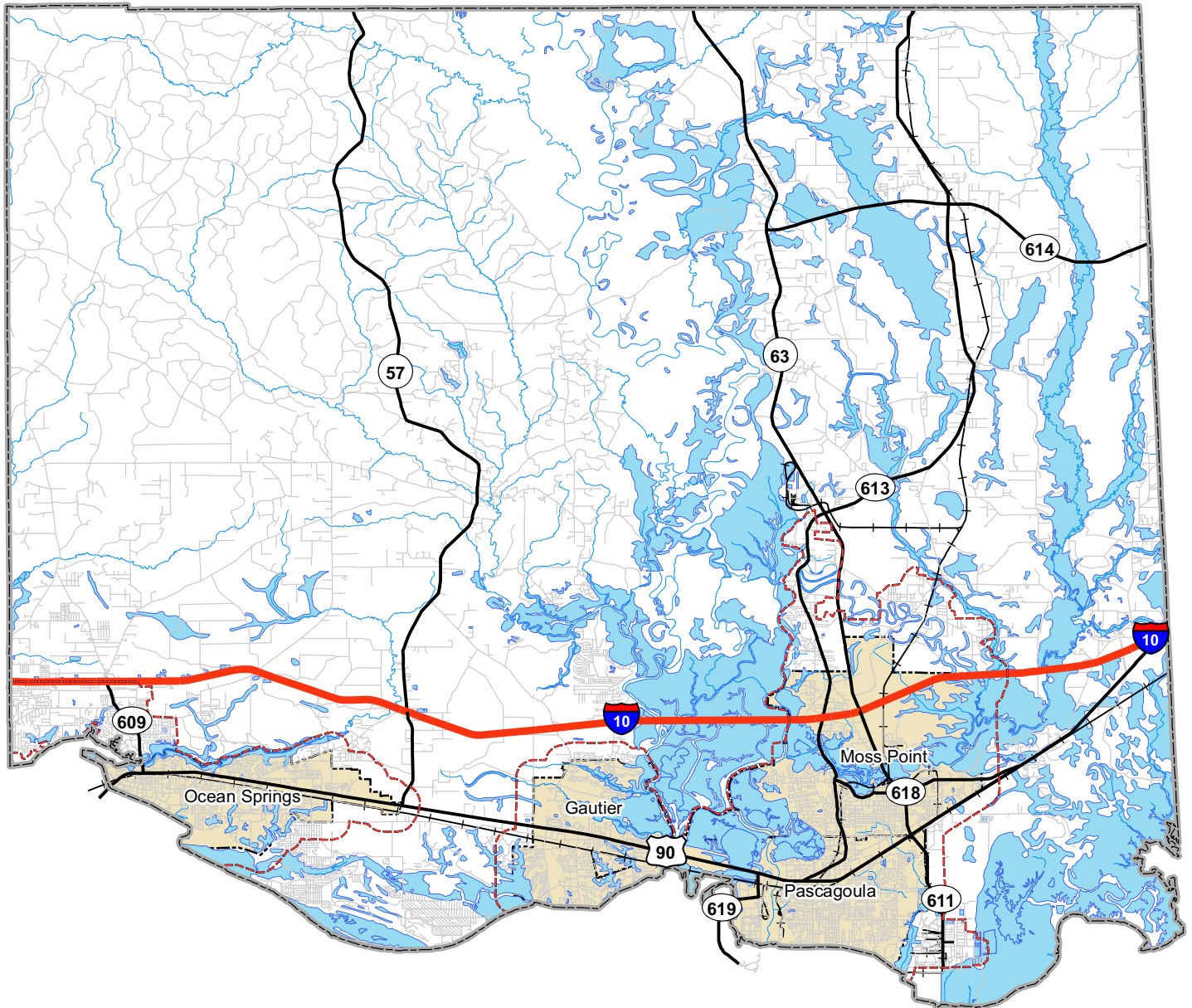


# JACKSON COUNTY, MISSISSIPPI

## COUNTY WILDFIRE PROTECTION PLAN



DECEMBER 2007

PREPARED BY SOUTHERN MISSISSIPPI PLANNING AND DEVELOPMENT DISTRICT WITH FUNDING PROVIDED BY THE MISSISSIPPI FORESTRY COMMISSION AND THE NATURE CONSERVANCY

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## **Introduction**

In late 2006, the Mississippi Forestry Commission and The Nature Conservancy commissioned the preparation of wildfire protection plans for a fifteen-county south Mississippi region. The plan is an effort to address changes to the Wildland-Urban Interface (WUI) brought about by Hurricane Katrina as well as from increased development in many parts of the region in recent years. While some downed timber was salvaged, an increased risk of future wildfire remains a threat because of residual debris.

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, Jackson 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 2007, SMPDD 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 Jackson County Emergency Management Office, the Mississippi Forestry Commission, The Nature Conservancy, 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, the county's Hazard Mitigation Plan and the Comprehensive Emergency Management Plan.

## Area Description

Jackson County is located in the southeastern section of Mississippi and is one of the State's three coastal counties. It is bordered on the south by the Mississippi Sound; the Mississippi-Alabama state line forms Jackson County's eastern border. Primarily urban in character, Jackson County has a large manufacturing base. With strategically located waterways, the county has often been described as the most industrialized county in the state. Pascagoula is the largest city in the area, with Moss Point, Ocean Springs, and Gautier being the other incorporated areas.

Jackson County has excellent transportation routes that include rail, air and seaports. State Highway 63 and State Highway 57, major north-south arteries, provide access to upland counties in the state and connections to U.S. Highway 98. U. S. Highway 90 and Interstate 10 traverse the county from east to west, linking Jackson County to Mobile, Alabama on the east; New Orleans, Louisiana on the west; and all other major cities and markets.

The population of Jackson County in 2000 was 131,420, evidencing a 14% growth in residency since 1990 and strongly reversing the 2.4% population loss registered in the prior ten-year period from 1980-1990. The U. S. Census Bureau estimated a 2006 population of 131,351, a slight decrease since 2000. The decrease may be largely attributable to the population exodus following the devastation of Hurricane Katrina, although recent years have also shown a gradual loss of industry in the county and a shift toward a more diverse economy. Despite these considerations, however, Jackson County is experiencing a remarkable recovery and the economy is robust. Major redevelopment projects such as the Riverfront Development Plan in Pascagoula, the revitalization of downtown Moss Point, and the Ocean Springs Front Beach Master Plan provide ample confidence to believe that Jackson County's population will rebound. By 2010, the population is projected to rise to 156,628; if realized, this 19.2% increase during the ten-year period from 2000-2010 will continue the strong growth rate seen over the last two decades.

Jackson County contains 731 square miles, with land largely held by private landowners. Approximately 72% of the county land area is contained within commercial forests. Recreational activities in the area are enhanced by the proximity of the Gulf Islands National Seashore, Shepard State Park, Sandhill Crane Wildlife Refuge, the Pascagoula River Game Management Area, and the Pascagoula and Escatawpa Rivers. The Gulf Islands National Seashore Visitors Center is a designated Mississippi Historic Landmark.

Jackson County has a fairly typical sub-tropical climate with humid, warm temperatures moderated by coastal breezes from the Mississippi Sound and Gulf of Mexico. Average spring temperature is 67 degrees Fahrenheit, with averages ranging from 57 to 77 degrees Fahrenheit; average winter temperatures range from 41 degrees to 62 degrees. Summer temperatures range from 85 to 95 degrees Fahrenheit, with an average July/August temperature of 91 degrees. Rainfall averages between 55 and 64

inches annually. Driest month is October; wettest month is September. The prevailing wind direction is typically east-southeast to southeast at 6 to 12 knots; winds often increase during thunderstorms, which occur frequently and are sometimes accompanied by strong to severe winds, including tornadoes.

Because of relatively high annual precipitation amounts, Jackson County is not usually prone to property-damaging wildfires. However, occasional drought-like conditions prompt fire service officials to issue bans against burning, and encroachment 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. Drought conditions contribute to an enhanced risk of wildfires affecting populated areas in Jackson County. For the Southeast region of the United States, the first 6 months of the year have been persistently dry. In fact, December 2006-May 2007 has been drier than average for 7 of the past 9 years. Mississippi had the driest December-May in their 113-year record. The latest U. S. Drought Monitor report (December 4, 2007) indicates that Jackson County is not currently considered to be in a drought condition.

