firefighters. The fighting of wildfires also is a substantial cost to the tribe for the salaries and equipment used in the firefighting operation.

# Flooding

Flooding can be caused by intense precipitation, sudden release of water such as that caused by a dam failure, or the inability for water to run off of land due to drainage restrictions, or overloading of normal watercourses.

#### The Tribe's Vulnerability to and Impact from Flooding

According to the National Climatic Data Center (NCDC) data, between 08/24/1984, when the tribe became Federally Recognized and 03/31/2011, there were 28 Flood Events in Escambia County, Alabama. These storms yielded no injuries and 3.805 million dollars in damages to property.

Flooding is also a source of potential loss of life and or injury to tribal members and visitors. Flooding at the Magnolia Branch Campground resulted in trapping campers who had to be rescued by emergency response personnel. Flooding also causes damage to buildings and roadways and erodes land.

On December 12<sup>th</sup> of 2009 the Tribe was part of a disaster declaration for flooding (FEMA-1870DR-8L).

Land around the reservation is relatively flat which can cause problems from pooling water. There are several creeks and rivers that have potential impact on tribal areas. The tribal property is not subject to flooding by storm surge from hurricanes or tropical storms. Previous history has shown several areas prone to flooding by standing water (water collecting on normally dry land that does not have adequate drainage to carry away precipitation) as well as overbank flooding from waterways. Flooding ranked a score of 83% relative risk in the Tribal HVA.

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28 FLOOD event(s) were reported in Escambia County, Alabama between 08/24/1984 and 03/31/2011.

Mag: Magnitude
Dth: Deaths
Inj: Injuries

PrD: Property Damage CrD: Crop Damage

Click on Location or County to display Details.

#### Alabama

Location or County	Date	Time	Type	Mag	Dth	In	PrD	C
Southwest Portion	01/07/1998	10:45 AM	Flash Flood N/A		0	0	10K	0
2 Countywide	03/08/1998	01:30 AM	Flood N/A		0	0	1.5M	0
3 Atmore	07/29/1998	06:50 PM	Flash Flood	N/A	0	0	20K	0
4 Countywide	09/27/1998	11:30 AM	Flood	N/A	0	0	0K	0
5 Central Portion	03/13/1999	08:30 PM	Flash Flood	N/A	0	0	3K	0
6 Countywide	03/03/2001	12:00 PM	Flash Flood	N/A	0	0	10K	0
7 Atmore	09/26/2002	02:05 AM	Flash Flood	N/A	0	0	0	0
8 West Central Portion	06/06/2003	05:00 PM	Flash Flood	N/A	0	0	0	0
9 Countywide	06/30/2003	09:00 PM	Flash Flood	N/A	0	0	0	0
10 Countywide	07/01/2003	12:00 AM	Flash Flood	N/A	0	0	0	0
11 Poarch	06/02/2004	10:15 AM	Flash Flood	N/A	0	0	0	0
12 West Portion	09/16/2004	05:00 AM	Flash Flood	N/A	0	0	0	0
13 Central Portion	10/19/2004	10:00 AM	Flash Flood	N/A	0	0	0	0
14 Countywide	07/10/2005	05:00 PM	Flash Flood	N/A	0	0	0	0
15 Countywide	08/29/2005	12:00 PM	Flash Flood	N/A	0	0	0	0
16 Atmore	11/15/2006	12:00 PM	Flash Flood	N/A	0	0	0K	OK
17 Brewton	04/01/2007	20:15 PM	Flash Flood	N/A	0	0	0K	OK
18 Wallace	04/14/2007	17:30 PM	Flash Flood	N/A	0	0	0K	OK
19 Boykin	01/31/2008	21:00 PM	Flash Flood	N/A	0	0	0K	OK
20 Appleton	12/10/2008	07:18 AM	Flash Flood	N/A	0	0	0K	OK
21 Atmore	12/14/2009	17:50 PM	Flash Flood	N/A	0	0	1.3M	OK
22 Atmore	12/14/2009	17:50 PM	Flash Flood	N/A	0	0	250K	OK
23 Brewton	12/14/2009	18:40 PM	Flash Flood	N/A	0	0	0K	OK
24 Appleton	12/14/2009	19:00 PM	Flood	N/A	0	0	400K	OK
25 Flomaton	12/14/2009	22:00 PM	Flood	N/A	0	0	362K	OK
26 Atmore	05/03/2010	08:00 AM	Flash Flood	N/A	0	0	0K	0K
27 Atmore	03/09/2011	10:00 AM	Flash Flood	N/A	0	0	0K	0K
28 Brewton	03/09/2011	10:30 AM	Flash Flood	N/A	0	0	0K	0K
		F1	TOT	ALS:	0	0	3.805M	0

In January of 2001, CDG Engineers & Associates prepared a Storm Drainage Study for the Poarch Band of Creek Indians. (Attached as Appendix D) The study was conducted to:

- 1. Determine the condition and capacity of the existing storm drainage system;
- 2. Identify existing and potential future problems with the drainage system;
- 3. Prepare cost estimates for improvements to the drainage system.

The study was conducted in an area of approximately 460 acres that was divided into 23 drainage basins. The reservation property extended beyond the boundaries of the 23 basins, however it was these basins that contributed to the runoff either causing or potentially causing drainage problems. As a result of this study and recommendations, one location in a housing area was identified as a flood prone area. It was determined that the existing drainage flume (shown above as a diagonal line leading from the yellow box to the road by the top left house) did not have adequate slop to carry water away from the subdivision. The recommendation was to rebuild the flume with adequate slope and to place approximately 650 feet of culvert to run toward Martin Road. An open concrete ditch was constructed (shown in yellow box below) to carry water away from the subdivision and this mitigation effort has proven very effective in preventing flooding in the subdivision. More details on this recommended project can be found on page 11 of the study, under Drainage Basin 4 and in the Table for Drainage Basin 4 - describing the Area of Concern, Recommendation, Priority, and Estimated Cost in the same section of the Drainage Study.

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New Concrete Lined Drainage Ditch Shown in Yellow Box

#### Severe Repetitive Loss Properties

The Tribe has no repetitive flood loss structures under the National Flood Insurance Program and does not participate in the National Flood Insurance Program as of the time this plan was developed in 2011. If the Tribe applies as a subgrantee, it reserves the right to be eligible for receiving a reduced Federal cost share based on the eligibility of the grantee. There are some rental homes that are subject to repeated flooding and this is addressed in the PBCI Mitigation Action Table. Some of this flooding was mitigated by the project shown in the above photo. New projects should be developed based on data obtained by a new drainage study.

