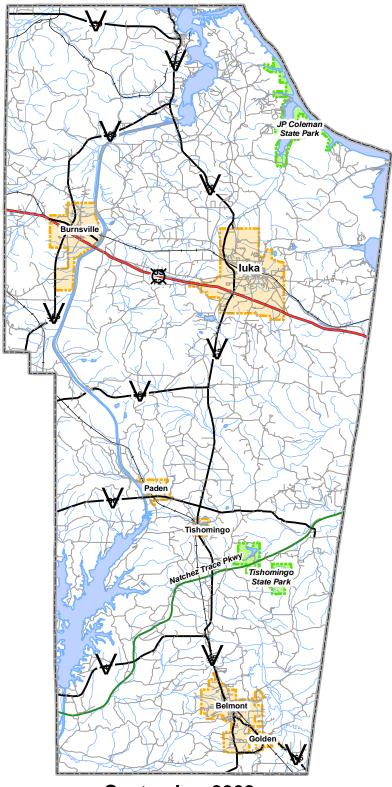
### TISHOMINGO COUNTY, MISSISSIPPI County Wildfire Protection Plan



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PREPARED BY NORTHEAST MISSISSIPPI PLANNING AND DEVELOPMENT DISTRICT WITH FUNDING PROVIDED BY THE MISSISSIPPI FORESTRY COMMISSION

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#### Introduction

In December of 2007, the Mississippi Forestry Commission met with the Mississippi Association of Planning and Development Districts to commission the preparation of wildfire protection plans for twelve counties in the State. The plan is an effort to address changes to the Wildland-Urban Interface (WUI) brought about by increased industrial and residential development in those counties in recent years.

The Wildland-Urban Interface, where structures and other developments merge with undeveloped wildland or vegetative fuels, can create one of the most dangerous and complex situations for firefighters. The WUI zone can pose a significant risk to communities in the event of a large-scale wildfire. In a proactive effort to address these increased risks and others, Tishomingo County has agreed to create a County Wildfire Protection Plan (CWPP). A CWPP can reduce the potential for loss in the event of a wildfire by identifying priorities for the protection of life, property, and critical infrastructure within the WUI.

In February of 2008, NEMPDD officials began gathering geographical data, historical fire information, etc. Planners then met with the local county fire coordinator to review the information and obtain input on the strengths and weaknesses of the county fire departments and their ability to fight wildfires. Later, a Steering Committee was formed through cooperation of local, state, and federal agencies, and other interested parties. The Steering Committee included the Tishomingo County Emergency Management Office, the Mississippi Forestry Commission, the County Fire Coordinator, and Volunteer Fire Departments.

Over the next several months the Steering Committee, with the opportunity for public input, produced a County Wildfire Protection Plan. The Plan includes several components: Geographic Information System produced maps, a County Risk Assessment, a Mitigation Projects List, Structure Ignitability Recommendations, and an Action Plan and Assessment Strategy. It is the intent of the Steering Committee that this plan will guide development and educate landowners, as well as address and then treat at-risk wildfire areas within the County.

This plan was developed with an effort toward consistency with the Healthy Forests Restoration Act of 2003, Tishomingo County's Hazard Mitigation Plan, and the Comprehensive Emergency Management Plan.

#### **Area Description**

Tishomingo County is located in the northeastern corner of the State of Mississippi, bordering Alabama to the east and Tennessee to the north. State Highway 25, which runs north and south, and U.S. Highway 72, which runs east and west are major transportation corridors. Highway 72 provides direct access to Memphis, Tennessee, and Huntsville, Alabama. State Highway 25 provides access to Starkville, Mississippi (Mississippi State University), and the State Capitol of Jackson.

The Tennessee River serves as the boundary for the far northeastern tip of the County, and close by to the west is the Yellow Creek Port, as well as the Tennessee-Tombigbee Waterway. The Waterway has direct connections to the Port of Mobile and the Ohio-Mississippi-Missouri River network. A full-service port facility, the Yellow Creek Port handles loads up to 300 tons per lift, including containerized cargo. There are also two barge docks at the Port.

Also located in the northeastern part of Tishomingo County is J.P. Coleman State Park, named for a former Mississippi governor. The Park sits along side Pickwick Lake and the Tennessee River, and provides first-rate camping facilities, as well as excellent fishing for small-mouth bass.

Tishomingo State Park, which was built by the Civilian Conservation Corps in the 1930's, is located in the southern part of the County. Notably, the Park contains massive rock formations and fern-filled crevices found nowhere else in the State. Many of the original buildings constructed in the 1930's are still standing and in use. The Park is named for the Chickasaw Indian Chief Tishomingo.

The population of Tishomingo County in 2000 was 19,163, showing an 8.4% increase from 1990. The projected population for 2007 showed a decrease of -0.6%, likely due to industries closing or relocating away from the County.

Tishomingo County contains 445 square miles, with 425 square miles of land, and 20 square miles of water. Only 26% of the County is nonforest, with 74% being forestland. Federally owned land makes up 7%; the forest industry makes up 23%; the majority of the forest (70%) is privately owned. Timber is considered the number one crop of Tishomingo County. Savannah, Ora, Ruston, Smithdale, and Mantachie make up the majority of soils found in the County. These soils support over 180,000 acres of forestry; 31,000 acres of cropland; 23,000 acres of pastureland; and 10,000 acres of water.

Tishomingo County gets an average 57 inches of rainfall per year. The average U.S. rainfall is 37. Snowfall is two inches per year. The number of days with any measureable precipitation is 91. On average, there are 216 sunny days per year in the County. The July high is around 90 degrees; the January low is 27. The comfort index, which is based on humidity during the hot months, is a 27 out of 100, where higher is more comfortable. The U.S. average on the comfort index is 44.

Because of relatively high annual precipitation amounts, Tishomingo County is not usually prone to property-damaging wildfires. However, occasional drought-like conditions prompt county officials to issue bans against burning, and the advance of urban development into wildlands becomes more of a concern. Since the beginning of 2007, fire activity has been concentrated primarily in those parts of the United States that have experienced drought and abnormally dry conditions. These situations contribute an increased risk of wildfires affecting populated areas of Tishomingo County. For the Southeast region of the United States, the first six months of 2007 were persistently dry. Mississippi had the driest December (2006) – May (2007) in its 113-year record. The latest U.S. Drought Monitor report (August 26, 2008) indicates that the entire county of Tishomingo is currently considered to be in a drought condition, and is categorized as D 0, or Abnormally Dry.

Woodlands fires are controlled by rural fire departments and/or forestry service personnel. From January 2006 through May 2008, 384 wildfires (all woods fires) have been recorded in Tishomingo County, according to local volunteer fire department run, or call-out, records. Based on historical occurrences, wildfires can be expected annually in the less urbanized parts of the county. It is the threat of a spread of rural wildfires to the urban perimeter that poses the greatest concern. Mitigation measures such as prescribed burns, training and equipping firefighters, and public education on fire protection, as well as Firewise strategies, help to control the risk to life and property.

While climate conditions and debris can cause ignitability, certain industrial operations and facilities can also raise the threat of fire. These include the storage and/or transportation of flammable, toxic, or explosive materials. Dynasteel, Monotech, Skyline Steel, and the Roll Form Group handle steel fabrication products. Alliant Techsystems produce aerospace composites. These industries store a variety of hazardous materials. Three pipelines crisscross Tishomingo County and also pose certain associated risks.