About 72 percent of the land in Jackson County is use-classified as timber, open, or agriculture, creating an enhanced risk to the county of wildfires. Streams and drainage basins create natural barriers that help reduce this risk. Woodlands fires are controlled by rural firefighting departments and/or forestry service personnel. 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 fringe that poses the greatest concern. Mitigation measures such as prescribed burns, training and equipping firefighters, and public education on fire protection and Firewise strategies all 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. Major transportation arteries through Jackson County such as Interstate 10, U. S. Highway 90, and Highways 57 and 63 are used daily to transport flammable, toxic and/or explosive materials, thus exposing the county to potential transportation incidents involving hazardous materials. Volunteer fire departments within the county serve as first responders if an incident involving hazardous materials occurs.

With the tremendous growth projected for Jackson County over the next five to ten years, demands placed on the volunteer fire departments of the county will also increase. Jackson County is divided into nine fire response areas covering the unincorporated portions of the county from 25 fire stations strategically located throughout the County. The rural fire response areas are: East Central, Fountainbleau, Fort Bayou, Forts Lake, Latimer, Three Rivers, Vancleave, West Jackson, and Gulf Park/St. Andrews. All Fire Response Areas within the county, including Station Location(s), and Number of Volunteers, are listed below. All of the fire departments are manned by volunteers who receive no compensation for fire protection services. Total

number of volunteers is based on current staffing levels, but seasonal fluctuations occur.

Fire Response Area	Fire Department	Station Location(s)	Total Number of Volunteers
East Central (Main)	East Central VFD	21701 Highway 613	32*
East Central (Sub)	East Central VFD	7701 Community House Road	
East Central (Sub)	East Central VFD	6303 Tanner Williams Road	
East Central (Sub)	East Central VFD	8417 Nutbank Road	
Fountainbleau (Main)	Fountainbleau VFD	3901 Highway 57	25*
Fountainbleau (Sub)	Fountainbleau VFD	4920 Beach Street	
Fort Bayou (Main)	Fort Bayou VFD	13209 Seymour Lane	27*
Fort Bayou (Sub)	Fort Bayou VFD	14506 Lemoyne Blvd.	
Fort Bayou (Sub)	Fort Bayou VFD	11401 Yellowjacket Lane	
Forts Lake (Main)	Forts Lake VFD	10701 Forts Lake Road	23*
Forts Lake (Sub)	Forts Lake/Orange Grove VFD	5625 Orange Grove Road	
Latimer (Main)	Latimer VFD	10908 Tucker Road	20*
Latimer (Sub)	Latimer VFD	12302 Jim Ramsay Road	
Three Rivers (Main)	Three Rivers VFD	16933 Highway 63	10*
Three Rivers (Sub)	Three Rivers VFD	Highway 63 north of power plant	
Three Rivers (Sub)	Three Rivers VFD	24321 Old Americas Road	
Vancleave (Main)	Vancleave VFD	5117 Ballpark Road	25*
Vancleave (Sub)	Vancleave VFD	164001 Old River Road	
Vancleave (Sub)	Vancleave VFD	17400 Highway 57	
Vancleave (Sub)	Vancleave VFD	Waltman Road	
Vancleave (Sub)	Vancleave VFD	2330 Highway 57	
West Jackson (Main)	West Jackson VFD	15324 Big Ridge Road	38*
West Jackson (Sub)	West Jackson VFD	6215 St. Martin Street	
Gulf Park/St. Andrews (Main)	Gulf Park/St. Andrews VFD	1401 Elm Street	14*
Gulf Park/St. Andrews (Sub)	Gulf Park/St. Andrews VFD	2300 Simmons Bayou Road	

\* Total volunteers for fire response area, including substations.

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

At the beginning of the planning process, the Jackson County CWPP Steering Committee identified several goals. These goals were set to provide a common vision during the process and to identify specific results to be obtained upon completion of the final document.

1. Define the Wildland-Urban Interface (WUI) for Jackson 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. Make recommendations to improve the resources of the Volunteer Fire Department
  - Increase wildland firefighting training
  - Seek funding for better/proper equipment needed to fight wildland fires
6. Identify strategies to encourage collaboration between Jackson County and the Mississippi Forestry Commission
7. Identify education and outreach programs on wildfire prevention for homeowners
8. Develop strategies to encourage mitigation by homeowners and property owners, e.g. Insurance discounts
9. Develop a county ordinance to address violations of burn bans or burn ordinances by property owners, including but not limited to enforcement strategies and responsibilities as well as penalties for non-compliance

## Mapping

The Jackson County Wildfire Protection Plan contains seven maps created by the Southern Mississippi Planning and Development District (SMPDD) Geographic Information System Department. These maps were created for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Jackson County Base Map, Jackson County Risk Assessment Ratings, Jackson County Fire Data 2000-2006, High Occurrence Wildfire Areas, Arson Fires 2000-2004, Jackson County Fire Response Area, and Wildfires by Fire Response Area.

The county-wide base map provides a graphic baseline of infrastructure, roadways, inhabited areas, areas of community importance and a WUI designation. Initially, the WUI was set at ½-mile from existing municipal boundaries in accordance with the Healthy Forests Restoration Act of 2003. The Steering Committee then edited this line to include area developments within the county but not adjacent to municipalities. It was noted by the Steering Committee that the county has many areas where wildland meets development. For this reason, the Jackson County WUI will identify areas where the highest amount of development occurs and aid in identifying specific risk factors and treatment projects that have the potential to reduce the risk to life, property and critical infrastructure.

In addition to the WUI, the Steering Committee identified several areas of critical infrastructure including roadways for evacuation, water towers, utilities and the communication towers. The Base Map has become a visual representation of the core elements of county protection as identified for the CWPP.

The Risk Assessment Map graphically reflects the results of the risk assessment portion of the county wildfire protection plan process. The risk assessment process is explained in detail below. The resulting map reflects the infrastructure, roadways, municipalities and areas of community importance found on the base map. The Steering Committee assigned a risk rating to each of these attributes by considering available fuel load, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness. 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 reflect both wildfires and controlled burns, and several different causes of fires. Fire causes include lightning, campfire, smoking, debris burning, arson, and equipment use. Mississippi Forestry Commission data for Jackson County shows a total of 212 fires in the year 2000, 117 fires in 2001, 91 fires in 2002, 88 fires in 2003, 60 fires in 2004, 91 fires in 2005, and 128 fires in 2006. The fire occurrence maps were utilized in the Risk Assessment portion of the CWPP and as a valuable reference during the process of formulating mitigation projects and action items.



Through the use of the SMPDD Geographic Information System, all fires and all causes, tracked for years 2000-2006 by the MFC, are reflected on the Jackson County Wildfires 2000-2006 map. When these data are mapped, it becomes apparent that there are specific geographic areas where there is a high occurrence of wildfire.

The High Occurrence Wildfire Areas are based on a computer calculation used to determine density and distribution by comparing each fire occurrence to its surrounding neighbors. The resulting calculation was then separated into nine classes to isolate areas with higher density. The lowest six classes were eliminated, and the remaining three classes were converted to single polygons to represent the three regions displayed as high occurrence areas. The regions were then manually edited to exclude fringe incidents leading to distinct and cohesive boundaries. Area 1 is geographically located in the east-central portion of the county around Highway 57. Area 2 is geographically located in the northeast area of the county. Area 3 is located in the eastern area of the county just north of Interstate 10. Area 4 is located in the eastern area of the county just south of Interstate 10.

A majority of the fires within Jackson County, approximately 53%, are attributed to arson. According to Forestry Commission wildfire data, 297 out of 568 fires tracked from 2000-2004 were attributed to arson. The map of Arson Fires by Year reflects the geographic distribution of these fires throughout the county.

The Jackson County Fire Response Area map reflects the county fire station response areas with respective boundaries and each volunteer fire station location. Also included is a map reflecting all wildfires from 2000-2006, as well as a map depicting all fire district boundaries and the department locations. Wildfires 2000-2006 by Fire Response Area will aid in the assessment of numbers of fires and their general location within each district.