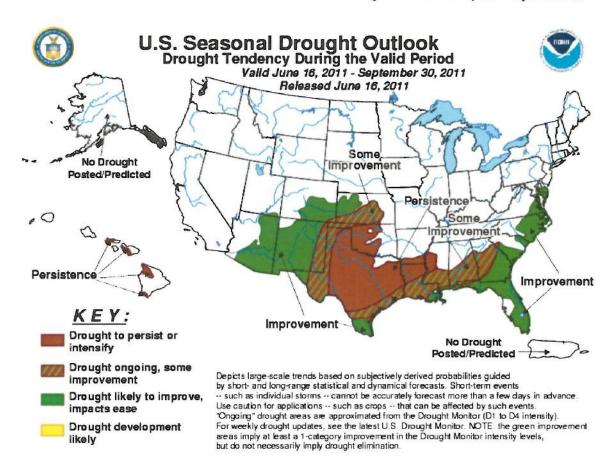
# Drought

Drought can cause serious problems ranging from water shortages for domestic purposes to wild fires, to loss of crops and livestock. In October of 2010, Alabama Governor Bob

Riley declared all 67 counties in Alabama as facing a drought and named 23 of the counties to the Drought Warning level due to the lack of rain and the low probability for any significant near-term relief. The declarations followed an assessment by the state's Office of Water Resources, which is part of the Alabama Department of Economic and Community Affairs. According to David Emory Stooksbury, Ph.D., State Climatologist for Georgia, drought is a normal component of the climate system. (A Primer on Drought History in Alabama and Georgia,)

## The Tribe's Vulnerability to and Impact from Drought

According to the study referenced above, periods of drought can be expected to occur regularly, so the probability of future droughts impacting the tribal lands is high. The following map illustrates the U.S. Seasonal Drought Outlook for June – September of 2011 and shows drought tendency during the valid period for most of Southern Alabama, where the majority of the tribal lands are. Clearly tribal areas are subject to drought conditions. Reduction in water use can also have an impact on sewer system operations.



Drought ranked 78% relative risk in the Tribal HVA.

# Earthquakes

The known seismic history of Alabama spans about 100 years for local earthquakes. For shocks outside the State borders that caused damaged to cities in Alabama, the history can be traced to 1811 - 1812, when three great (estimated magnitude 8 or greater on the Richter scale) earthquakes centered in Missouri may have reached intensity VII in the northern and/or central sections. These gigantic earthquakes were comparable to the San Francisco shock in 1906 and were felt over 2 million square miles, more than half of the total area of the United States.

Historical records indicate the first earthquake of consequence in Alabama shook residents of Sumter and Marengo Counties, located in the western part of the State, on February 4, 1886. A similar shock occurred nine days later, on February 13. Both were reported felt at communities along the Tombigee River, but caused no damage. Only six months later, the destructive Charleston, South Carolina, shock that was felt in cities all over the Eastern United States occurred. This shock, located about 400 miles east of Alabama's border, caused minor damage in the northeastern part of the State.

In 1916 on October 18, a strong earthquake occurred on an unnamed fault east of Birmingham. It was apparently most strong at Easonville. Near the epicenter, chimneys were knocked down, windows broken, and frame buildings "badly shaken." It was noted by residents in seven States and covered 100,000 square miles.

Another tremor that damaged the Birmingham area occurred on April 23, 1957. Centered near the Tennessee River below Guntersville Dam, the earthquake shook residents in southern Tennessee, western Georgia, and most of northern and central Alabama. Earthquake records for that year state: "Felt by, awakened, and alarmed many. Minor damage occurred to several chimneys. There was one report of cement steps being cracked in two and several small cracks developed in walls. Table-top items tumbled to the floor."

A shock centered in the Huntsville area on August 12, 1959. Though felt over a small area of southern Tennessee and northern Alabama, it shook bricks from chimneys at Hazel Green; damaged one chimney and a newly constructed concrete block building at Meridianville; shook violently the buildings at New Sharon, knocking canned goods

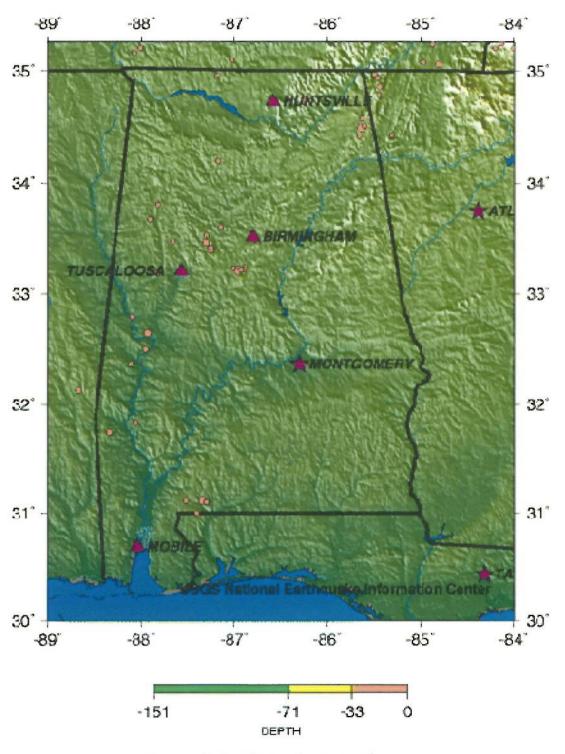
from shelves and sending frightened residents fleeing from their homes; and cracked plaster and knocked groceries from shelves at Huntsville.

Additional earthquakes (intensity V category) listed for this State that were minor and caused no damage centered near Rosemary, western Alabama, in June 1917; in the Scottsboro area northeast of Huntsville in June 1927; at Cullman, northern Alabama, in May 1931; and in the Anniston area in May 1939.

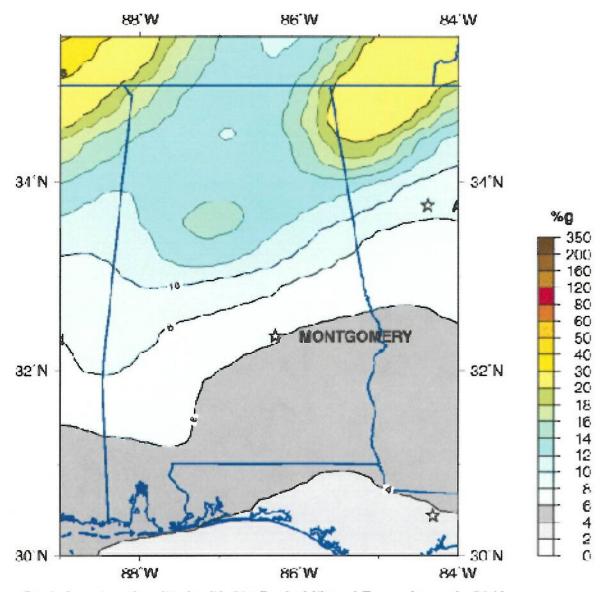
[The above history was abridged from Earthquake Information Bulletin, Volume 2, Number 1, January-February 1970. USGS]

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# Seismicity of Alabama 1990 - 2006



Source, United States Geological Survey



Peak Acceleration (%g) with 2% Probability of Exceedance in 50 Years site: NEHRP B-C boundary National Seismic Hazard Mapping Project (2008)

Source USGS

Irondale, Jefferson County, Alabama □1916 10 18 22:04 UTC □Magnitude 5.10

□Intensity VII - Largest Earthquake in Alabama



On the basis of the number of chimneys destroyed, this earthquake was more severe in Irondale than in any other town between Easonville and Birmingham. At Irondale, about 5 kilometers north of Birmingham, 14 chimneys in a two-block area were partly destroyed, and six chimneys on a brick store were leveled almost to the roof. Many other chimneys either were leveled to the roofs or were cracked so badly that they had to be rebuilt. At Pell City, a few bricks were dislocated from one of the courthouse

chimneys, and near Easonville, a few chimneys were damaged lightly. Poorly built chimneys on the eastern edge of Birmingham were damaged heavily.