Tishomingo County is divided into seventeen fire districts, including the six incorporated towns of luka (County Seat), Burnsville, Paden, Town of Tishomingo, Belmont, and Golden. Only luka and Belmont include paid firefighters, along with their volunteers. luka's Fire District has a Class Rating of 7. Three of the Districts are Class 8; ten are Class 9; and three are Class 10. The total number of volunteers is based on current staffing levels, but seasonal fluctuations occur.

Fire Department	Station Location	Class or Rating	# of Paid Firefighters	# of Volunteer Firefighters
Belmont	390 2 <sup>nd</sup> St, Belmont	8	2	19
Burnsville	90 Front St, Burnsville	8		20
Carters Branch	275 CR 958, Tishomingo	10		12
J.P. Coleman State Park	23 CR 402, luka	9		12
Dennis	37 CR 23, Dennis	10		18
Eastport	532 CR 956, luka	9		12
Golden	168 Main St, Golden	9		21
Harmony	296 CR 321, luka	9		12
Holt Spur	127 Hwy. 365 S., luka	9		18
luka	118 S. Pearl St, luka	7	12	10
Midway	475 Hwy. 364, luka	9		12
North Crossroads	42 CR 333, luka	8		15
Paden	3 Lennon Ave, Tishomingo	9		14
Snowdown/ Pleasant Hill	322 CR 995, luka	10		12
South Tishomingo	398 CR 864, Belmont	9		14
Tishomingo / 4 <sup>th</sup> District	1239 Main St Tishomingo	9		15
Valley Grove	614 CR 993, Belmont	9		14

#### **Strategic Goals of the County Wildfire Protection Plan**

At the beginning of the planning process, the Tishomingo County Fire Coordinator agreed to several goals for the CWPP. These goals were set to provide a vision for the overall process, and to identify specific results to be obtained upon completion of the final document.

- 1. Define the Wild-land Urban Interface (WUI) for Tishomingo County
- 2. Identify and prioritize high-risk areas within the WUI
- 3. Identify treatment methods for prioritized high-risk areas
- **4.** Make recommendations to reduce structure ignitability
- **5.** Classify needs of volunteer fire departments
  - Equipment (with emphasis on wildfires)
  - Fuel reimbursement
  - Retention of active volunteer firefighters
- **6.** Recommend regulation of prescribed burns
- 7. Incorporate a fire education program for high school students to increase fire safety, as well as encourage students to consider an active role as volunteer
- **8.** Identify strategies to encourage collaboration between Tishomingo County and the Mississippi Forestry Commission

#### **Mapping**

The Tishomingo County Wildfire Protection Plan contains seven maps created by the Northeast Mississippi Planning & Development District (NEMPDD) Geographic Information System (GIS) Department. These maps were generated for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Tishomingo County Base Map, Tishomingo County Risk Assessment Ratings, Tishomingo County Fire Data 2002-2007, the County's High Occurrence Wildfire Areas, Arson Fires 2002-2007, Tishomingo County Fire Response Area and Wildfires by Fire Response Area.

The Tishomingo County **Base Map** shows a detailed baseline of roadways, inhabited areas, infrastructure, areas of community importance, and a WUI designation. With almost 75% of the County being in forest, the Steering Committee requested that some areas of recent development be included in a WUI zone, even though they were not adjacent to municipalities. The Committee discussed specific risk factors and treatment projects to reduce the risk of wildfire in these newly developed areas.

In addition to the WUI, the Steering Committee identified several areas of critical facilities, including communication towers, elevated water towers, and electric substations. The Base Map is the focal point of county protection as identified for the CWPP.

The **Risk Assessment Map** shows the results of how specific areas of concern in Tishomingo County were rated by the Steering Committee. Included in those areas are roadways, municipalities, utilities, and locales of community importance found on the Base Map. The ratings for each of the attributes reflect whether they are at risk due to their purpose, the nearby fuel load, or the potential to cause a considerable impact in the event of their damage or loss due to a wildfire. These ratings were then displayed in map form to better enable review and assessment of the entire county.

Several fire occurrence maps were created from data collected from the Mississippi Forestry Commission (MFC). The data reflects both wildfires and controlled burns, and several different causes of fires. Those causes include arson, campfire, debris burning, equipment use, lightning, and smoking. MFC data for Tishomingo County shows a total of 37 fires in 2002, 31 fires in 2003, 31 fires in 2004, 49 fires in 2005, 99 fires in 2006, and 59 fires in 2007.

The Tishomingo County **Fire Data 2002 – 2007 Map** shows all fires from all causes over a six-year span. When these data were mapped, specific geographic areas revealing a high occurrence of wildfire became apparent.

The **High Occurrence Wildfire Areas Map** shows areas based on a computer calculation used to determine density and distribution by comparing each fire occurrence to its surrounding neighbors. Area One is geographically located in the northwestern part of the County. Area Two is located in the eastern central part of the County near the city of luka. Area Three is located in the southwestern part of the County near the Bay Springs vicinity. Area Four is located in the south central part of the County.

The **Arson Fires by Year Map** for Tishomingo County exhibits the geographic distribution of these fires throughout the County. According to the Mississippi Forestry Commission wildfire date, there were a total of 220 fires between the years of 2002 – 2007. This would account for over 70% of the 306 wildfires reported during that period.

The Tishomingo County **Fire Response Area Map** displays the county fire station response areas with respective boundaries, as well as each volunteer fire station location. The boundaries are considered in the term of "fuzzy", indicating that any fire department within a reasonable distance of a fire will respond and assist the primary station.

The **Wildfires by Fire Response Areas Map** presents all the wildfires from 2002 – 2007, as well as the fire district boundaries and the location of the fire departments within those districts.

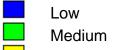
#### **County Risk Assessment**

Through the County Risk Assessment, fuel hazards, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness were all considered to compile the following list of county areas at risk from wildfire.

The Steering Committee endeavored to identify large facilities that may be at risk from wildfires due to their location, function, or potential impact to the community if damaged or lost to wildfire. Once identified, these at-risk areas were prioritized to enable available financial and human resources to be concentrated on specific mitigation projects in the future.

The objective of this task was to rate the areas from low to high. Areas receiving the highest rating pose an increased risk due to their purpose, amount of nearby fuel load, or the manner of causing significant community impact in the event of damage or loss due to a wildfire. Mitigation projects for the at-risk areas include a wide variety of activities. Removal or reduction in fuel load may be suggested for some areas, with a public awareness campaign suggested for others.

#### Rating Key



\_\_ Medium-High

High

#### **Fuel Hazards:**

J.C. Jourdan Lumber Co.

The business is rated **High**. While there is only a minor possibility for ignitability, the location and function warrant a High rating.

Columbia Gulf Pumping Station

The pumping station is located at the pipelines that traverse the County. While not in a high occurrence area, there have been arson fires set nearby. The pumping station is rated **Medium-High**.

Dowdle Gas Storage Tank

The storage tank is located within the city limits of luka, and also at the pipelines mentioned above. The area is well-maintained, but there is a moderate risk of fire. The storage tank has a **Medium** rating.

#### **High Wildfire Occurrence Areas:**

Eastport Electrical Substation; Eastport VFD; Holt Spur VFD

These structures have a low ignitability potential and are well maintained. However, their location and function warrant a **High** rating.