## 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 attempted to identify large facilities that may be at risk from wildfire 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 focus available financial and human resources on specific mitigation projects in the future.

For the purpose of this exercise, these areas were rated from low to high. Areas receiving the highest rating pose an increased risk due to their function, amount of nearby fuel load or may cause significant community impact in the event of damage or loss due to a wildfire. Mitigation projects for the at-risk areas include a wide array of activities. Removal or reduction in fuel load may be suggested for some areas, with a public awareness campaign suggested for others.

### Rating Key

- Low
- Medium
- Medium-High
- High

### Critical Infrastructure:

- E-911 communication tower on Highway 57 behind Fountainbleau Station

This E-911 communication tower is located behind a fire station in cleared pastureland. This risk rating is low.

- E-911 communication tower on Highway 63 across from Ed Parker Road

The land around the tower is cleared, but there is some forested land nearby. The tower is at medium risk.

- E-911 communication tower on the east side of Lily Orchard Road, near Augusta Road

There is only a moderate risk of fire at this tower location. It is rated medium.

- E-911 communication tower on 3C Road

The tower is located in a wooded area with a smaller buffer area than other towers. It is rated a medium-high.

- Vancleave Lower Elementary School

There is little risk of fire or smoke. The school is included because of its function as a shelter. Overall risk rating is low.

- Orange Lake Elementary School

The school is located near the railroad with little buffer. There is a risk of smoke and fire, and it is rated medium-high.

- Three Rivers South Fire Station\*

This fire station is at moderate risk due to its location. The rating is medium.

- River Road Fire Station\*

There is a wooded area on 3 sides of the station. For this reason, it is rated medium.

- Mount Pleasant Fire Station\*

Due to its proximity to forestland, the station is rated medium.

- May Lane – Vancleave Fire Station\*

This station is ranked high because of its location. It poses a higher risk than any other station.

- Sub-acute Center at Sunplex Business Park

There is only a small risk of fire but a high risk of smoke at this medical facility. The overall rating is medium.

- Mississippi Export Shortline Railroad

There is heavy vegetation around the rail line. The right-of-way is not clear. Additionally, coal is transported regularly along the rail to the power plant. It is rated a medium-high risk.

*\*All other fire stations in the county are rated low, posing little or no risk. Six of the fire stations are within the WUI.*

## Vulnerable Facilities

- Compressor Station/Pump Station – Destin Pipeline – natural gas, LPG/NGL
- Compressor Station/Pump Station – Standard Oil – natural gas
- Mississippi Phosphates Corporation – natural gas
- First Refinery –natural gas
- Loews Corporation – meter station – natural gas
- BP Products North America – gas processing with NGL or condensate production

All of the above facilities pose some risk due to function and impact to the community and beyond if damaged or destroyed. However, the companies that operate the facilities take adequate fire precautions. The overall rating for each is low.

## Areas of Community Importance

- East Central Community Center
- Latimer Community Center
- Orange Grove Community Center
- Vancleave Community Center

The centers listed above are important to the quality of life of the residents of Jackson County. There is not, however, a substantial smoke or fire risk. All of the centers are ranked low.

- Sand Hill Crane Refuge

An area used for bird watching and other eco-tourism activities, the refuge is rated low. While the railroad does run through the property, an adequate burn schedule is maintained.

## Areas of Concern

- Gulf Park Estates

The Gulf Park Estates area close to the beach carries a heavy fuel load, especially since Hurricane Katrina. There is still debris in the area as well as downed timber. The overall rating is medium.

- North Vancleave Area

Also impacted by Hurricane Katrina, this area carries a high fuel load and is rated medium.

## Emergency Preparedness

Emergency preparedness for each of the county volunteer fire departments is continually reviewed and assessed by the Jackson County Fire District. This assessment involves factors such as equipment availability and age, public protection classification, and manpower. Mutual aid agreements exist among all of the fire departments within the county, and many grants have been utilized over the years to obtain needed equipment.

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 Jackson County are listed below, with the corresponding MSRB classification.

Mississippi State Rating Bureau Public Protection Classification List

District	Class
East Central	8
Fountainbleau	8
Fort Bayou	8
Forts Lake	9
Latimer	10
Three Rivers	8
Vancleave	8 and 10
West Jackson	8
Gulf Park/St. Andrews	9

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 to provide better service within the districts.

Often times, the local firefighters work side-by-side with the Mississippi Forestry Commission. Generally, there is a good relationship between the two agencies. However, it is suggested that biannual meetings be established to clarify the roles and responsibilities of each agency. These meetings would allow any other inter-agency concerns to be addressed as well as to provide training opportunities and project coordination.

Although Jackson County is heavily industrialized, many residents commute to work in nearby cities in Mississippi and Alabama. Some of the volunteer firefighters find work outside their fire district or have trouble leaving work to respond to a fire call. To help alleviate this problem, it is recommended that a larger volunteer force be recruited.

A community outreach and awareness program may help address some of the manpower issues. Several volunteer fire departments across the county are involved with the local Boy Scouts of America through the explorer program ([www.scouting.org/](http://www.scouting.org/)). Many times, BSA can provide program direction, resources, and insurance to cover the department which allows for much more involvement by an explorer scout than a typical youth under 18.

An apprentice firefighter program working with local youth is also an option. While not allowed to fight fires, these youth may be able to gain training through department exercises. The youth would support by providing drinks, supplies or other equipment that is needed on-site. Involvement in the program may then lead to a career as a volunteer firefighter.

Additionally, recruitment kits should be created and kept on-hand for prospective candidates. Recruitment messages can be posted in local newspaper inserts and by placing flyers at local restaurants and other businesses. Adding recruitment information to the county website and local cable service announcements may also be effective.

In addition to the MSRB Rating and manpower issues, equipment status is tracked and assessed. A current listing of large equipment with description, age and location is provided below. The departments utilize a variety of large firefighting equipment with no immediate needs identified. However, a concern may arise in the future as this equipment ages if funds are not available for replacement.

The county has a brush truck at each station, but more “Indian Packs” are needed for firefighters.

#### Jackson County Fire District Equipment List

Department	Year	Make/Model	Type	Owner
<b>East Central</b>	1945	Antique Mack	Pumper	Jackson Co. FD
	1984	International	Tanker	Jackson Co. FD
	1985	Ford	First Response	Jackson Co. FD
	1990	International	4600 Series	Jackson Co. FD
	1990	Chevrolet	C70 Tanker	Jackson Co. FD
	1991	GMC	Pumper	Jackson Co. FD
	1997	Ford	Pumper	Jackson Co. FD
	1997	Ford	Pumper	Jackson Co. FD
	2000	Ford	Brush Truck	Jackson Co. FD
	2001	Ford	Brush Truck	Jackson Co. FD
	2002	Ford	Brush Truck	Jackson Co. FD
	2003	Ford	Brush Truck F350	Jackson Co. FD
2004	Freightliner	Pumper	Jackson Co. FD	
<b>Fountainbleau</b>	1969	Chevy Bruco	Pumper/Tanker	Jackson Co. FD
	1980	Chevrolet	Pierce Mini Pumper	Jackson Co. FD
	1981	Ford	Rescue (Ambulance)	Jackson Co. FD
	1982	Hahn	Pumper	Jackson Co. FD
	1985	E-1 Custom Cab	Pumper	Jackson Co. FD