A careful study of the Red Gap fault, which extends from near Gate City to beyond Irondale, did not reveal direct evidence of recent earth movement. The most significant geologic result was the effect of the earthquake on underground water, particularly in Irondale. Five wells in a one-block area of Irondale went dry immediately after the shock, and the water level in many others was lowered. At Pell City, the shock lowered the water level in one well about 50 centimeters. Several small aftershocks occurred through October 28. Also felt in Georgia, Indiana, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

Abridged from Seismicity of the United States, 1568-1989 (Revised), by Carl W. Stover and Jerry L. Coffman, U.S. Geological Survey Professional Paper 1527, United States Government Printing Office, Washington: 1993.

#### The Tribe's Vulnerability to and Impact from Earthquakes

Earthquakes can happen suddenly and cause extreme devastation. Historical data from the United States Geological Survey shows relatively minor damage from earthquakes in Alabama, particularly in areas where the tribe has land. In fact, as of June 2011, no earthquake, magnitude 3.5 or greater, had occurred in Alabama for at least 30 years. Earthquakes ranked 56% relative risk in the Tribal HVA and the Tribe's vulnerability to earthquakes is considered low. Based upon the above referenced studies and historical data, the probability of future earthquakes is low as well.

#### Hail

Hail is precipitation that is formed when updrafts in thunderstorms carry raindrops upward into extremely cold areas of the atmosphere. Hail can damage aircraft, homes and cars, and can be deadly to livestock and people. One of the people killed during the March 28, 2000 tornado in Fort Worth was killed when struck by grapefruit-size hail. Hailstones grow by collision with super cooled water drops. (Super cooled drops are liquid drops surrounded by air that is below freezing which is a common occurrence in thunderstorms.) There are two methods by which the hailstone grows, wet growth and dry growth, and which produce the "layered look" of hail.

In wet growth, the hailstone nucleus (a tiny piece of ice) is in a region where the air temperature is below freezing, but not super cold. Upon colliding with a super cooled drop the water does not immediately freeze around the nucleus.

Instead liquid water spreads across tumbling hailstones and slowly freezes. Since the process is slow, air bubbles can escape resulting in a layer of clear ice.

With dry growth, the air temperature is well below freezing and the water droplet immediately freezes as it collides with the nucleus. The air bubbles are "frozen" in place, leaving cloudy ice. The presence of large hail indicates very strong updrafts and downdrafts within the thunderstorm. These are also possible indicators of tornadic activity. (Sources: www.srh.noaa.gov/jetstream/tstorms/hail.htm and www.erh.noaa.gov/cae/svrwx/hail.htm)

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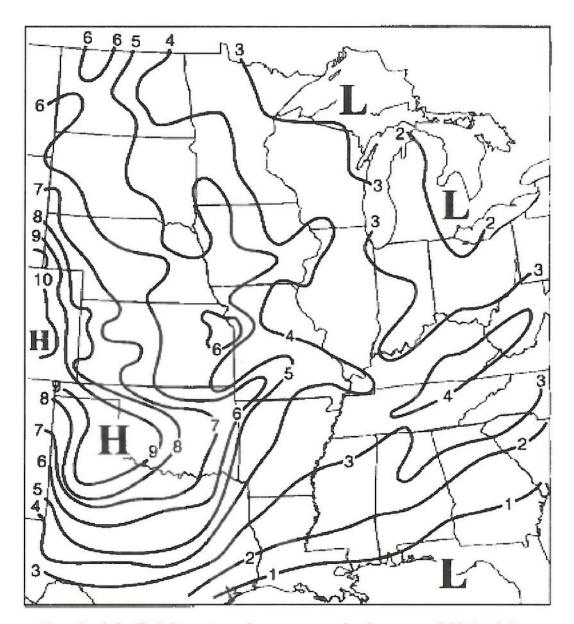


FIG. 2. A hail risk pattern for property in the central United States based on indices determined by combining point data on average hail-day values and average hailstone sizes. The value of 1 is the lowest risk. These values are based on hail data for the 1901–96 period.

Source: Data and Approaches for Determining Hail Risk in the Contiguous United States Stanley A. Changnon, Journal of Applied Meterology, Volume 38 10 March 1999)

## The Tribe's Vulnerability to and Impact from Hail

Although the tribe is in a portion of the United States that does receive severe

thunderstorms, according to the study cited above in Fig. 2., their risk from hail is at the lowest risk level. Hail ranked 56% relative risk in the Tribal HVA. Impact from hail would primarily be loss of crops and damage to buildings and vehicles. Severe hail could also cause injury or death. Based upon the above referenced studies, the future probability of hail damage is low.

#### Winter Storms

Winter storms can include problems from snow and ice. These can range from hazardous road conditions to power outages from ice-covered power lines.

### The Tribe's Vulnerability to and Impact from Winter Storms

Being located in the "Deep South" the tribal communities are not equipped for snow removal due to the relative rarity of winter storms. Although winter storms are rare in this area, when they do occur they can significantly impact transportation due to the inability to deal with the snow and ice conditions. Winter storms ranked 30% relative risk in the Tribal HVA. Based on the geographic location of the tribe, the probability of future impact from winter storms is low.

#### Cultural Issues

Sacred and Historically Significant Sites Within Poarch Band of Creek Indians Land Prepared by Robert G. Thrower, Tribal Historic Preservation Officer (THPO)□

Note: These site locations are identified by county and coded by General Location Areas: H - Headapadea. PS - Poarch Switch, HF - Hog Fork, BC- Bell Creek, HG- Hickory Ground, TR-Tallapoosa River. RH - Red Hill (now Huxford, Alabama), MB - Magnolia Branch Wildilfe Preserve, MI - Mims Island. Exact locations of some sites are confidential and are kept within the THPO Program files.