Elks Landing Condos; Goat Island Condos; Goat Island Campground; Pickwick Pines; Mary's Little Lamb Daycare; Crow's Neck Environmental Center; Belmont Water Treatment Plant

These structures are located in High Wildfire Occurrence Areas. Even though they have a low ignitability potential, their communities would face significant loss if damaged or destroyed. They are rated **Medium-High**.

Elevated Water Tower: Eastport

The grounds surrounding the tower are well-maintained, but the tower is located in a High Wildfire Occurrence Area. The rating is **High**.

Northeast MS Waterfront Industrial Park; Paden Industrial Park; Yellow Creek Industrial Park

These industrial areas are located in High Wildfire Occurrence Areas. Though kept well-maintained, their location and function merit a **High** rating.

#### Vulnerable Facilities:

Woodall Mountain Radio Tower

Located on the highest point in Mississippi at 806 feet above sea level, the Tower is surrounded by forestland. The grounds are well maintained, but being located on a steep slope, the Tower has been rated **High**.

Corinth & Counce Railroad; Illinois Central Railroad; Southern Railway

Tishomingo County is almost 75% of forestland. The railroads run throughout the County, and trains have caused several wildfires, and some fires within municipal boundaries. The rating is **High**.

Waterway Bridges at U.S. Highway 72 and State Highways 4 and 30

These structures have a low ignitability potential and are well maintained. However, each would be a significant loss if damaged or destroyed. The bridges are rated **High**.

Jamie Whitten Lock & Dam; Yellow Creek Port; Tri-State Commerce Park

While there is only a minor possibility for ignitability, the location and the function of these facilities warrant a **High** rating.

J.P. Coleman State Park; Tishomingo State Park; Tishomingo County Old Courthouse and Museum

These landmarks serve an important part in the historical and recreational capacity of the County. All have a high risk of fire and smoke damage. They are rated **High**.

#### <u>Critical Infrastructure:</u>

Fire Repeater Tower

Located in the lower part of the County at the edge of Belmont City Limits, the Tower grounds are well-maintained, but there are trees nearby. The loss of the Tower would be significant if damaged or destroyed; therefore, the tower is rated **High**.

North Mississippi Medical Center (luka Hospital)

The hospital is rated **Medium**. There is a moderate risk for fire, but a high smoke risk. Damage to the facility or loss of use would be significant to the community.

- Elevated Water Towers: Belmont, Burnsville, J.P. Coleman State Park, Dennis and Short-Coleman
- Water Treatment Plants: Belmont, J.P. Coleman State Park, Dennis, Short-Coleman, and Yellow Creek
- Electric Substations: Belmont, Burnsville, J.P. Coleman State Park, and North Crossroads
- Belmont Industrial Park; luka Industrial Parks (2)

The areas surrounding these facilities are well-maintained, and have a low ignitability potential. Fire departments are located nearby. Rated **Low** over-all.

- Elevated Water Towers: luka # 1, Midway
- Water Treatment Plants: Burnsville, Golden, and luka
- Electric Substations: Eastport, Holcut, and the Town of Tishomingo

The areas surrounding these facilities are well-maintained, but there is a moderate risk of fire. They are rated **Medium**.

Elevated Water Tower: luka # 2

The area surrounding the tower is well-maintained, but is located in the vicinity of the Columbia Gulf Pumping Station. The rating is **Medium-High**.

Tishomingo Industrial Park

The Industrial Park is located in a rural setting, near a High Fire Occurrence Area. The ignitability potential is low, but the location and function rate **Medium-High**.

#### **Areas of Community Importance:**

Assisted Living Centers and Nursing Homes: Carrington House, Southern Magnolia Living Center 1 & 2; Timber Hills Beacon House; Tishomingo Manor

These Centers have more of a smoke risk than a fire risk. All are located within two miles of fire stations. Rated **Medium** over-all.

Iuka Headstart, Iuka Elementary School, Iuka Middle School

There is a high smoke risk, but less of a fire risk. The rating is **Medium**.

There is a high smoke risk, but less of a fire risk. The rating is **Medium**.

Belmont High School; Burnsville Elementary / Middle School; Town of Tishomingo Elementary School

While some risks exist, a fire station is located near each school. The rating is **Low**.

Tishomingo High School

Grounds are cleared and kept well maintained with easy access to the facility. The rating is **Low**.

Iuka Airport; Tishomingo County Airport (Belmont)

Surrounding area is cleared and grounds are well-maintained. The rating for both facilities is **Low**.

#### **Emergency Preparedness**

Emergency preparedness for each of the county volunteer fire departments was reviewed as a part of this planning process. Based on information provided by the fire coordinator, this assessment involved factors such as equipment availability, public protection classification, and manpower.

Automatic aid agreements are in place with Alcorn, Prentiss, and Itawamba Counties in Mississippi, as well as Colbert, Lauderdale, and Franklin Counties in Alabama, and Hardin County in Tennessee. If the Tishomingo County VFD services are requested by these other counties, they will respond. All responses are logged. The ownership of the fire department buildings, trucks, and equipment in the county is divided, according to the location of the departments. Those in municipal areas are owned by the towns or cities. The remainders are owned by the county. A contract is in place between the county and the 17 fire departments and is renewed every four years.

Fire Districts and Municipalities in the State of Mississippi receive a public protection classification through the Mississippi State Rating Bureau (MSRB). This classification is the basis for determining the fire insurance rating for each district. The Fire Districts within Tishomingo County are listed below. The City of luka Fire Department is also listed, with a Class Rating of 7.

Mississippi State Rating Bureau Public Protection Classification List

DISTRICT	CLASS		
luka	7		
Belmont	8		
Burnsville	8		
North Crossroads	8		
J.P. Coleman State Park	9		
Eastport	9		
Golden	9		
Harmony	9		
Holt Spur	9		
Midway	9		
Paden	9		
South Tishomingo	9		
Tishomingo / 4 <sup>th</sup> District	9		
Valley Grove	9		
Carter's Branch	10		
Dennis	10		
Snowdown / Pleasant Hill	10		

In general, the departments are well-equipped and able to respond to the needs of the areas they serve. However, Steering Committee members did identify improvements that could be made, especially with the increase in new subdivisions outside the municipalities.

Approximately 250 volunteer firefighters serve Tishomingo County. Being in a tri-state area, many residents commute outside of the county for work. This puts a strain on the number of volunteer firefighters available to fight daytime fires. 911 Dispatch handles central dispatch from the basement of the Tishomingo County Courthouse. Each of the volunteer fire departments has at least one firefighter who has completed training to be a medical first responder. They assist Tishomingo County's Ambulance Service when requested.

There are many cases when it is necessary for Tishomingo County volunteer firefighters to work side-by-side with the Mississippi Forestry Commission. This has been a successful relationship resulting in improved protection of land area within Tishomingo County. In order to better this relationship and improve the firefighting efforts by both agencies, biannual meetings are recommended for information sharing purposes. These meetings would allow inter-agency concerns to be addressed, as well as provide training opportunities and project coordination.

One major concern of the county fire departments is the limited frequency with the Mississippi Forestry Commission radio. With Tishomingo County being a geographically elongated county, it utilizes a north and a south communication tower. Presently, the dispatch office has to go through the MFC District Office in Tupelo to alert the county foresters of any wildfires in the county. The fire coordinator would like to have both frequencies on the MFC radio for the north and south towers.

It is also suggested that the MFC sponsor local media ads (television and radio spots, newspaper press releases) to promote fire safety and education among adults, as well as young people. This could be done in the spring and fall, when the rate of fires in the county increases.