Department	Year	Make/Model	Type	Owner
<b>Fountainbleau</b>	1994	Pierce	Pumper	Jackson Co. FD
	1994	GMC	Tanker	Jackson Co. FD
	2002	Ferrara	Pumper	Jackson Co. FD
	2005	Ford	Rescue Truck	Jackson Co. FD
	2006	E-1 Freightliner	Pumper	Jackson Co. FD
<b>Fort Bayou</b>	1974	Ford	Brush Truck	Jackson Co. FD
	1975	Mack	Ladder Truck	Jackson Co. FD
	1977	Ford	Tanker	Jackson Co. FD
	1979	Ford	Tanker	Jackson Co. FD
	1985	Ford	Ambulance	Jackson Co. FD
	1990	Ford	First Response	Jackson Co. FD
	1991	GMC	Pumper	Jackson Co. FD
	1993	Chevrolet	Pickup	Jackson Co. FD
	1994	Chevrolet	Pumper	Jackson Co. FD
	1994	Ford F750	Tanker	Jackson Co. FD
	1995	Ford F700	Tanker	Jackson Co. FD
	1995	Ford F700	Tanker	Jackson Co. FD
	2004	Ferrara	Pumper	Jackson Co. FD
<b>Forts Lake</b>	1986	Chevrolet	Tanker	Jackson Co. FD
	1986	Chevrolet	Tanker	Jackson Co. FD
	1989	International	Tanker	Jackson Co. FD
	1991	E-1	Pumper	Jackson Co. FD
	1992	Ford	Van	Jackson Co. FD
	1998	Ford	Pickup	Jackson Co. FD
	1998	Mavistart	Pumper/Tanker	Jackson Co. FD
	2004	Ford F550	Rescue Truck	Jackson Co. FD
	2004	E-1	Pumper	Jackson Co. FD
	2005	Cascade	Trailer & Equipment	Jackson Co. FD
<b>Latimer</b>	1979	Ford	Brush Truck	Jackson Co. FD
	1991	GMC	Pumper	Jackson Co. FD
	1992	GMC	Pumper	Jackson Co. FD
	1994	International 4900	Pumper	Jackson Co. FD
	1994	International 4900	Pumper	Jackson Co. FD
	1994	International 4900	Pumper	Jackson Co. FD
	1998	Ford	Pumper	Jackson Co. FD
	1999	E-1 Grizzly	Tanker	Jackson Co. FD
	2004	Ford	Rescue Truck	Jackson Co. FD
<b>Three Rivers</b>	1981	Ford	Brush Truck	Jackson Co. FD
	1984	International	Tanker	Jackson Co. FD
	1986	GMC	Pumper	Jackson Co. FD
	1989	GMC Topkick	Tanker	Jackson Co. FD
	1990	GMC	Pumper	Jackson Co. FD
	1993	Ford	Brush Truck	Jackson Co. FD
	1997	Ford	Pumper	Jackson Co. FD
	1997	International	Pumper	Jackson Co. FD
	1999	Chevrolet	Brush Truck	Jackson Co. FD
	2001	GM 3500	Brush Truck	Jackson Co. FD

Department	Year	Make/Model	Type	Owner
<b>Vancleave</b>	1977	Dodge	Brush Truck	Jackson Co. FD
	1978	Ford	Pumper	Jackson Co. FD
	1979	E-1	Pumper	Jackson Co. FD
	1984	International	Tanker	Jackson Co. FD
	1985	Chevrolet	Brush Truck	Jackson Co. FD
	1985	Chevrolet	Brush Truck	Jackson Co. FD
	1991	GMC	Pumper	Jackson Co. FD
	1991	Ford	Tanker	Jackson Co. FD
	1991	Ford	Tanker	Jackson Co. FD
	1995	Dodge	Brush Truck	Jackson Co. FD
	1997	Ford	Pumper	Jackson Co. FD
	1998	E-1	Pumper	Jackson Co. FD
	2001	Ferrara	Pumper HME	Jackson Co. FD
	2003	International	Tanker	Jackson Co. FD
	2004	HazMat	Trailer	Jackson Co. FD
2004	HazMat	Trailer	Jackson Co. FD	
<b>West Jackson</b>	1982	GMC	Panel Van	Jackson Co. FD
	1984	Ford	Tanker	Jackson Co. FD
	1989	Ford	Tanker	Jackson Co. FD
	1991	Ford	Pumper	Jackson Co. FD
	1994	Ford F800	Tanker	Jackson Co. FD
	1998	Ferrara	Custom Pumper	Jackson Co. FD
	2001	Ford F550	Light Air	Jackson Co. FD
<b>Gulf Park/St. Andrews</b>	1975	International/Pierce	Brush Truck	Jackson Co. FD
	1981	Chevy/Pierce	Brush Truck	Jackson Co. FD
	1988	E-One	Engine	Jackson Co. FD
	1990	GMC	Reserve Tanker	Jackson Co. FD
	2002	Farrar/International	Engine	Jackson Co. FD
	2005	Farrar	Engine	Jackson Co. FD
	2006	Kenworth/Pierce	Tanker	Jackson Co. FD
	2006	Kenworth/Pierce	Tanker	Jackson Co. FD

While the county water sources are adequate at this time, it is recommended that the fire district work with the newly formed Jackson County Water Authority to ensure that new towers are erected in the high growth areas. The Pascagoula River is deemed to be a good water source, but it has been noted that if the wind were in the right direction, the river would not stop a wildfire.



## **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 fuel treatment projects for Critical Infrastructure, Vulnerable Facilities or Areas of Community Importance were identified or found to be necessary at this time. These sites are generally well maintained and have moderate to low ignitability potential.

Mitigation projects are recommended for the Gulf Park Estates area and North Vancleave. Both areas carry a very high fuel load. It is suggested that the Mississippi Forestry Commission work with the landowners and the county to remove debris and downed trees. If possible, controlled burning should also be considered.

### Mitigation Projects

1. Removal of debris and downed trees at Gulf Park Estates near the beach.
2. Removal of debris and downed trees in North Vancleave.

In addition to mitigation projects, structure ignitability recommendations should be distributed to homeowners. These recommendations, as condensed from information found at [www.firewise.org](http://www.firewise.org), are steps that property owners can take to improve the protection and survivability of a structure in the event of a wildfire. It was also recommended by the Steering Committee that a minimum distance between structures should be designated and included in county construction ordinances.

### Structure Ignitability Recommendations

#### Homeowners

1. Provide a clearing of at least 30 feet around structures for firefighting equipment access
2. Provide a driveway at least 12 feet wide with 13 feet of vertical clearance
3. If home is gated, display a clearly visible address, provide a gate that swings inward and is at least 30 feet off of the main road.
4. Remove "ladder fuels" that can link grasses to tree tops
5. Maintain an irrigation system
6. Prune tree limbs so the lowest is between 6' - 10' from the ground

7. Remove leaf clutter from roof and yard
8. Mow regularly
9. Remove dead and overhanging branches
10. Store firewood away from the house
11. Don't keep combustible materials under decks or elevated porches
12. Make trellises of non-flammable metal
13. Prevent sparks from entering house by covering vents with wire mesh no larger than 1/8"
14. Use construction materials that are fire-resistant or non-combustible when possible
15. Prevent collection of leaf clutter or other combustible materials beneath mobile homes by installing proper skirting

#### County Ordinance

1. Maintain minimum distance between structures as recommended by the National Fire Protection Association
2. Maintain a minimum radii of outside edge at dead-end turnaround circle of 45 feet to provide for emergency vehicles on both surface ditch and curb/gutter roadways
3. Maintain minimum width standards for subdivision roads and access roads to individual homes per pending subdivision regulations

Min. width of surface ditch roadway with *local* designation: 28 ft.

Min. width of surface ditch roadway with *collector* designation: 34 ft.

Min. width of curb and gutter streets with *local* designation: 27 ft.

Min. width of curb and gutter streets with *collector* designation: 33 ft.

## Action Plan and Assessment Strategy

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

1. Propose the strengthening of subdivision regulations to require developers to erect elevated (as opposed to horizontal) water tanks

Responsibility: Jackson County Fire District, Planning Department, Board of Supervisors, and the Jackson County Water Authority

Funding: \$0

Expected Outcome: Better water resources to fight wildfires and better fire ratings

Timetable for Completion: Summer 2008

2. Establish biannual meetings between the Mississippi Forestry Commission and the Jackson County Fire District

Responsibility: Jackson County Fire District and the Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Implement immediately

Expected Outcome: Improved communication and coordination in the areas of firefighting, training, safety and project management

Assessment Timetable: 2–5 years

3. Develop a community outreach and education program using a mail-out and posting on the county website that list specific fire concerns in the area and steps that homeowners can take to reduce ignitability potential.