## Elmore & Montgomery Counties, Alabama

- Ocheobofa Creek Town Site (Hickory Ground) HG
- Hickory Ground Ceremonial Grounds Site HG
- Columee Creek Town Site TR
- Columee Mound Area TR

#### Santa Rosa County, Florida

• Mims Island Grave Site & Riverbank Stabilization Site - MI

#### Escambia County, Alabama

- St. Anna's Episcopal Church H
- Ceremonial Grounds (Current Stomp Dance Grounds) H
- Pickrell House & Consolidated School House and Pow Wow Grounds H
- Certain Objects Within the Archival Safety Vault (New Poarch Creek Indian Museum & Welcome Center) – H
- Fred Walker Home Site H
- Headapadea Baptismal and Swimming Hole Site H
- Judson Indian Cemetery H
- Poarch Community Church H
- Friendly Holiness Church (Old St. Johns in the Wilderness Site) PS
- Poarch Baptist Church Cemetery PS
- Calvin McGhee Home Site HF
- Church of God of Prophecy HF
- New Home Church HF
- New Home Cemetery HF
- Bell Creek Bridge Baptismal Site BC
- Red Hill Indian Cemetery RH

## **Traditional Cultural Properties (TCP) Sites**

- Poarch Creek Rivercane Restoration Sites H and MB
- Box Turtle Reserve Area MB

Due to the cultural sensitivity of the sacred and historically significant sites, details on their location and specific vulnerabilities are not listed in this plan but are confidential and are kept within the THPO Program files. Sites are still being discovered and protection of them becomes an issue once they are discovered. It is not possible to anticipate future discoveries and protection measures needed at that time.

# The Tribe's Vulnerability to Loss of Cultural and Historical Resources

One site along the Tallapoosa River is in danger of loss due to bank erosion. The site is in need of a riverbank stabilization project. The tribal museum has a water-based fire suppression system. Should this system be damaged by freezing or be discharged, it would put many precious artifacts in danger of water damage. The tribe would like to replace the water-based suppression system with one that is more suitable for a museum setting to minimize damage to cultural and historic resources at the museum.

# Capability Assessment

Due to its geographic location, the Tribe has been subject to impact from hazards throughout the history of the Tribe. These hazards and the Tribe's vulnerability to them are discussed in detail in the discussions of specific threats in this plan. In the last two decades, the Tribe began an evaluation process as it was impacted from various hazard events such as hurricanes and other high wind and rain events. The Tribe realized it needed to build more capability to respond to hazard events as well as to mitigate their impact in the future. Working with agencies such as the Indian Health Service and other Federal, state and local partners, the tribe developed a strong emergency management program. The tribe has been very proactive in developing mitigation strategies for all hazards. The Tribe has adopted building codes to make buildings more resistant to damage from storms. They have also made emergency management an integral part of the Tribal operations, utilizing highly trained personnel and a robust equipment cache. Due to these evaluations and discussions in dealing with multiple disaster situations, the Tribe has taken the numerous measures to mitigate the impact of emergency events. The Tribe's hazard mitigation capability relies on Tribal policies, land use planning, budget allocations, personnel, training, public outreach and collaboration with outside entities. The Tribe "looked inward" at its own pre-disaster capabilities and realizing the need for improvement, built a robust program that not only prepares for, but also is able to respond to disasters. Some of these enhanced capabilities are highlighted below.

The Tribe has a full time Emergency Management Director. The Tribal Emergency Management Director is responsible for preparing for and/or combating emergency and disaster situations, both natural and man made. The Tribal Chairman supervises the Tribal Emergency Management Director, except in times of emergency when the Executive Committee of the Tribal Council supervises it. Duties of the EM Director include, but are not limited to:

The Duties of Emergency Management Director

- 1. Being responsible for the planning and implementation of a community Emergency Response Team for all natural and man-made disasters occurring on Tribally owned lands.
- 2. Development of warning, control, and evacuation plans to be used in the event of a disaster.
- 3. Drafting and implementing plans designed to cover the four phases of coping with a disaster (mitigation, preparation, response, and recovery) and reviewing these plans to coordinate with changes in state and federal policies.
- 4. Developing and equipping an Emergency Operations Center that will serve as a

- command center in any disaster.
- 5. Pre-defining criteria that will qualify as a disaster, with emergency response plans to cover each type of disaster.
- 6. Conducting or arranging for classes in emergency techniques, such as first aid, flood protection, fire fighting, post attack operations, etc.
- Conferring and coordinating with local, state and federal authorities as well as
  with representatives of local police, fire, and public works departments to
  coordinate planning, training and responses.
- 8. Conducting geographic surveys of Tribal lands to aid in formulating emergency management plans.
- Coordinating activities of workers engaged in preparing for, or combating
  disaster situations and negotiating with civic and professional leaders to
  develop and implement survival plans in accordance with local needs and state
  and federal policies.
- 10. Addressing community and interested civic, social, and religious groups to stimulate awareness of emergency response activities.
- 11. Inspecting and replenishing all inventories of emergency supplies and equipment and arranging for all equipment maintenance.
- 12. Providing warnings and survival information to the Tribal community before, during and after an emergency.
- 13. Seeking funding through the grant process to support emergency preparedness activities.
- 14. Performing other duties as assigned by the appropriate person.

The Tribal fire Department is a highly trained asset to the community and the surrounding area. All of the Tribe's Firefighters are HazMat Technicians and all have Rope Rescue and High Angle Rescue training. The three (3) Captains are trained as HazMat Incident Commanders and the Department has some air monitoring equipment to identify airborne hazards during emergencies. The Emergency Management Program is NIMS compliant.

The Tribal Fire Department is a Career Full-time Fire Department. At the time of this writing, only three (3) were not EMTs but were awaiting testing to become EMTs. However there were five firefighters in school working on their Advanced EMT license.

The Tribal Fire Department and Tribal Police Department are working collaboratively to develop a Tribal SWAT Group to respond to certain situations both on and off the reservation.

Due to their experience, expertise and capabilities, the PBCI Emergency Management program is often looked to by other entities to play a vital role in events even off of their

reservation and tribal properties. The Tribe was asked to participate at the State level for a Tabletop Exercise for Hurricane Response as a part of the annual Governor's Hurricane Exercise. Participation in this exercise is by invitation only. Additionally, the tribe responds to 15 miles of Interstate 65 whenever there is an emergency situation. The tribe has a close working relationship with the Indian Health Service Emergency Management Program and acts as both a staging area for equipment to be deployed to other tribes and as a responder.

The tribe has stockpiled various pieces of equipment that can be used in an emergency event, including a restroom trailer, two large capacity water purification units, large (200 KVA) and small (300 watt) capacity generators, 2 Mobile Medical Units -1 Adult and 1 Pediatric and a Mass Casualty Trailer. One of the Mobile Medical Units was deployed during the 2011 outbreak of tornadoes in Alabama. It was used in support of non-tribal residents of Alabama.

The Tribe is a pre-staging site for Disaster Mortuary Response Team (DMORT) supplies for the State of Alabama including the Bio-Seal System. The Tribe also has a HazMat Response Trailer, a Mobile Communication Trailer, and 2 more trailers for response. If it asked to be deployed during a disaster, the Tribe wants to be self-sufficient.