Fire safety programs for school age children are already in place, primarily in the City of luka school system. An expansion of this program is recommended for high school students, which could result in their considering volunteer firefighting when they come of age.

The limited budget for the Tishomingo County VFDs has put a strain on fuel consumption for the firefighters who respond to wildfires without the aid of the MFC. The Fire Coordinator inquired about a reimbursement program for fuel, with funding being granted by the MFC.

Tishomingo County has maintained good numbers in regards to volunteer and paid firefighters. Several of those who have joined the fire services were relocating to the area and had served in their former communities as firefighters. What is now posing a threat is the retention of the volunteer fire services. Most are looking for an incentive to stay, such as pay-per-call, retirement or a tax break. While it is unlikely that the county currently has the resources to hire full-time, paid firefighters or offer fringe benefits as incentives to

volunteers, there are some low-cost or no-cost strategies that may help retain firefighters. Points can be awarded to individuals for response calls, meeting attendance, drills, fundraisers, training courses, or any other set activity. These accumulated points then correspond with certain "prizes". Prizes may include gift certificates to area merchants or restaurants (donated), tickets to sporting events or other community events, or a gift (donated) reflecting the interest of the individual (hunting, fishing, etc.).

In addition to the MSRB Rating, equipment status is tracked and assessed. A list of current available information on large equipment is provided below. No immediate needs for fire equipment were identified, but a concern may arise in the future as this equipment ages, if funds are not available for replacement.

Most of the fire equipment in Tishomingo County is relatively new. The oldest Class A Pumper is a 1964 model, which is only used when the newer truck is out of service. The threshold for rating purposes is 15 years. The fire coordinator indicates that there is limited equipment suitable to fight wildfires. With several marinas in the county, a request was made several years ago for a fire boat to fight wildfires. The request was denied in September, 2001, and has not been granted since that time.

#### **Tishomingo County Fire District Equipment List**

DEPARTMENT	TYPE	OWNER	GRANT	STATION
Belmont	Pumper (2)	City	X (1)	RFTAAP
	Wildland Fire Apparatus (1)	City		
	Quick Response Vehicle (2)	City		
Burnsville	Pumper (3)	City	X (1)	RFTAAP
	Tanker (1)	City		
	Wildland Fire Apparatus (1)	City		
Carter's Branch	Pumper (1)	County		
	Tanker (1)	County		
	Quick Response Vehicle (1)	County		
Coleman State Park	Pumper (2)	County	X (1)	RFTAAP
	Tanker (1)	County		
	Quick Response Vehicle (1)	County		
Dennis	Pumper (1)	County		
	Tanker (1)	County		
	Quick Response Vehicle (1)	County		
Eastport / Mill Creek	Pumpers (2)	County		
Golden	Pumper (1) [to be received in October 2008]	City	Х	AFG

DEPARTMENT	TYPE	OWNER	GRANT	STATION
	Tanker (1)	City		
	Wildland Fire Apparatus (1)	City		
Harmony Central	Pumper (1)	County	Х	AFG
	Tanker (1)	County		
	Wildland Fire Apparatus (1)	County		
Holt Spur	Pumper (1)	County		
	Tanker (1)	County		
	Wildland Fire Apparatus (1)	County		
luka	Pumper (3)	City		
	Wildland Fire Apparatus (1)	City		
Midway	Pumper (2)	County	X (1)	RFTAAP
	Tanker (1)	County		
	Wildland Fire Apparatus (1)	County		
	Quick Response Vehicle (1)	County		
North Crossroads	Pumper (1)	County	Х	RFTAAP
	Tanker (1)	County		
	Wildland Fire Apparatus (1)	County		
	Quick Response Vehicle (1)	County		
Paden	Pumper (1)	City	Х	RFTAAP
	Tanker (1)	City	Х	AFG
	Wildland Fire Apparatus (1)	City		
Snowdown / Pleasant Hill	Pumper (3)	County		
South Tishomingo	Pumper (2)	County	X (1)	RFTAAP
	Wildland Fire Apparatus (1)	County		
Tishomingo / 4 <sup>th</sup> District	Pumper (2)	City	X (1)	RFTAAP
	Quick Response Vehicle (1)	City		
Valley Grove	Pumper (1)	County		
	Tanker (1)	County		
	Wildland Fire Apparatus (1)	County		

#### Mitigation Projects and Structure Ignitability Recommendations

Through the Community Risk Assessment several areas for improvement were identified. Mitigation projects for the at-risk areas may involve removal or reduction in fuel load for some, a public awareness campaign for others, or a combination approach.

No specific treatments were identified or found to be necessary at this time. The facilities and infrastructure in Tishomingo County are generally well-maintained and have moderate to low ignitability potential.

However, a recent gas leak at a marina in the Eastport area caused concern for the local EMA Director. The topographical location of the marina made communication by cell phone and radio impossible. The Coordinator had to use the marina's landline business phone to contact the DEQ, MEMA, and other organizations necessary to get the situation under control. Even though the E911 and Fire Coordinator has a satellite phone for the use of fire or emergency services, consideration will be given to identifying a grant program or other funding to provide a satellite phone for Tishomingo County's Homeland Security and Emergency Management Agency director.

Among the sites discussed as being vulnerable facilities are those involving the use or transport of natural gas or other hazardous materials. There is an increased potential for structure ignitability at or near these sites due to the natural characterizations of these operations. Education of citizens residing or working near these facilities appears to be the best defense. Developers should be aware of these facilities and plan accordingly when building new subdivisions or industries.

Mitigation projects for High Occurrence Wildfire Areas were limited to a community outreach and education program involving the identification and prosecution of arsonists. The Steering Committee also identified the need for these areas to be revisited in the future for creation and implementation of other mitigation projects.

#### Mitigation Projects

#### COUNTY

- **1.** Develop a homeowner education program.
- **2.** Encourage large developments to become Firewise USA Communities.
- **3.** Research funding for satellite phone in remote areas.
- **4.** Purchase wildland turnout gear and filtered breathing apparatus to be used at wildfires.

In addition to mitigation projects, structure ignitability recommendations can be formulated and then distributed to homeowners. These recommendations, as condensed from information given by the MFC, through handouts, brochures, and the Firewise video, are steps that property owners can take to improve the protection and survivability of a structure in the event of a wildfire.

- 1. Design road width, grade and curves to allow access for large emergency vehicles.
- 2. Make sure dead-end roads and long driveways have turnaround areas wide enough for emergency vehicles. Construct turnouts along one-way roads.
- **3.** Post clear road signs to show traffic restrictions such as dead-end roads and weight and height limitations.

#### Structure Ignitability Recommendations

#### **HOMEOWNERS**

- 1. Leave a minimum of 30' around structure for firefighting equipment access.
- **2.** Widely space and carefully situate the trees you plant.
- **3.** Construct driveway at least 12 feet wide with 13 feet of vertical clearance.
- **4.** If home is gated, display a clearly visible address; provide a gate that swings inward and is at least 30 feet from the main road.
- **5.** Remove "ladder fuels" (vegetation that serves as a link between grass and tree tops).
- **6.** Keep trees and shrubs properly pruned. Lowest tree limbs should be 6' to 10' from the ground.
- **7.** Remove leaf clutter from roof and yard.
- **8.** Mow regularly.
- **9.** Remove dead and over-hanging branches.
- **10.** Keep firewood stacked away from the house.
- **11.** Store and use flammable liquids properly.
- **12.** Follow manufacturers' instructions when using fertilizers and pesticides.
- **13.** Prevent collection of leaves and other combustible materials beneath home by installing proper skirting.