Responsibility: Jackson County Fire District, in coordination with Mississippi Forestry Commission and local Volunteer Fire Departments

Funding: Homeland Security Fire Safety Grant, possible coordination with local utility or county agency for inclusion in mail-out

Timetable for Completion: October 2008, Coordinate with Fire Prevention Awareness Month

Expected Outcome: Implementation of Firewise safety measures by homeowners, including an increase in properly assigned and visible residential addressing as well as a decrease in non-compliant residential burns

Assessment Timetable: Winter 2009

4. Create a community outreach program to educate citizens, specifically young adults, about the volunteer firefighter program and its importance. This program could include a high school component where students are made aware of the program so that they might consider serving at some point in the future. Also to include National Fire Protection Association public service announcements.

Responsibility: Jackson County Fire District

Funding: Volunteer Fire Departments, grants, Mississippi Forestry Commission

Timetable for Completion: 1-2 times per year in coordination with Fire Awareness Month

Expected Outcome: Increased community awareness of the need for volunteer firefighters and increase in volunteer recruitment

Assessment Timetable: Annual review of recruitment efforts and numbers

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

Responsibility: Jackson County Fire District, Southern Mississippi Planning and Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Additional grant applications resulting in an increase of grant funds

Assessment Timetable: Review applications v. funding annually

6. Maintain, update and redistribute the CWPP maps to all County Departments, volunteer fire departments and other organizations utilizing the document.

Responsibility: Jackson County Fire District, Planning Department and Southern 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 and interview other organizations to see if the maps make their role in wildfire prevention more effective

7. Encourage Mississippi Insurance Commissioner to consider rebate program to allow for home assessments and homeowner mitigation projects (creating defensible space).

Responsibility: Jackson County Fire District, Board of Supervisors, Volunteer Fire Departments, Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Spring 2008

Expected Outcome: More homeowners participating in mitigation activities, lower insurance premiums for homeowners and additional funds for volunteer fire departments

Assessment Timetable: Review progress in May 2008 after legislative session ends.

8. Encourage the Mississippi Forestry Commission to better enforce issuing citations for wildland fires. The landowners or their insurance companies should be made responsible for covering the cost of equipment, fuel, etc.

Responsibility: Jackson County Fire District, Board of Supervisors, and Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Winter 2009

Expected Outcome: Deterrent to negligent burning

Assessment Timetable: Review progress in Summer 2009

9. Purchase additional equipment to fight woods fires including "Indian packs."

Responsibility: Jackson County Fire District

Funding: Grant funds

Timetable for Completion: 2 years

Expected Outcome: Better equipment and gear to fight woodland fires

Assessment Timetable: Review progress every 2 years

10. Develop county ordinance to address violations of burn bans or burn ordinances by property owners, including but not limited to enforcement strategies and responsibilities as well as penalties for non-compliance. Currently the county has no authority to enforce the rules.

Responsibility: Jackson County Fire District, Board of Supervisors;

Funding: \$0

Timetable for Completion: 1 year

Expected Outcome: Establish clear lines of authority in terms of enforcement and allow VFDs that must extinguish fires in violation of burn bans or burn ordinances to recover the actual costs of personnel and equipment incurred

Assessment Timetable: Winter 2009

## Potential Funding Sources

1. Assistance to Firefighters Grant Program  
Website: [www.firegrantsupport.com](http://www.firegrantsupport.com)  
Application Deadline: Spring, 2008  
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](http://www.firegrantsupport.com)  
Application Deadline: Fall, 2008  
Program Description: Outreach to high risk target groups including children, seniors and firefighters. Monitor website for further information on eligible activities
3. Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program  
Website: [www.firegrantsupport.com](http://www.firegrantsupport.com)  
Application Deadline: Summer, 2008  
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](http://www.rurdev.usda.gov)  
Application Deadline: Contact local USDA Representative  
Program Description: Funding for assistance in developing an essential community facility. Funds can be used to construct, enlarge, or improve community facilities for health care, public safety, and community and public services.
5. U.S. Smokeless Tobacco Company Polaris Ranger Donation Program  
Website: [www.ustinc.com](http://www.ustinc.com)  
Application Deadline: December 28, 2007  
Program Description: Donation of Polaris Ranger 6X6 utility vehicles for firefighting, rescue, police, emergency medical service, and wildlife law enforcement organizations.
6. First Responder Institute Website  
Website: [www.firstresponder.org](http://www.firstresponder.org)  
Program Description: Provide support to local U.S. fire departments and emergency service personnel.
7. Responder Knowledge Base Website  
Website: [www.rkb.mipt.org](http://www.rkb.mipt.org)  
Program Description: Website contains information on currently available products, standards, training and grants

8. Grants Office  
Website: [www.firegrants.info](http://www.firegrants.info) and [www.grantsoffice.com](http://www.grantsoffice.com)  
Program Description: Provides info, tools, and tips to help fire departments be more successful at obtaining funds from the Assistance to Firefighters Grant Program.



## References

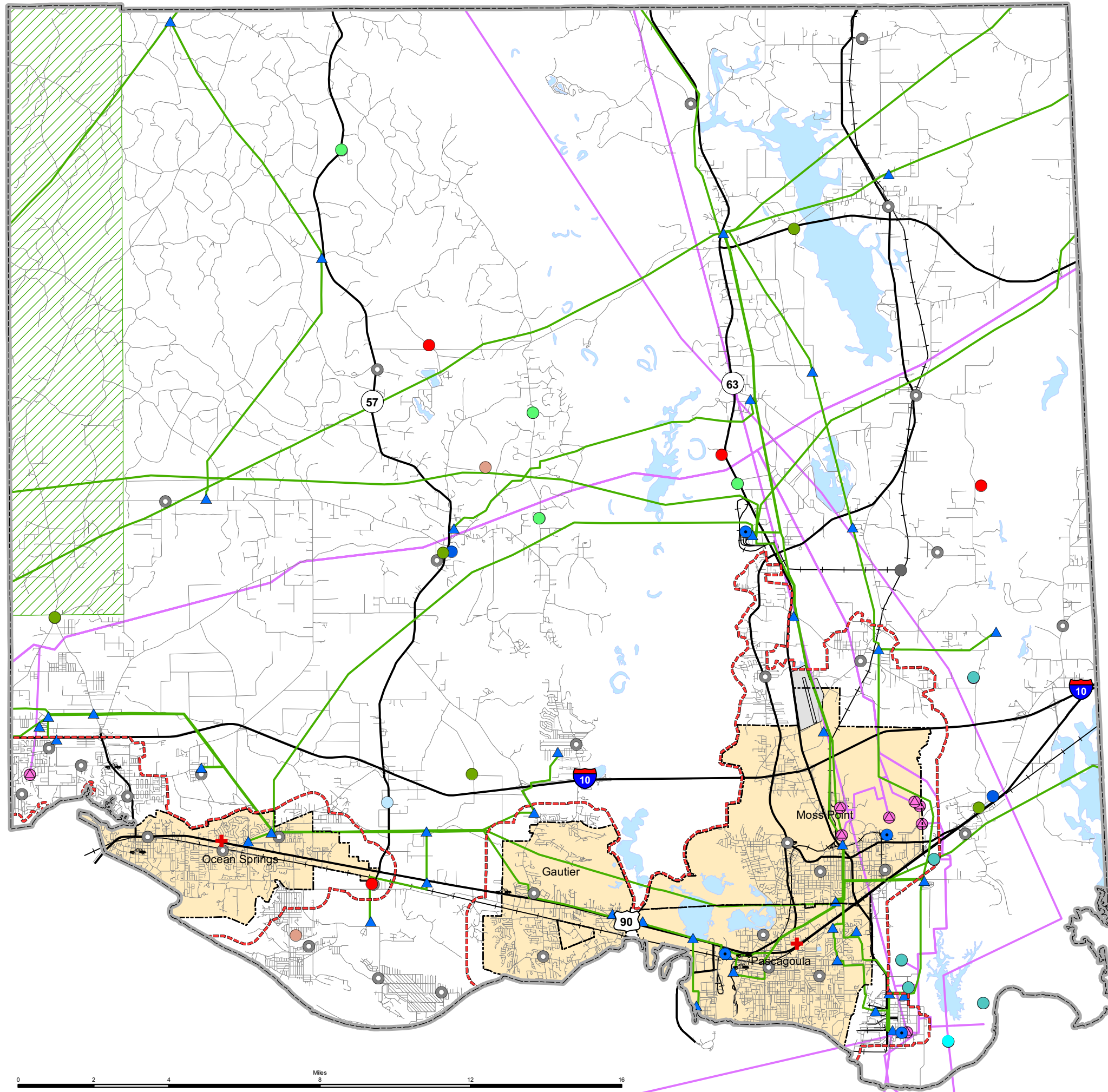
1. Jackson County Hazard Mitigation Plan
2. Jackson County Comprehensive Emergency Management Plan
3. Firewise  
Around Your Home brochure  
[www.firewise.org](http://www.firewise.org)
4. USDA Forest Service  
Preparing a Community Wildfire Protection Plan  
March 2004