Although some may look at the Tribe's emergency management equipment and staff as response resources, they in fact serve a dual role. A coordinated, effective and well-equipped response effort is in fact a mitigation strategy. Equipment such as generators, water purification units, restroom facilities and other emergency equipment, mitigate the impact of an emergency. For example, generators can power refrigeration units to avoid food spoilage. They can power health care facilities so that they can continue to deal with injuries and illness. They can power water and wastewater facilities to prevent health hazards that would arise if these systems failed. Adequately trained staff can respond in a more effective manner to lessen the impact of an event. The tribe has worked diligently to prepare for emergencies and mitigate their impact. The major barrier to further action is funding for further mitigation actions.

# **Development in Hazard Prone Areas**

Since for most hazards identified by this Plan, the entire reservation would be considered to be in a "hazard prone area" the above mentioned evaluation of the Tribe's policies applies to this section. The Tribal government's adoption of building codes has assisted in mitigation efforts by defining requirements for construction on the reservation. Adoption of these codes was based on the realization that codes would require building standards

that would assist in migration future damage from hazards. As part of the development of the Tribal Master Plan, the Tribe will consider the impact of hazards in the planning and development process. The Tribe's full-time emergency management program is part of the administration of the Tribe. It provides continuous input to the operation of the Tribe, including operations during current events as well as for future plans. The Emergency Manager interfaces with other Tribal programs thorough regular monthly tribal administrative meetings, Tribal Council Meetings, public (tribal member) meetings, and departmental training. As a part of the process for developing this plan, the Tribal Emergency Manager met with Tribal departments to determine their capabilities and to identify areas that needed improvement. This will be an ongoing process as part of the duties of the Emergency Management program and the continual operation of this plan. More detailed information on regular Tribal meetings are described later in this Plan in the Plan Maintenance section.

#### **Current Tribal Capability for Severe Weather Events**

The Tribe has established a close working relationship with the National Weather Service and obtains frequent briefings from the NWS during inclement weather. The tribe also installed a public warning system on the reservation and actively uses the system to warn the public of impending storms.

#### **Current Tribal Capability for High Wind Events**

The tribe has already taken some measures to mitigate damage from high wind events. The Tribe purchased CAT-5 hurricane netting to be installed on appropriately constructed buildings. This netting can quickly be attached to a prepared building and serves to weaken the force of winds and lessen the lifting effect of those winds. This netting is primarily used for hurricane events, since there is adequate warning and time to prepare for these events. It is not practical to install the netting for other high wind events, due to the usual short notice of the event and the need to be able to use the facilities, such as Fire Station Number 1 for emergency response.

The Wind Creek Casino and Hotel and was constructed to withstand 200 mile per hour winds.



Wind Creek Casino and Hotel is Built to Withstand High Winds

The tribe has a close working relationship with the Indian Health Service (IHS) Emergency Management Program. As a result of this relationship, and the tribe's proven emergency management capabilities, the tribe is able to utilize IHS equipment for emergency management. The tribe acts as a mutual aid responder with the IHS and not only stores IHS equipment, but also is also able to utilize it as a responder. This includes a mobile restroom trailer, a shower trailer, a rapid response trailer with 6 small generators, a chainsaw and other response equipment, and several large generators that can be used to power water system pumps or substantial sized buildings.

The tribe also has its own equipment and capabilities.

# **Mitigation Strategy**

# **Overall Mitigation Strategy**

The mitigation strategy is to reduce risks through collaborative actions and policies that limit the effects of natural hazards on the tribal members and physical assets of the Poarch

Band of Creek Indians. Individual mitigation strategies for specific risks determined by the HVA have been addressed below for each risk. The following are the overall mitigation goals of this plan:

- Goal 1: Enhance the abilities of the tribe to mitigate hazards.
- Goal 2: Reduce the Tribe's risk from natural hazards.
- Goal 3: Reduce the vulnerability of current and future developments.
- Goal 4: Educate and foster public support and acceptance of hazard mitigation.
- Goal 5: Expand and promote interagency hazard mitigation cooperation.

# **Funding Sources**

Projects that have been identified in this plan, will be funded through possible Federal grants, through collaboration with other Departmental mandates, and/or through different agencies that the Tribe deals with such as the Indian Health Service, the Assistant Secretary for Indian Affairs, Housing and Urban Development, the Environmental Protection Agency, Community Development Block Grants, or other funding sources. Funding may also come from FEMA Mitigation Funds that are available for identified funding as a result of a disaster declaration. Funding may also come from Poarch Creek Tribal Government yearly budget appropriations. Funding information for each mitigation action item is included in the PBCI Mitigation Action Table in Appendix I.

#### Tribal Mitigation Strategy for Lightening

#### Goal

Reduce the exposure of tribal members and visitors to lightening hazards.

#### **Objectives**

- 1. Develop a tribal policy for lightening protection during outside activities.
- 2. Provide education opportunities for lightening hazard reduction.

#### Actions

 (L-1) Tribal Emergency Management will draft a policy for managing tribally sponsored outside activities to reduce exposure to lightening during these events.
 It will spell out measures to be taken during outside activities when lightening is a threat. The draft will be sent to Tribal Council for review and adoption.

- 2. (L-2) Tribal Emergency Management will draft a policy for tribal employees who work outside to provide guidelines for reducing the threat from lightening. This policy will be sent to the Tribal Human Resources Office for review and adoption.
- (L-3) Education materials on lightening safety will be made available to tribal members during public education venues such as the health department and tribal gatherings.

The best way to protect ones self from lightning is to avoid the threat. People simply should not be caught outside in a storm. As mentioned above, the tribe will develop a lightning safety plan, and information campaign and cancel or postpone tribally sponsored activities appropriately if thunderstorms are expected. Event leaders will be required to monitor weather conditions and order people to a safe place before the weather becomes threatening. Substantial buildings and hard-topped vehicles are safe options. Rain shelters, small sheds, and open vehicles are not safe; therefore the following information relating to lightening safe areas will be incorporated into the policy

A safe shelter from lightning is either a substantial building or an enclosed metal vehicle. A safe building is one that is fully enclosed with a roof, walls and floor, and has plumbing or wiring. Examples include homes, schools, churches, hotels, office buildings, or shopping centers. Once inside, people should be instructed to stay away from showers, sinks, bathtubs, and electronic equipment such as stoves, radios, corded telephones and computers. Unsafe buildings include carports, open garages, covered patios, picnic shelters, beach pavilions, golf shelters, and tents of any kind, baseball dugouts, sheds and greenhouses.

A safe vehicle is any fully enclosed metal-topped vehicle such as a hard-topped car, minivan, bus, truck, etc. While inside a safe vehicle, people should not use electronic devices such as radio communications equipment during a thunderstorm. If people drive into a thunderstorm, they slow down and use extra caution. If possible, they should pull off the road into a safe are and not leave the vehicle during a thunderstorm. Unsafe vehicles include golf carts, convertibles, motorcycles, or any open cab vehicle. (Source: National Weather Service)

#### Tribal Mitigation Strategy for Tornadoes

As mentioned in the introduction to this hazard, tornadoes are extremely violent and can destroy even strong structures in their path. Although it is possible to predict the possibility of tornadoes forming in weather systems, the actual formation of an individual tornado happens quickly and without much time for warning the public. A combination of National Weather Service information, a trained storm spotter network, adequate public warning systems, a trained public and adequate shelters can form the best defense against

these severe storms. As was previously mentioned in the capabilities section of this plan, the Tribe has established a close working relationship with the National Weather Service and obtains frequent briefings from the NWS during inclement weather. The tribe also installed a public warning system on the reservation and actively uses the system to warn the public of impending storms. The tribe would like to further enhance these systems.