- **14.** Cover vents with wire mesh no larger than 1/8" to prevent sparks from entering house.
- **15.** Use non-flammable materials to construct trellises.
- **16.** Use fire resistant building materials and roofing materials.

#### **Action Plan and Assessment Strategy**

The action plan and assessment strategy portion of the County Wildfire Protection Plan serves to identify roles and responsibilities, address funding needs, set timetables for carrying out identified activities, and measure the plan's effectiveness.

1. Purchase of a satellite phone to be used only in emergencies.

Responsibility: Tishomingo County Homeland Security / EMA Director

Funding: Seek grant funding

Timetable for Completion: Five years, or as grant become available

Expected Outcome: Improved access to emergency assistance in

topographical areas where communication is limited

Assessment Timetable: 1-3 Years

2. Fuel reimbursement for VFD's that extinguish wildfires without the aid of the MFC.

Responsibility: Tishomingo County Fire Coordinator, Mississippi

Forestry Commission

Funding: FEMA; Homeland Security; Mississippi Forestry

Commission

Timetable for Completion: Implement as soon as possible

Expected Outcome: Improve limited resources of the volunteer fire

departments

Assessment Timetable: 1-5 Years

3. Purchase of wildland turnout gear and filtered breathing apparatus to be used at wildfires.

Responsibility: Tishomingo County Fire Coordinator

Funding: \$2,000 grant funding through MFC

Timetable for Completion: Five years, or as grants become available

Expected Outcome: Increased safety for volunteer and paid firefighters

during the extinguishing of wildfires

Assessment Timetable: 1-5 Years

4. Request the Corp of Engineers regulates its use of prescribed burns.

Responsibility: Tishomingo County Forester, MFC

Funding: \$0

Timetable for Completion: *Implement immediately* 

Expected Outcome: Corp representative can contact the county fire

coordinator, who can then notify the local volunteer fire

department

Assessment Timetable: Review every two years

5. Change the burn ban law designating MFC as the authorized agency to initiate the ban instead of the County Board of Supervisors.

Responsibility: County Board of Supervisors

Funding: \$0

Timetable for Completion: *Implement immediately* 

Expected Outcome: Allows the MFC to permit its local county forester to

make the decision on whether a burn ban is necessary

Assessment Timetable: Review every four years

6. Maintain, update, and redistribute the CWPP maps to all county departments, volunteer fire departments, and other organizations utilizing the documents.

Responsibility: Tishomingo County Fire Coordinator, Northeast

Mississippi Planning and Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Increased awareness of fire activity leading to

implementation of action plan in an effort toward

reduction of fire incidents

Assessment Timetable: Make any additions or changes to maps on an annual

basis. Interview other organizations to see if the maps make their role in wildfire prevention more

effective.

7. Encourage Mississippi Insurance Commissioner to consider rebate programs to allow for home assessments and homeowner mitigation projects.

Responsibility: Mississippi Forestry Commission

Funding: Seek grant funding

Timetable for Completion: Every 4-6 Years

Expected Outcome: More homeowners participating in mitigation activities;

lower insurance premiums for homeowners; additional

funds for volunteer fire departments.

Assessment Timetable: Review after legislative sessions ends

8. Continue fire safety programs to educate young people in wildfire prevention. Include a high school education component that would encourage students to consider becoming firefighters (paid or voluntary).

Responsibility: Tishomingo County Fire Coordinator, along with local

Fire Departments; MFC County Forester; Natural Resources Conservation Service; State Fire Marshall

Funding: Volunteer Fire Departments; Mississippi Forestry

Commission; NRCS; National Fire Association

Timetable for Completion: Biannually, preferably May and October

Expected Outcome: Increased awareness of fire safety and prevention by

young adults, as well as interest in protecting their communities by serving as firefighters at a future time

Assessment Timetable: Annual review of recruitment efforts and numbers

### 9. Request the Mississippi Forestry Commission to upgrade radio frequency in order that both communication towers will have reception.

Responsibility: Mississippi Forestry Commission

Funding: \$0

Timetable for completion: Implement as soon as possible

Expected outcome: Aid local volunteer fire departments with guicker

response time; Also will help MFC County Forester to

organize the MFC firefighters

Assessment Timetable: Project is already in the works. New radios are soon to

be delivered for MFC fleet trucks and hand-held radios in the Northeast District, but must be programmed with frequencies by MFC technicians before installation.

### 10. Maintain and update the grants/funding resource list included in CWPP document.

Responsibility: Tishomingo County Fire Coordinator

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Additional grant applications resulting in an increase of

grant funds

Assessment Timetable: Review applications / funding annually

### 11. Establish bi-annual meetings between the Mississippi Forestry Commission and the Tishomingo County Volunteer Fire Departments.

Responsibility: Tishomingo County Fire Coordinator and the Mississippi

Forestry Commission

Funding: \$0

Timetable for Completion: *Implement immediately* 

Expected Outcome: Improved communications and coordination in the areas

of firefighting, training, safety and project management

Assessment Timetable: 2 - 5 years

#### **Potential Funding Sources**

#### 1. Assistance to Firefighters Grant (AFG) Program

Website: www.firegrantsupport.com

Application Deadline: Spring, 2009

Program Description: Funding for training, equipment, vehicles, firefighter

health and safety program, and operations

#### 2. Fire Prevention and Safety (FP&S) Grant Program

Website: www.firegrantsupport.com

Application Deadline: Fall, 2009

Program Description: Outreach to high risk target groups including children,

senior citizens, and firefighters.

#### 3. Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program

Website: www.firegrantsupport.com

Application Deadline: Summer, 2009

Program Description: Funding for the hiring of fire personnel and incentives

for volunteer recruitment and retention

#### 4. USDA – Rural Development Community Facilities Grant Program

Website: www.rurdev.usda.gov

Application Deadline: N/A - Applications taken year round

Program Description: Funding for assistance in constructing, enlarging, or

improving community facilities for public safety

#### 5. U.S. Smokeless Tobacco Company Polaris Ranger Donation Program

Website: www.ustinc.com
Application Deadline: December 28, 2008

Program Description: Donation of Polaris Ranger 6X6 utility vehicles for

firefighting, rescue, police, emergency medical service,

and wildlife law enforcement organizations

#### 6. Mississippi Forestry Commission

Website: mfc.state.ms.us

Application Deadline: Approximate date – Mid to Late October, 2008

Program Description: Wildland fire gear (Ready Kits), which consists of nomex

coveralls, helmet, headlamp, neck shroud, gloves, and a

bag for storage

#### 7. First Responder Institute Website

Website: www.firstresponder.org

Program Description: Provide support to local U.S. fire departments and

emergency service personnel

#### 8. Responder Knowledge Base Website

Website: www.rkb.mipt.org

Program Description: Website contains information on currently available

products, standards, training, and grants

#### 9. Grants Office

Website: www.firegrants.info and www.grantsoffice.com
Program Description: Provides information, tools. and tips to help fire

departments be more successful at obtaining funds from

the Assistance to Firefighters Grants Program

#### References

Tishomingo County Hazard Mitigation Plan, 2004

Natural Resources Conservation Service through Mississippi State University Extension Service Timber - Tishomingo County's Number One Crop

Firewise
"Living with Fire" booklet
Courtesy of Robert Thornton, Coordinator, MFC