## Project Contact Information

1. Jackson County Fire District  
600 Convent Avenue  
Pascagoula, MS 39567  
Phone: (228) 769-3110  
Fax: (228) 769-3108  
[www.co.jackson.ms.us](http://www.co.jackson.ms.us)
2. Jackson County Emergency Management  
600 Convent Avenue  
Pascagoula, MS  
Phone: (228) 769-3110  
Fax: (228) 769-3108  
[www.co.jackson.ms.us](http://www.co.jackson.ms.us)
3. Mississippi Forestry Commission  
477 South Gate Road  
Hattiesburg, MS 39401  
Phone: (601) 583-4240  
Fax: (601) 583-2500  
[www.mfc.state.ms.us](http://www.mfc.state.ms.us)
4. The Nature Conservancy  
405 Briarwood Drive, Suite 101  
Jackson, MS 39206  
Phone: (601) 713-3355  
Fax: (601) 982-9499  
[www.tnc.org](http://www.tnc.org)
5. Southern Mississippi Planning and Development District  
9229 Highway 49  
Gulfport, MS 39503  
Phone: (228) 868-2311  
Fax: (228) 868-7094  
[www.smpdd.com](http://www.smpdd.com)

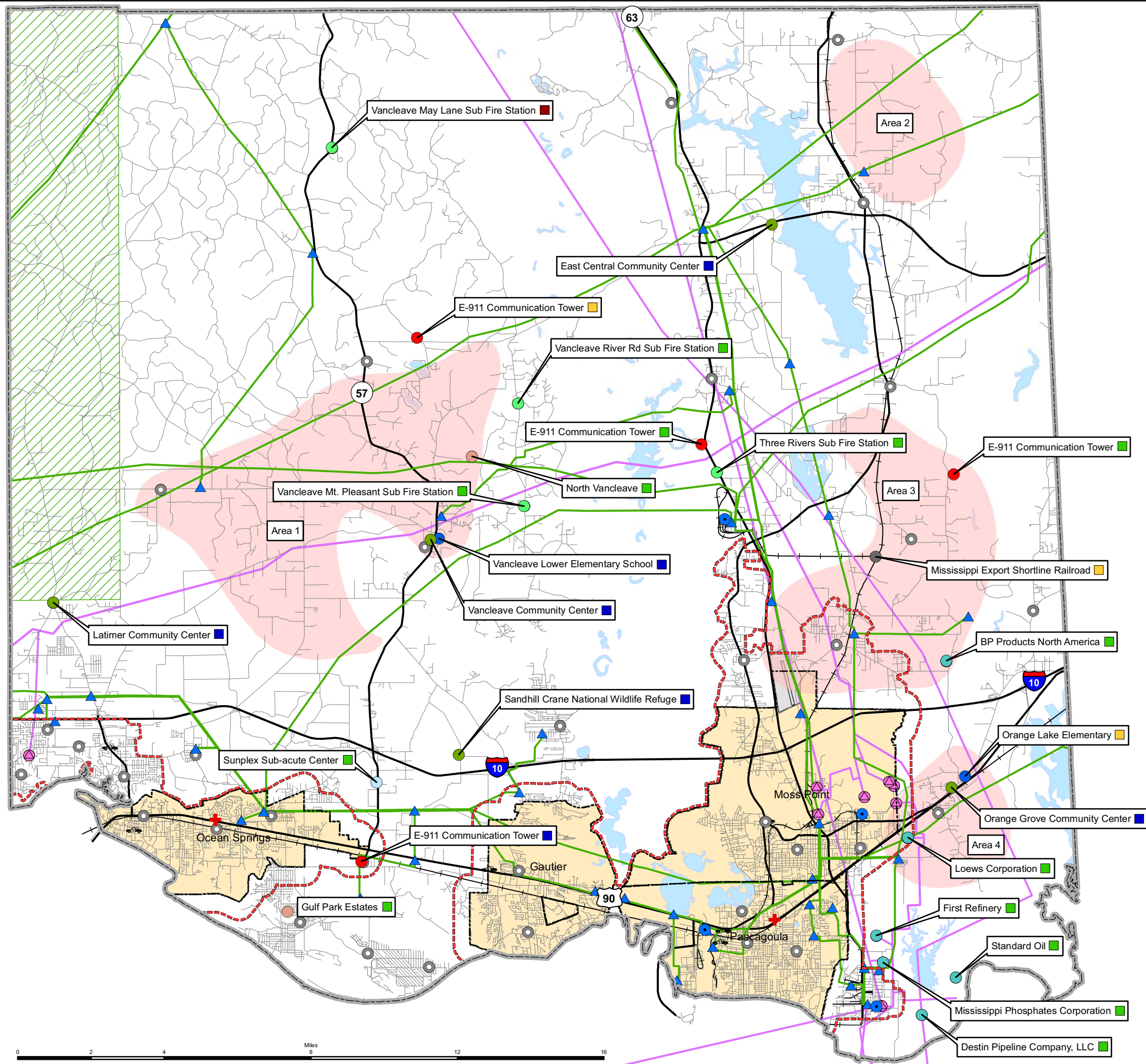
# Jackson County, Mississippi Wildfire Protection Plan Basemap

At Risk Area	
Community	Electric Sub-Station
E-911 Comm. Tower	Oil or Gas Facility
Emergency Management	Electric Transmission Line
Industrial or Utility	Oil/Gas Pipeline
Medical	Highway
Public Facility or Area	Road
School	Railroad
Transportation	National Forest
Hospital	WUI
Fire Station	Waterbody
Law Enforcement	Airport
Power Plant	Incorporated City
	County Boundary