#### Goal

Reduce the exposure of tribal members and visitors to tornado hazards.

## **Objectives**

- Develop a system to increase information flow to the tribal emergency management program to allow for rapid decision making, based upon accurate storm information to maximize warning times for tornadoes.
- 2. Expand and enhance the existing storm warning system to provide better coverage.
- 3. Provide storm shelters for tribal members.

#### Actions

- (T-1) To further enhance the community's readiness and response, the tribe will
  pursue developing a network of volunteers of trained storm spotters. The NWS
  offers two levels of Storm Spotter training, basic and advanced. The tribe will
  sponsor training sessions on the reservation and encourage people to attend these
  sessions and become Storm Spotters. Amateur Radio Operators will also be
  contacted to be a part of this network.
- (T-2) There is also a need for a storm warning system for the northern tribal
  properties and a need to add warning boxes to the existing tribal system for remote
  locations. The tribe will pursue funding sources for enhancing their storm warning
  system.
- 3. (T-3) There are no tornado storm shelters on the reservation. The tribe would like to pursue installation of storm shelters for their members. These could be used not only in tornado situations, but also other severe weather such as severe thunderstorms with straight-line winds, as well as hurricanes. Currently there is no tribal funding source for this action but the Tribe has applied for funding through current State of Alabama mitigation funding.

#### **Tribal Mitigation Strategy for High Wind Events**

#### Goal

Reduce the damage to tribal facilities from high wind events.

### **Objectives**

- Develop enhanced tribal building standards for future construction of tribal facilities.
- 2. Retro fit existing buildings to make them more resistant to high winds.

#### Actions

- 1. (HW-1) Tribal Administration will develop a tribal policy for future construction of tribal buildings requiring them to be built to a standard that is resistant to high winds.
- 2. (HW-2) To mitigate damage from future high wind events, the tribe would like to retrofit buildings to bring them up to a safe design standard. There is especially a need for better roofing for the Tribal rental units due to wind loads that occur on the Reservation. (These units are owned by the Tribe and rented to Tribal Members as a part of the Tribal Housing Program.) High impact glass is also needed for the rental units on the Reservation.

The tribe has already adopted the following building codes to set standards for construction on the reservation:

- 2009 State of Alabama Codes
- 2009 International Building Codes
- 2009 Plumbing Code
- 2009 International Mechanical Code
- 2009 International Fire Code
- 2011 National Electrical Code

The new policy would be used to enhance existing building codes and clearly determine their applicability for construction on the reservation. As of this writing, there were no funds identified for retrofitting existing buildings. This will be addressed in the PBCI Mitigation Action Table in Appendix I.

#### Tribal Mitigation Strategy for Hurricanes

As mentioned in the capabilities section, the tribe has taken substantial measures to mitigate impact from hurricanes. This is as a result of "lessons learned" from previous events.

#### Goal

1. Reduce the damage to tribal facilities from hurricanes and tropical storms.

2. Reduce impact to tribal members from hurricanes and tropical storms.

#### **Objectives**

- 1. Develop enhanced tribal building standards for future construction of tribal facilities. Retro fit existing building to make them more resistant to hurricanes and tropical storms bringing them up to the new standard.
- Take measures to enhance the safety and comfort of tribal members during hurricanes and tropical storms.

#### Actions

- 1. (HU-1) Develop a tribal policy for future construction of tribal buildings requiring them to be built to a standard that is resistant to high winds, including those from hurricanes and tropical storms. To mitigate damage from future high wind events, the tribe would like to retrofit buildings to bring them up to a safe design standard.
- 2. (HU-2) Develop shelter operations for tribal members for refuge during hurricanes and tropical storms and their aftermath. Some facilities also have a need for back-up power during emergencies. There is a huge need for a generator for the Housing Building to be able to continue work duties and expedite the repair of homes and return people back to their homes during emergencies. Also, buildings designated as shelters should have back-up power with enough fuel for sustained operations.

#### **Tribal Mitigation Strategy for Extreme Temperatures**

#### Goal

1. Reduce impact to tribal members from extreme temperatures

#### **Objectives**

- 1. Develop a tribal policy to address community needs in extreme temperature situations.
- 2. Tribal designation and preparation of facilities and staff to be used for and at cooling stations for vulnerable populations during high heat conditions.

#### Actions

- 1. (ET-1) The health department will identify people at risk during high heat events.
- 2. (ET-2) The tribe will designate what facilities will be used as cooling stations, properly equip those stations for use, and train staff in appropriate skills. EMS

will check on high-risk people and move them to designated cooling stations if necessary.

#### **Tribal Mitigation Strategy for Thunderstorms**

Goals, objectives and actions for thunderstorms are the same as for lightening hail and high winds; therefore these will not be repeated here. Please refer to the lightening, hail, and high winds sections.

#### **Tribal Mitigation Strategy for Wildfires**

#### Goal

1. Reduce the risk to buildings, homes residents and fire fighters from wildfires.

# **Objectives**

- 1. Educate homeowners about safe building materials and landscape practices.
- 2. Enhance situational awareness for firefighters relating to location of buildings, firefighters and enhanced communications.
- 3. Procure adequate fire fighting equipment and supplies for wild fire operations.

#### Actions

- 1. (WF-1) Work with Alabama Department of Forestry on housing standards including types of shingles, clearing brush, etc.
- (WF-2) Perform periodic aerial surveys of wooded land to locate new homes and other structures and identify their location with GPS coordinates and maps.
   Purchase of individual locator beacons such as SPOT devices for firefighters.
- (WF-3) Purchase of portable holding tanks and bladders for water to fight wild fires.

#### **Tribal Mitigation Strategy for Flooding**

Since the drainage study that was discussed in the flooding hazard section of this plan was conducted in 2001, there have been many changes to the tribal land. New structures have been built and there are increased areas of paving and other hard surfaces and numerous new buildings. Due to the condition of current ditches located on or near a number of the Tribal Rental Units on the Reservation, some of the subdivisions flood during intense rain events. Additionally, other tribal property outside of the main reservation has

not been studied. It is recommended that as a flooding mitigation strategy, a new comprehensive storm drainage study be conducted and that its recommendations be followed.