Tishomingo County Development Foundation www.tishomingo.org

Sperling's Best Places Tishomingo County Climate BestPlaces.com

Mississippi Forestry Commission Arson Fires Fires by Cause

U.S. Drought Monitor Mississippi http://drought.unl.edu.dm

#### **Project Contact Information**

Tishomingo County E911 and Fire Coordinator

Jerry Bonds

1008 Battleground Drive

luka, MS 38852

Phone: 662.423.7004 Fax: 662.423.7003 tc911andfire@aim.com

2. Tishomingo County Emergency Management Agency

Bill Strickland

1008 Battleground Drive

luka, MS 38852

Phone: 662.423.7028 Fax: 662.423.7036

tishomingocoema @msn.com

3. Mississippi Forestry Commission

Robert Thornton, Firewise Coordinator

rthornton@mfc.state.ms.us

Michael Crabb (Tishomingo County Forester)

mcrabb@mfc.state.ms.us

P. O. Box 703

1711 McCullough Blvd.

Tupelo, MS 38802 Phone: 662.841.2479 Fax: 662.841.2479

Website: www.mfc.state.ms.us

4. Natural Resources Conservation Service

Phil Purvis, District Conservationist Kevin Swinney, Rural Development (Tishomingo and Prentiss Counties)

613 West Church Street

Booneville, MS 38829

662.728.7985

5. Northeast Mississippi Planning & Development District

P. O. Box 600

619 East Parker Drive Booneville, MS 38829 Phone: 662.728.6248

Fax: 662.728.2417

Website: www.nempdd.com

#### **Tishomingo County Wildfire Protection Plan Maps**

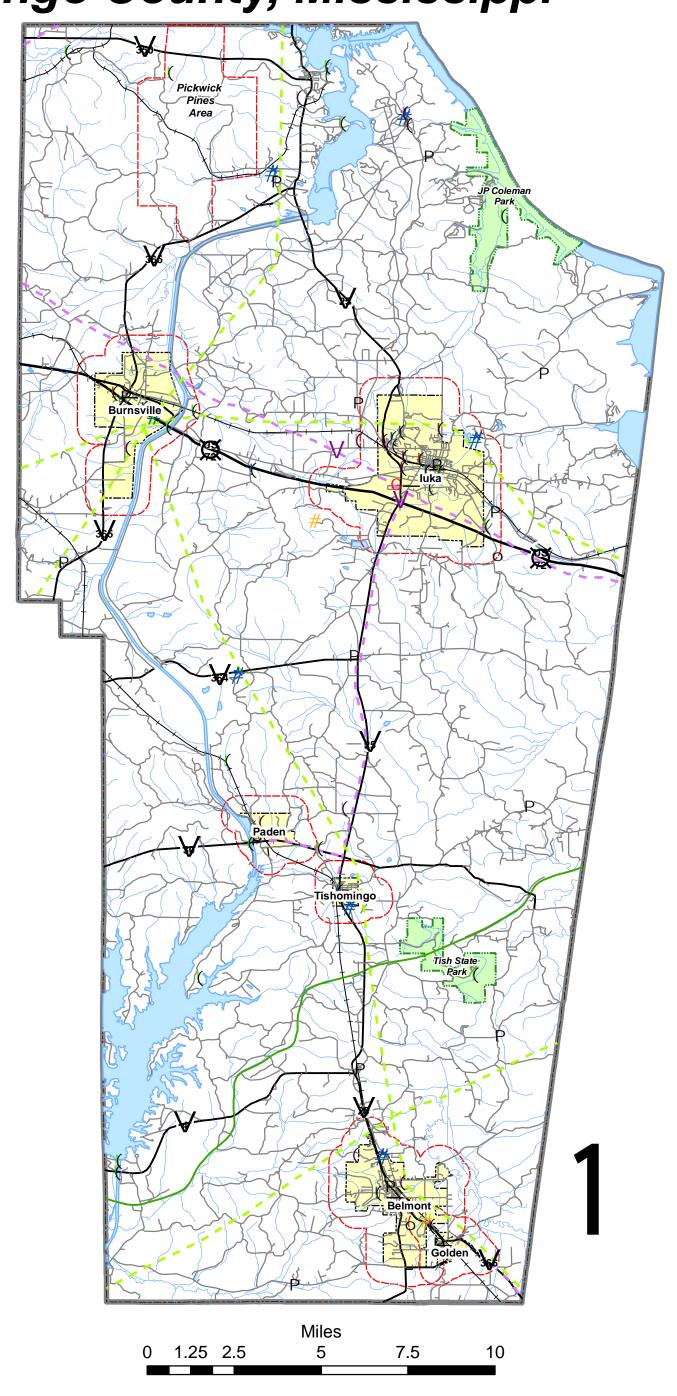
- □ Base Map
- □ Risk Assessment Ratings Map
- □ Fire Data 2002-2007 Map
- □ High Occurrence Wildfire Areas Map
- □ Arson Fires 2002-2007 Map
- □ Fire Response Area Map
- □ Wildfires by Fire Response Area

# **County Wildfire Protection Plan**

### **Base Map**

#### At Risk Areas

- Community Imp.
- ( Assisted Living Fac.
- **Public Works**
- School
- **Vulnerable Fac.**
- ( Industrial Area
- **#** Communi. Tower
- G Hospital
- P FDs / VFDs
- Law Enforcement
- # Electric Substations
- V Oil or Gas Facility
- Elec. Transm. Lines
- Oil / Gas Pipelines
- Roads, Streets
- State Hwys
- Natchez Trace Pky
- US Hwy 72
- Railroad
  - Rivers, Streams
- State Parks
  - WUI
- Incorp. Cities, Towns
  - Lakes