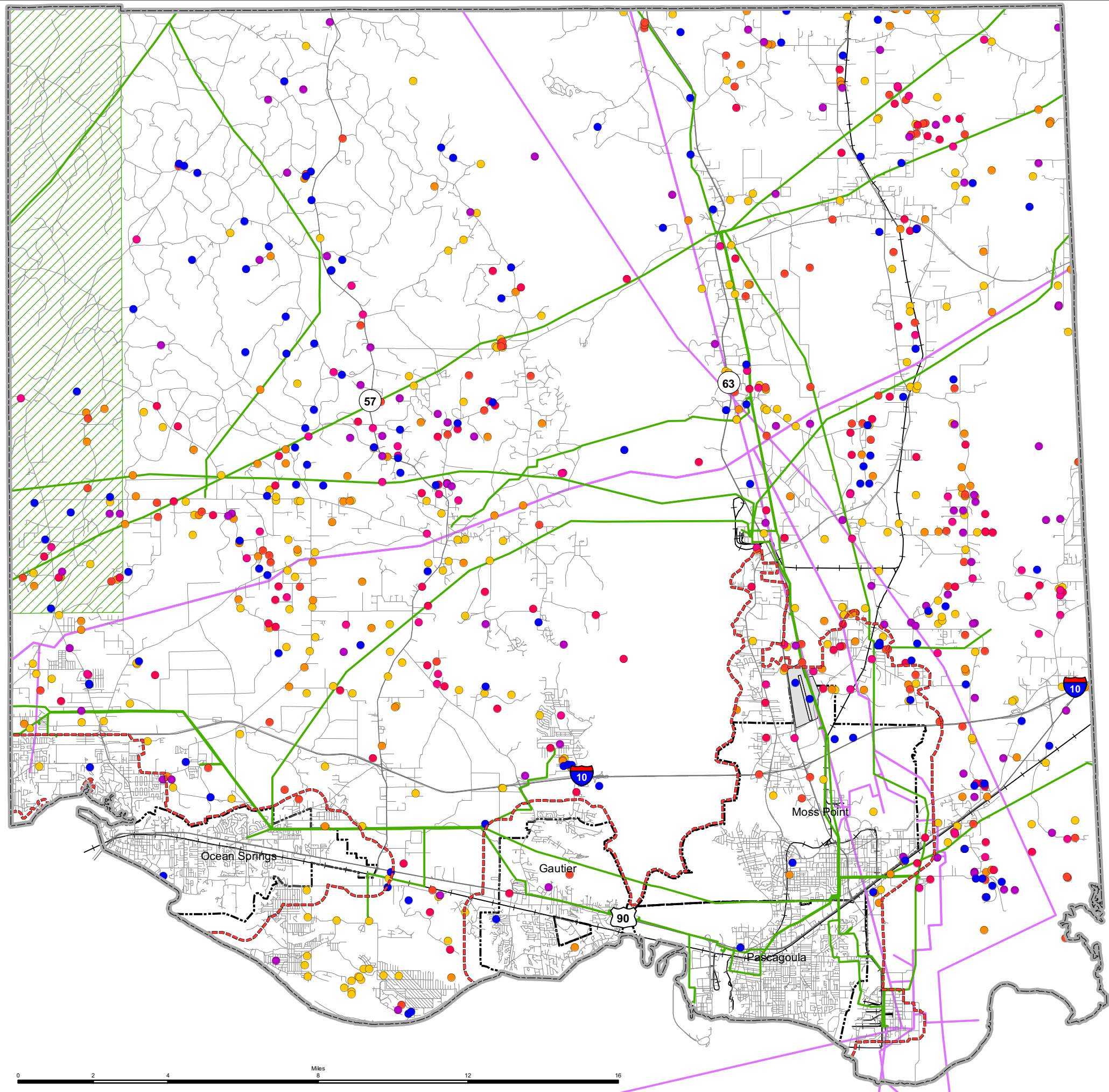
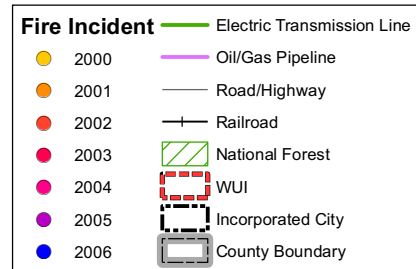


# Jackson County, Mississippi Wildfire Protection Plan Risk Assessment Ratings

At Risk Area	
Community	Electric Transmission Line
E-911 Comm. Tower	Oil/Gas Pipeline
Emergency Management	Highway
Industrial or Utility	Road
Medical	Railroad
Public Facility or Area	National Forest
School	WUI
Transportation	High Fire Occurrence
Hospital	Waterbody
Fire Station	Airport
Law Enforcement	Incorporated City
Power Plant	<b>Risk Assessment Rating</b>
Electric Sub-Station	Low
Oil or Gas Facility	Medium
	Medium-High
	High