#### Goal

1. Reduce the risk to the tribal community from flooding.

### **Objectives**

- 1. Determine what areas on tribal lands are prone to potential flooding problems and solutions for alleviating flooding in those areas.
- 2. Educate the community on the hazards of flooding
- Prepare and equip the tribal emergency services program for flooding and swift water rescue

#### Actions

- 1. (Fl-1) Have a new comprehensive drainage study done for all tribal properties to identify potential flooding problems and to recommend mitigations for those areas.
- 2. (Fl-2) Provide education to the public through community organizations.
- 3. (F1-3) Obtain training and equipment for the tribal emergency services program to make them ready for flooding and swift water rescue.

# **Tribal Mitigation Strategy for Drought**

#### Goal

1. Reduce the risk to the tribe from drought.

#### **Objectives**

- 1. Develop water conservation procedures
- 2. Develop back up sources of water that are less subject to drought impact
- 3. Develop procedures to reduce risk from wild fires related to drought.

#### Actions

(D-1) The tribal utility program will develop informational and educational
materials for tribal utility users to educate them on water conservation practices.
The utilities (water an sewer) will also develop policies on how to operate during

- drought conditions, including development of procedures for water use restrictions.
- 2. (D-2) Develop wells or other sources of water that can be used to supplement the existing water source.
- 3. (D-3) See Actions under Wild Fires.

## Tribal Mitigation Strategy for Protection of Cultural Resources

#### Goal

1. Reduce the risk to the tribe's cultural and historically significant resources.

#### **Objectives**

- 1. Protect cultural resources along the Tallapoosa River
- 2. Protect resources in the tribal museum from water damage.

#### Actions

- 1. (C-1) Develop a riverbank stabilization project to stabilize the bank on the Tallapoosa River to protect vulnerable cultural resources in the area.
- 2. (C-2) Replace the existing fire suppression system with one that is suitable for a museum setting. Provide back up power for museum protection systems.

No funding has been identified for either of these projects.

#### Tribal Mitigation Strategy for Earthquakes, Hail and Winter Storms

Due to the low relative risk from earthquakes, hail and winter storms for the tribe, no mitigation strategies for these events are offered.

#### Plan Maintenance

Under 44 CFR 201.7 Tribal Mitigation Plans will be valid for 5 years. Since there is no previous, Poarch Creek tribal specific plan, this Plan is not due for update, but shall stand as the initial plan for the Poarch Band of Creek Indians. The intent is for this plan to be an "active working document" that will be kept current through regular meetings and updates. These meetings are already a part of normal Tribal operations. Tribal Administration meets on a monthly basis and the Emergency Management Team meets on a quarterly basis. This is a part of normal operations for the Tribe and review and evaluation of the mitigation strategies will be a part of these meetings once this plan is

adopted. The Poarch Creek Emergency Management Director will be responsible for maintaining the plan. Tribal administration will review and approve updates to the plan as needed to reflect changes in development, progress in local mitigation efforts, and changes in priorities and resubmit it for approval within 5 years of its initial approval. A tracking log will be maintained by the Emergency Management Program, and will be utilized for all hazard mitigation strategies. The status of each strategy will be evaluated and discussed in the Tribe's monthly staff meetings as well as in quarterly Emergency Management Team meetings. A copy of the Individual Hazard Tracking Sheet is attached as Appendix G. This form will be maintained and used to evaluate and track each hazard and the progress made for its individual actions. This will be done at each quarterly Emergency Management Team meeting. The status of each strategy will be then transferred from the Individual Hazard Tracking Sheet to the Mitigation action Table for collective monitoring. Integration of the strategies will be incorporated into appropriate departmental plans and operations through the monthly staff meetings.

Opportunity for continued public involvement will be accomplished through booths at the annual Calvin McGhee Day, the Annual Celebration and the annual Pow Wow. Other stakeholders will have opportunities to participate in regular meetings with the State, local governments, and federal programs to review and update their plans and how they integrate with the Tribe's Plan.

# APPENDIX A

# **Tribal Resolution**

This space reserved for the Tribal Resolution accepting this plan.

# APPENDIX B

# Escambia County Alabama Hazard Mitigation Planning Committee Meeting Sign In Sheet

Copy of Sign In Sheet for Escambia County Alabama November 12, 2009 Hazard Mitigation Planning Committee Meeting showing April Sells, Poarch Creek EMA Director as a participant in the meeting. This copy was reproduced from the Escambia County Plan and can be found on the next page.

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# ESCAMBIA COUNTY HAZARD MITIGATION PLANNING MEETING

November 12, 2009 10:00 a.m.

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NAME	AGENCY/DEPARTMENT	PHONE/FAX	E-MAIL	
GERRY MEGHEL	Chick ATMORE FIRE	1-251-368-1377	ChicEAFORIFITME	
Paul Darnell	DMD Engineers President	1-877-357-29/3 334-222-1849 334-222-1869	poul admoderagineers in	
Steve Yuherz	City a desta flore y Andy.		5 ун Бизак і буд вістопия д	
TEREMY MEMAH	DAID ENGINES V-P/Bosit Manger	(334) 488-6527 (334) 222-1869	jereng Odmdung news.co	
Bernie Walt	For of history of his	,	become well pike ela	
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isson Congares	ENGRAPHERINGT Escondia County Halth Door	*****	jg mari Qaft State	
Alan Baker	State Representative	251-867-0244 888-243-3057	stateregaco.escambia.al	
April Colls	Harch Clerk Indiana	351-365-9136 251- <b>56</b> 9-1233	osalsopa-non-	

# APPENDIX C Tribal Hazard Vulnerability Analysis

# APPENDIX D Tribal Storm Drainage Study

# APPENDIX E Tribal Buildings List

### DRAFT PBCI Mitigation Plan - 1-24-12 version

### APPENDIX F Describing A Place Called Poarch Master Plan Document

### DRAFT PBCI Mitigation Plan - 1-24-12 version

#### APPENDIX G Individual Hazard Tracking Sheet

#### APPENDIX G

### Poarch Band of Creek Indians 2011 Mitigation Plan Individual Hazard Tracking Sheet

Date of this report:	Project completion date:
Hazard:	
Goal:	
Objective:	
Action:	
Responsible Department/Committee:	
Responsible Person:	
Current Status:	
Barriers to completion:	
Comments:	
This form was completed by: Name:	Title:

### DRAFT PBCI Mitigation Plan - 1-24-12 version

### APPENDIX H PBCI Mitigation Action Table

T-1	ယ်	L-2	L #	Action
Develop a network of volunteers of trained storm spotters.	Education materials on lightening safety will be made available to tribal members during public education venues such as the health department and tribal gatherings	Draft a policy for tribal employees who work outside to provide guidelines for reducing the threat from lightening	Description  Draft a policy for managing tribally sponsored outside activities to reduce exposure to lightening during these events	Action
Tornado	Lightening	Lightening	Addressed Lightening	Hazard
Develop a system to increase information flow	Provide education opportunities for lightening hazard reduction	Provide education opportunities for lightening hazard reduction	Addressed Tribal policy for lightening protection during outside activities	Objective
High	High	High	High	Priority
12/31/14	6/30/12	12/31/12	12/31/12	Timeline
Emergency Managemen t Program	Emergency Managemen t Program	Emergency Managemen t Program and Human Resources Department	Office Emergency Managemen t Program	Responsible
Departmental	TBD	Departmental	Source Departmental	Funding
Staff Time / NMS	TBD	Staff Time	Staff Time	Cost
Pending	Pending	Pending	Status Pending	2011

						ruture construction of tribal facilities.		requiring them to be built to a standard that is	
			Legal Department	·		building standards for	events	construction of tribal buildings	
Pending	Unk.	Staff Time	Tribal Council/	12/31/14	High	Develop enhanced tribal	All high wind	Develop a tribal policy for future	HW-1
			Program						
		Tribal Funds	Managemen t			shelters for tribal members	Hurricane	storm shelters for their members	
Pending	Unk.	Grants/	Emergency	12/31/14	High	Provide storm	Tornado	Installation of	T-3
						coverage			
						to provide better	•		
			611081411			warning system			·
			t Program			existing storm	•		
(		•	Managemen	,	(	enhance the		warning system	
Pending	Unk.	Departmental	Emergency	4/30/13	High	Expand and	Tornado	Enhanced storm	T-2
						for tornadoes			
						warning times			
						maximize			
						information to			
						storm			
						upon accurate			
						making, based			
						for rapid decision			•
				·		program to allow			
						management			
						emergency	•		
						to the tribal			·
Status		Source	Office			Addressed	Addressed	Description	#
2011	Cost	Funding	Responsible	Timeline	Priority	Objective	Hazard	Action	Action
		,		1			-		

	:		Department			safety and	t	tribal members for	
Pending	Unk	Departmental	Family	12/31/15	High	Take measures to	Hurricane	Develop shelter operations for	HU-2
						tropical storms.			
						hurricanes and			-
	,					resistant to		tropical storms.	
						them more		hurricanes and	
						building to make		resistant to	
				·		Retro fit existing		them more	
						tribal facilities.		building to make	
						construction of		Retro fit existing	
						future		of tribal facilities.	
						standards for		future construction	
						building		standards for	
			Department			enhanced tribal	S	tribal building	
Pending	Unk	Departmental	Facilities	12/31/15	High	Develop	Hurricane	Develop enhanced	HU-1
						them more resistant to high winds.	events	a sate design standard.	
Pending	Unk	Departmental	Facilities Department	12/31/15	High	Retro fit existing building to make	All High Wind	Retrofit buildings to bring them up to	HW-2
								resistant to high winds	
Status		Source	Office			Addressed	Addressed	Description	*
2011	Cost	Funding	Responsible	Timeline	Priority	Objective	Hazard	Action	Action

		ľ	
WF-1	ET-2	ET-1	Action #
Work with Alabama	The tribe will designate what facilities will be used as cooling stations, properly equip those stations for use, and train staff in appropriate skills. EMS will check on high-risk people and move them to designated cooling stations if necessary.	The tribal health department will identify people at risk during high heat events.	Action Description refuge during hurricanes and tropical storms and their aftermath.
Wildfires	Extreme temperatu res	Extreme temperatu res	Hazard Addressed
Educate homeowners	Tribal designation and preparation of facilities and staff to be used for and at cooling stations for vulnerable populations during high heat conditions.	Develop a tribal policy to address community needs in extreme temperature situations	Addressed Addressed comfort of tribal members during hurricanes and tropical storms.
Med	High	High	Priority
12/31/12	12/31/12	12/31/12	Timeline
Fire Department,	Tribal Health Department, Housing, Elder Program, Emergency Managemen t	Tribal Health Department	Responsible Office
Staff Time	Departmental	Departmental	Funding Source
Unk	Staff Time	Staff Time	Cost
Pending	Pending	Pending	2011 Status

>

F-1	WF-3	WF-2	Action #
Have a new comprehensive drainage study	Purchase of portable holding tanks and bladders for water to fight wild fires.	Department of Forestry on housing standards including types of shingles, clearing brush, etc. Perform periodic aerial surveys of wooded land to locate new homes and other structures and identify their location with GPS coordinates and maps.	Action Description
Flooding	Wildfires	Wildfires	Hazard Addressed
Educate the community on	Procure adequate fire fighting equipment and supplies for wild fire operations.	about safe building materials and landscape practices  Enhance situational awareness for firefighters relating to location of buildings, firefighters and enhanced communications.	Objective Addressed
High	Med	High	Priority
12/31/15	12/31/13	12/31/14	Timeline
Facilities/ Housing Authority	Fire Department	Housing Housing Authority/ Fire Department	Responsible Office
Departmental And Grants	Departmental and Grants	Departmental	Funding Source
Unk	Unkl	Unk	Cost
Pending	Pending	Pending	2011 Status

D-1	F1-3	F]-2	Action #
The tribal utility program will develop policies,	Obtain training and equipment for the tribal emergency services program to make them ready for flooding and swift water rescue.	done for all tribal properties to identify potential flooding problems and to recommend mitigations for those areas.  Provide education to the public through community organizations.	Action Description
Drought	Flooding	Flooding	Hazard Addressed
Develop water conservation	Prepare and equip the tribal emergency services program for flooding and swift water rescue.	the hazards of flooding  Prepare and equip the tribal emergency services program for flooding and swift water rescue	Objective Addressed
Med	High	Med	Priority
12/31/14	12/31/13	06/30/13	Timeline
Cultural Authority	Fire Department	Fire Department	Responsible Office
Departmental And Grants	Departmental And Grants	Departmental And Grants	Funding Source
Unk	Unk	Unk	Cost
Pending	Pending	Pending	2011 Status

C-1	D-3	D-2		Action #
Protect cultural resources along the Tallapoosa River	See Actions under Wild Fires for reducing wildfire risks	Develop wells or other sources of water that can be used to supplement the existing water source	informational and educational materials for tribal utility users to educate them on water conservation practices.	Action Description
Cultural	Drought	Drought		Hazard Addressed
Develop a riverbank stabilization project to stabilize the bank on the Tallapoosa River to protect vulnerable cultural resources in the	Develop procedures to reduce risk from wild fires related to drough.t	Develop back up sources of water that are less subject to drought impact.	procedures	Objective Addressed
High	Med	High		Priority
12/31/15	12/31/14	12/31/14		Timeline
Cultural Authority	Utilities Department And Fire Department	Utilities Department		Responsible Office
Departmental And Grants	Departmental And Grants	Departmental And Grants	,	Funding Source
Unk	Unk	Unk		Cost
Pending	Pending	Pending		2011 Status

			C-2		#	Action
		museum from water damage.	Protect resources in the tribal		Description	Action
			Cultural		Addressed	Hazard
for museum protection systems	for a museum setting. Provide back up power	suppression system with one that is suitable	Replace the existing fire	area.	Addressed	Objective
			High			Priority
			12/31/15			Priority   Timeline
			Cultural Authority		Office	Responsible
			Departmental And Grants		Source	Funding
			Unk			Cost
			Pending		Status	2011