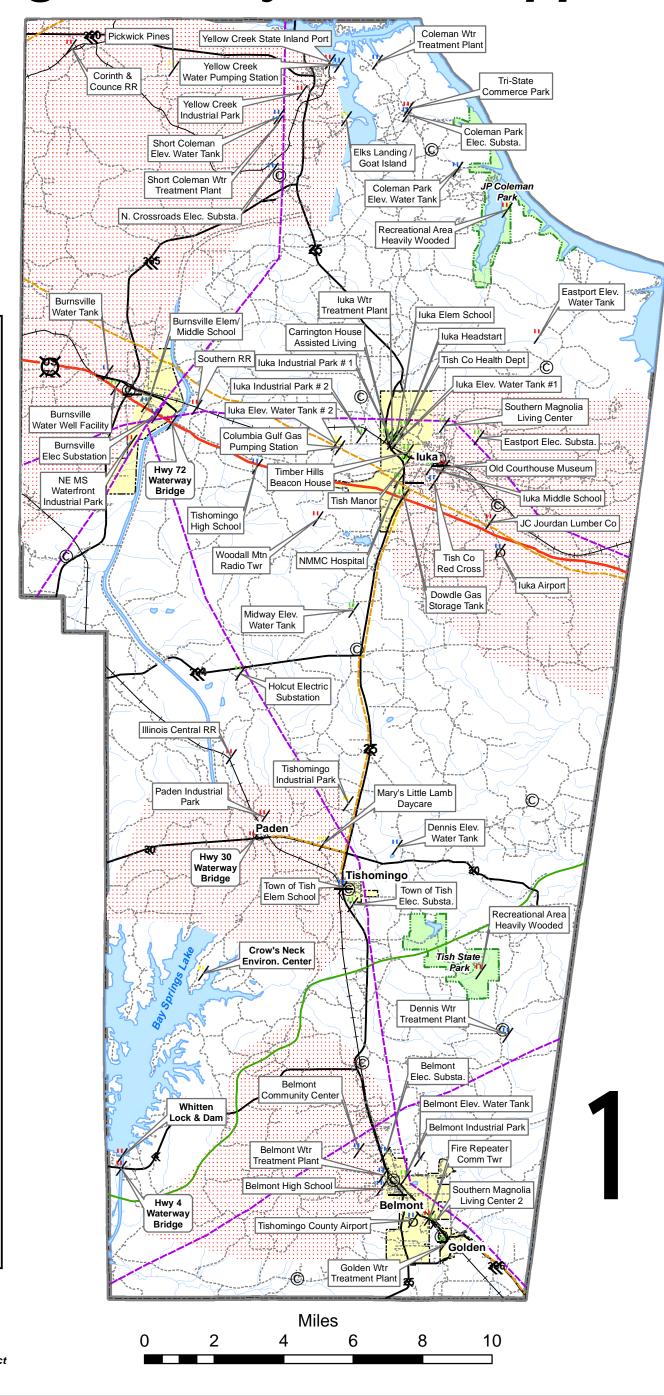


# **County Wildfire Protection Plan**

## Risk Assessment Ratings

#### **Risk Assessment**

- " Low
- Medium
- Medium-High
- " High
- Law Enforce.
- © FDs / VFDs
- ----- Elec. Trans. Lines
- Oil / Gas Lines
- Roads, Streets
- Hwy
- Natchez Trace Pky
- US 72
- Rails
- High Fire Occurr.
- Lakes, Ponds
  - Rivers, Streams
- Cities, Towns
- State Parks

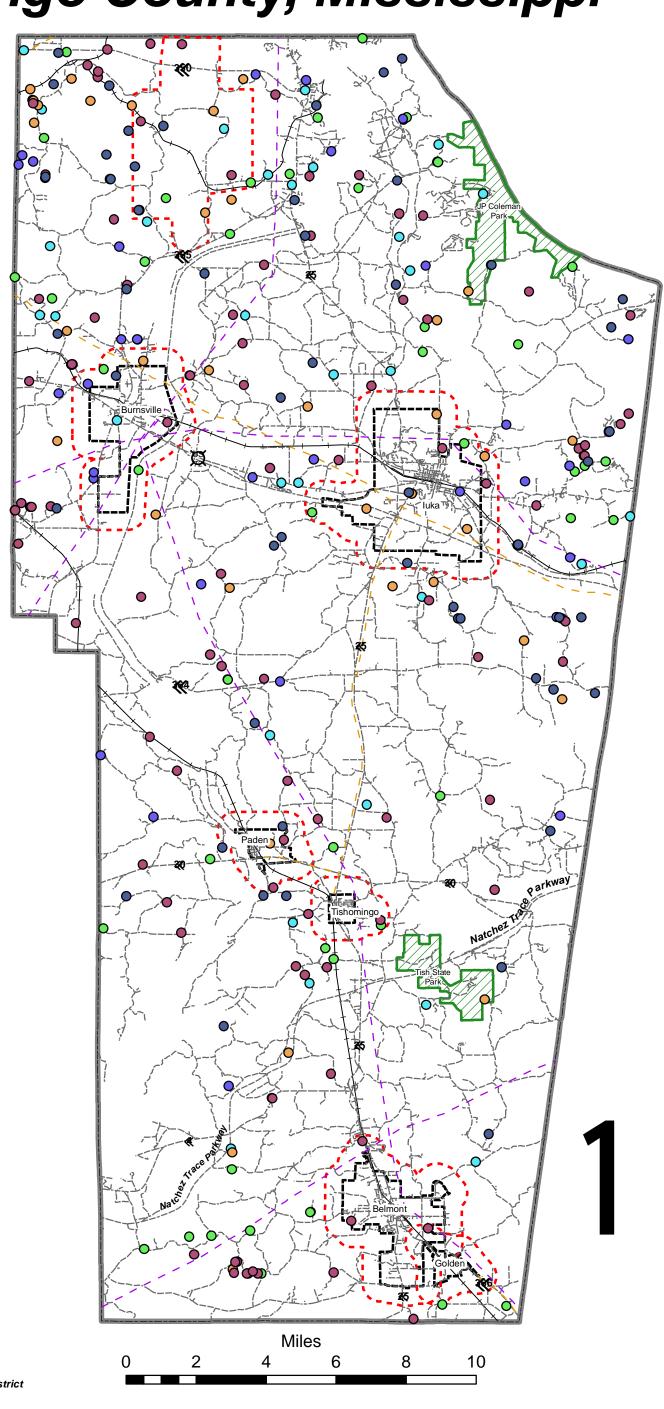


# **County Wildfire Protection Plan**

Fire Data **2002 - 2007** 

#### **Fire Incident**

- 2002
- 2003
- 2004
- 2005
- **2006**
- **2007**
- ---Elec. Trans. Lines
- ---Oil or Gas Pipeline
- ---- Hwys/Roads/Pkwy
- ---- Railroad
- WUI
- State Parks
- Cities, Towns
- County