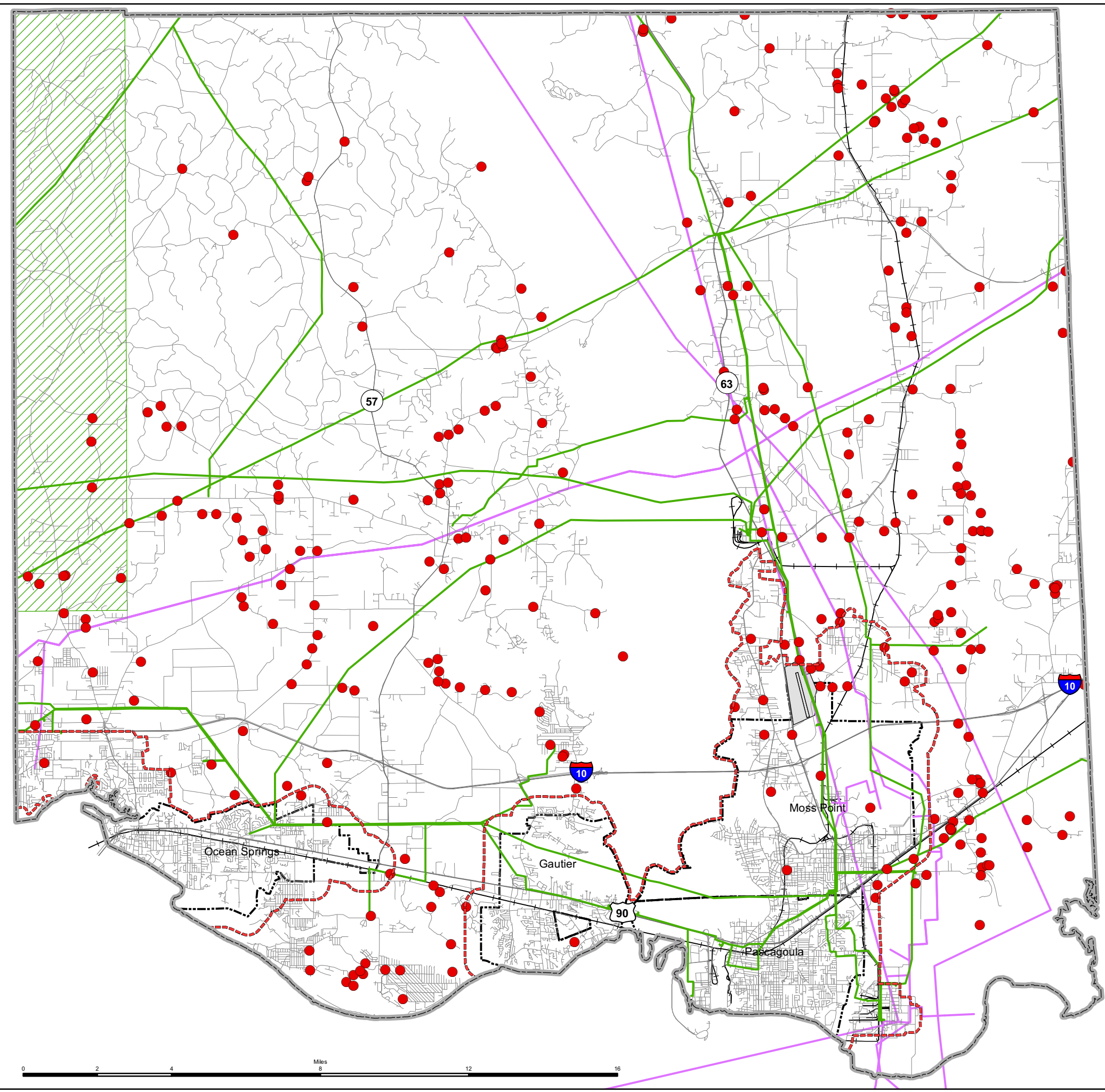


Jackson County, Mississippi  
Wildfire Protection Plan  
Fire Data 2000 - 2006

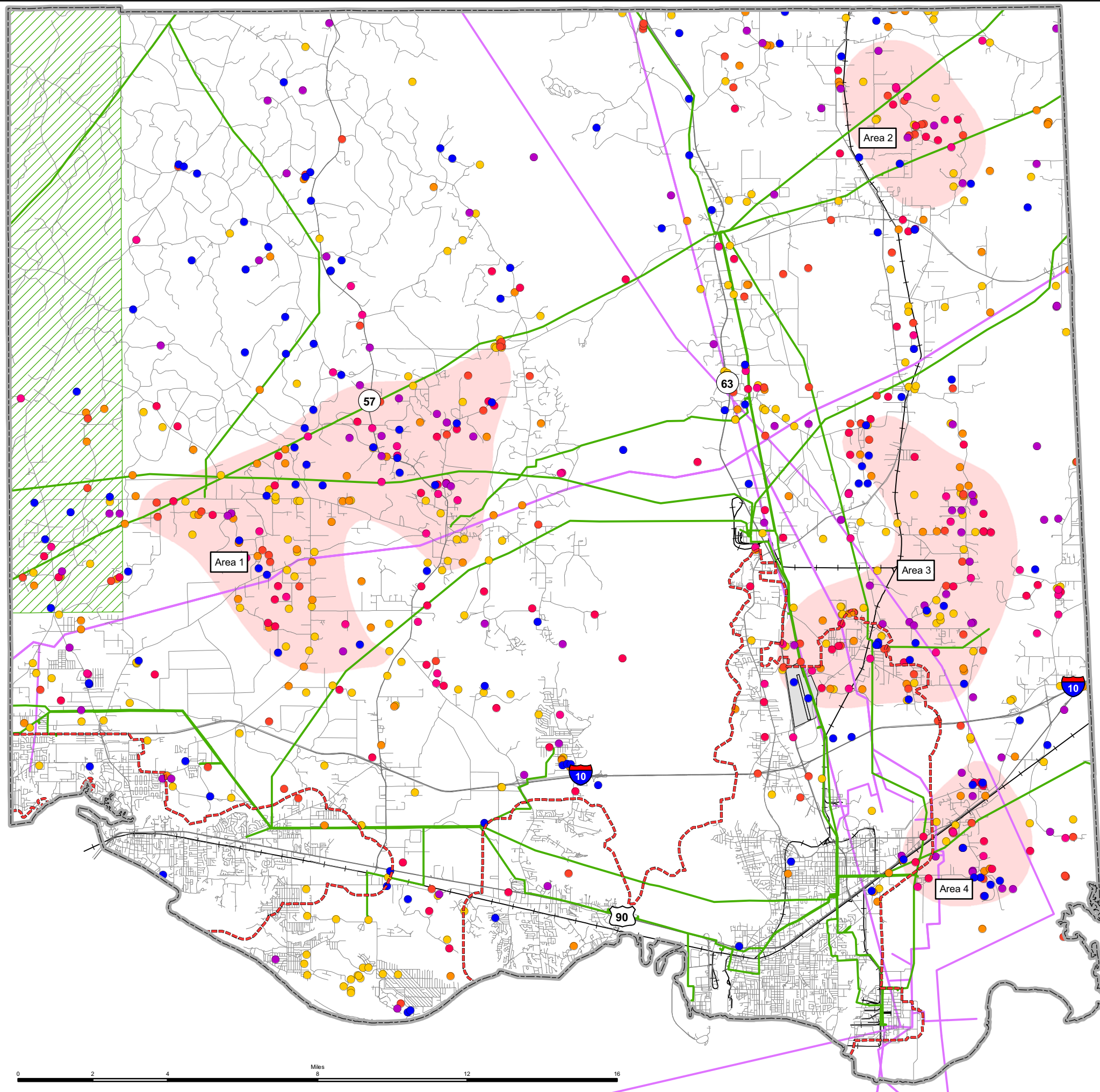
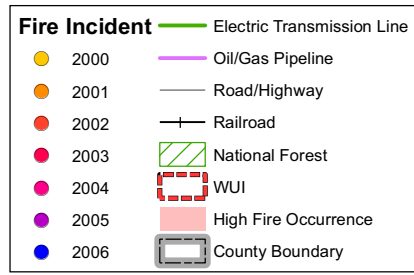


Jackson County, Mississippi  
 Wildfire Protection Plan  
 Arson Fires 2000 - 2004

- Arson Incident
- Electric Transmission Line
- Oil/Gas Pipeline
- Road/Highway
- Railroad
- ▨ National Forest
- - - WUI
- - - Incorporated City



Jackson County, Mississippi  
Wildfire Protection Plan  
High Occurrence Wildfire Areas

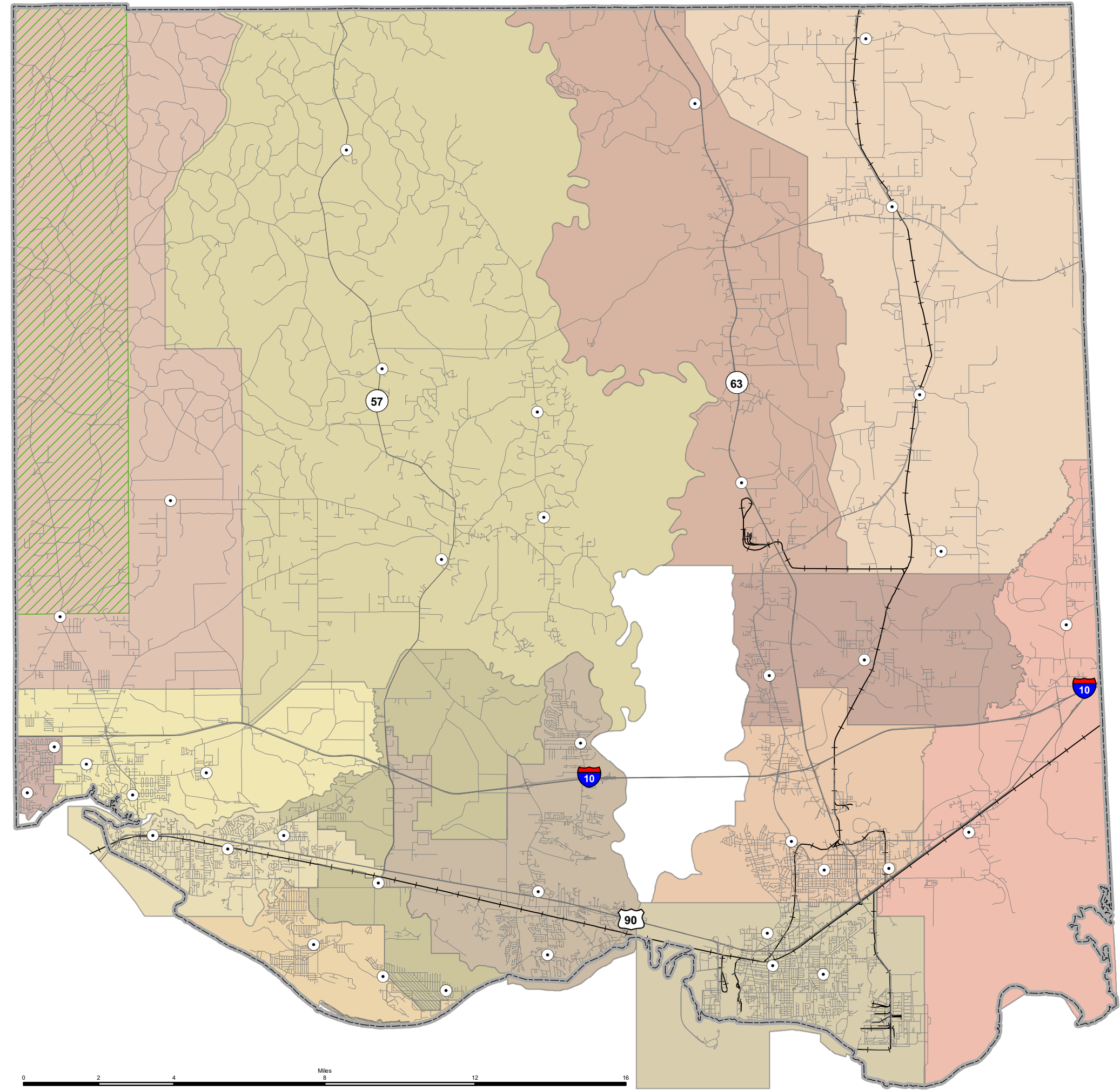


Jackson County, Mississippi  
Wildfire Protection Plan  
Fire Response Areas

**Fire Districts**

- EAST CENTRAL
- ESCATAWPA
- FONTAINEBLEAU
- FORT BAYOU
- FORTS LAKE/FRANKLIN CREEK
- GAUTIER
- GULF PARK
- LATIMER
- MOSS POINT
- OCEAN SPRINGS
- PASCAGOULA
- THREE RIVERS
- VANCLEAVE
- WEST JACKSON COUNTY

Fire Station  
 Road/Highway  
| Railroad  
 National Forest





Jackson County, Mississippi  
Wildfire Protection Plan  
Wildfires by Response Area

**Fire Districts**

- EAST CENTRAL
- ESCATAWPA
- FONTAINEBLEAU
- FORT BAYOU
- FORTS LAKE/FRANKLIN CREEK
- GAUTIER
- GULF PARK
- LATIMER
- MOSS POINT
- OCEAN SPRINGS
- PASCAGOULA
- THREE RIVERS
- VANCELEAVE
- WEST JACKSON COUNTY
- All Fires 2000 - 2006
- Road/Highway
- + Railroad
- National Forest