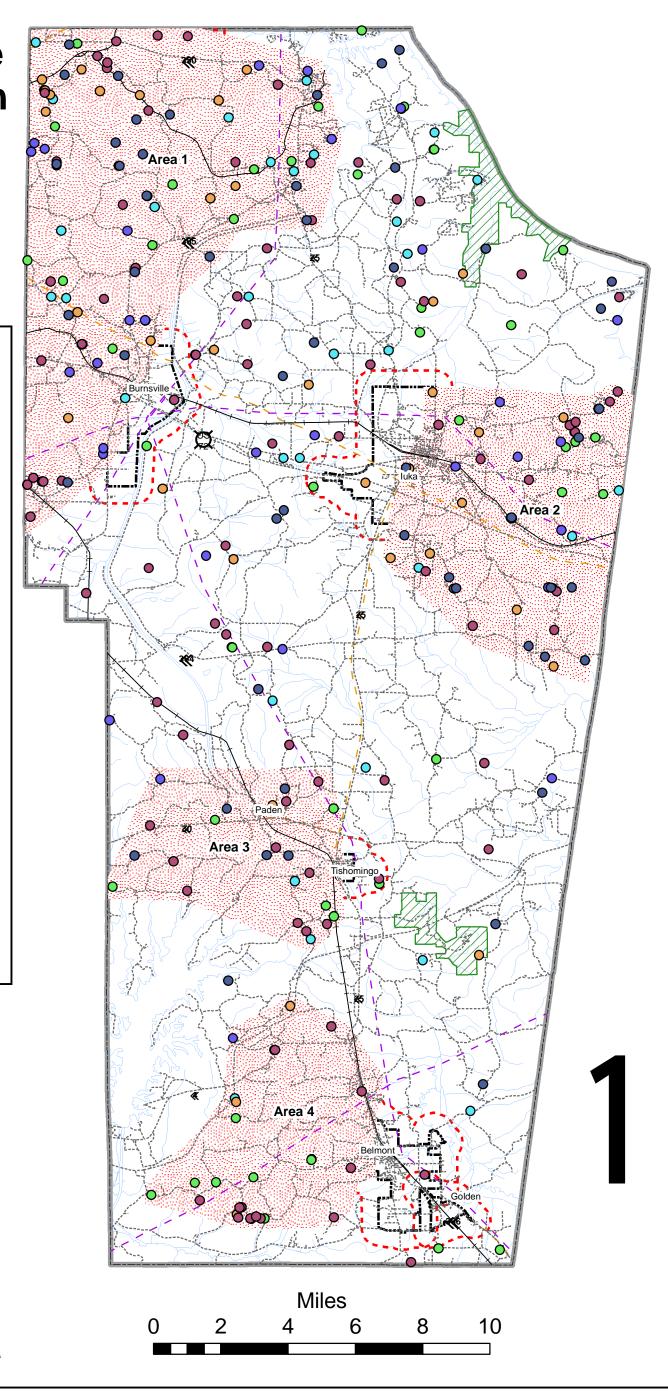


# **County Wildfire Protection Plan**

## High Occurrence Wildfire Areas

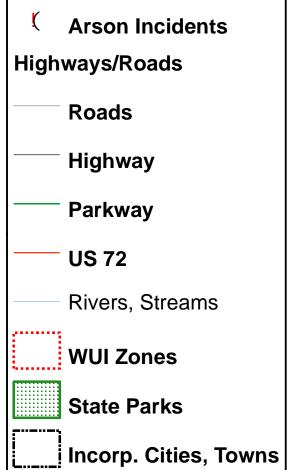
### **Fire Incident**

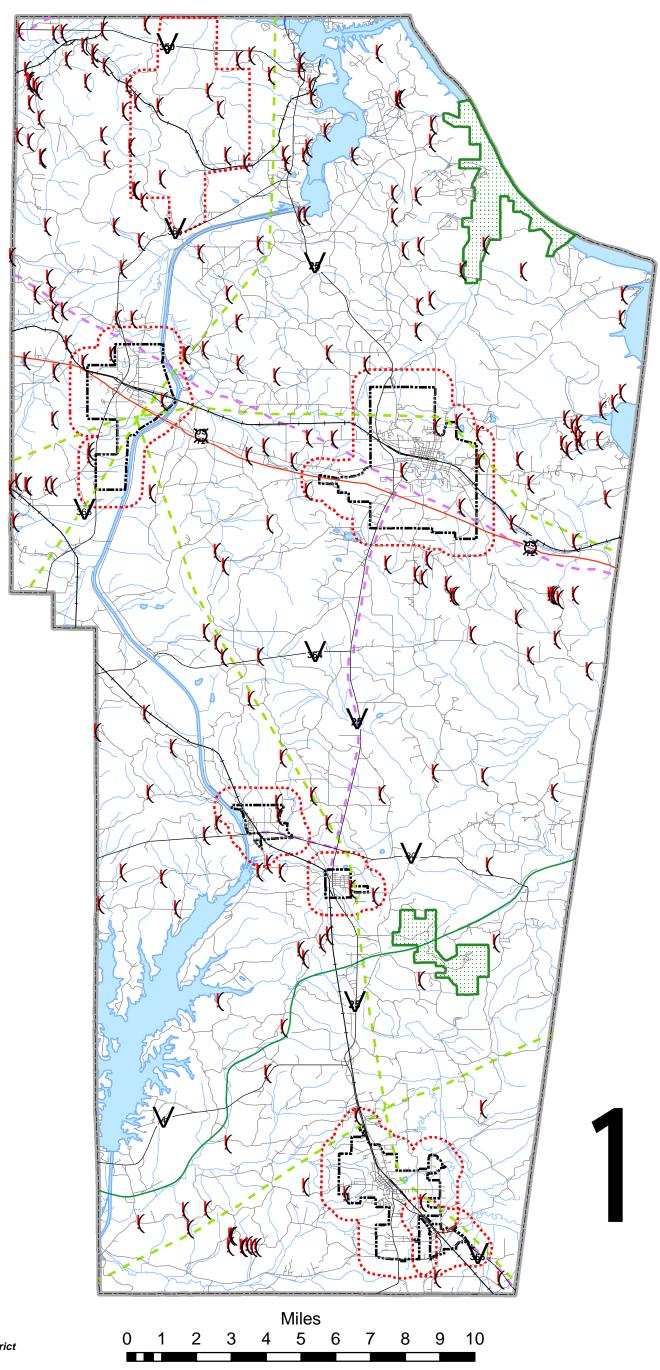
- 2002
- 2003
- 2004
- 2005
- 2006
- **2007**
- Roads / Hwys
- ---- Railroad
- ---Elec. Trans. Lines
- - Oil or Gas Pipeline
- High Occurrence Area
- WUI
- State Parks
- Cities, Towns
- County



# **County Wildfire Protection Plan**

**Arson Fires 2002 - 2007** 



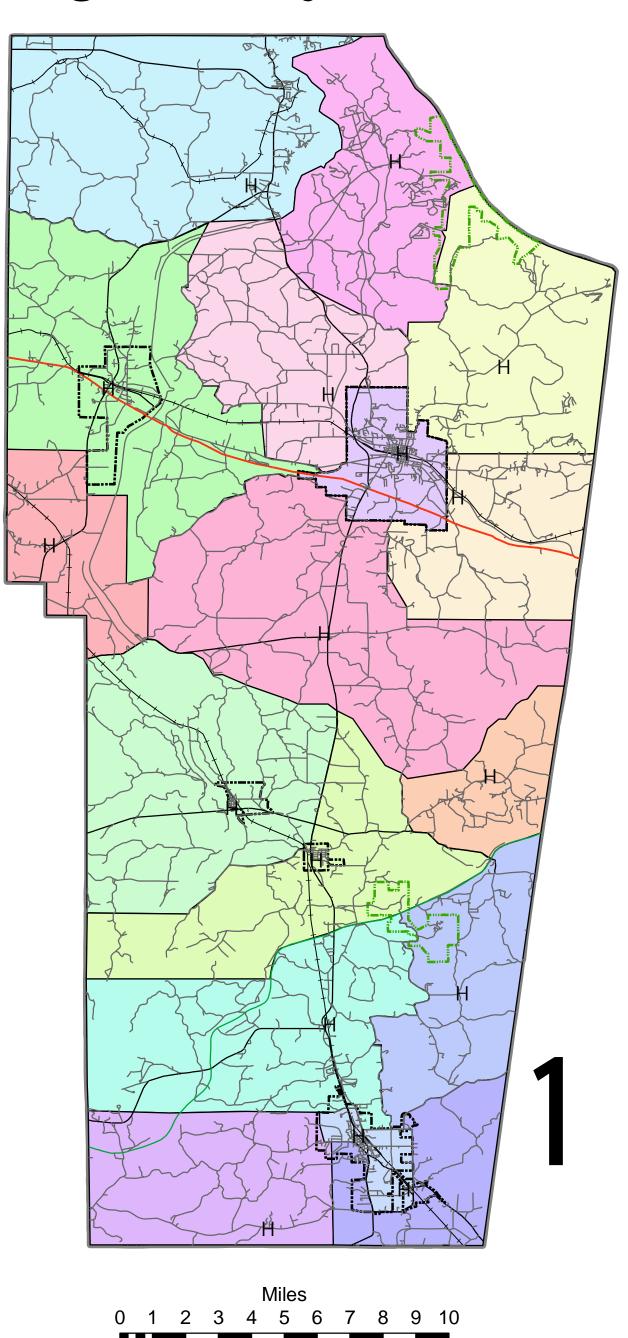


# Tishomingo County, MS

# **County Wildfire Protection Plan**

# Fire Response Areas





## Tishomingo County, MS

# **County Wildfire Protection Plan**

## Wildfires by Response Area



