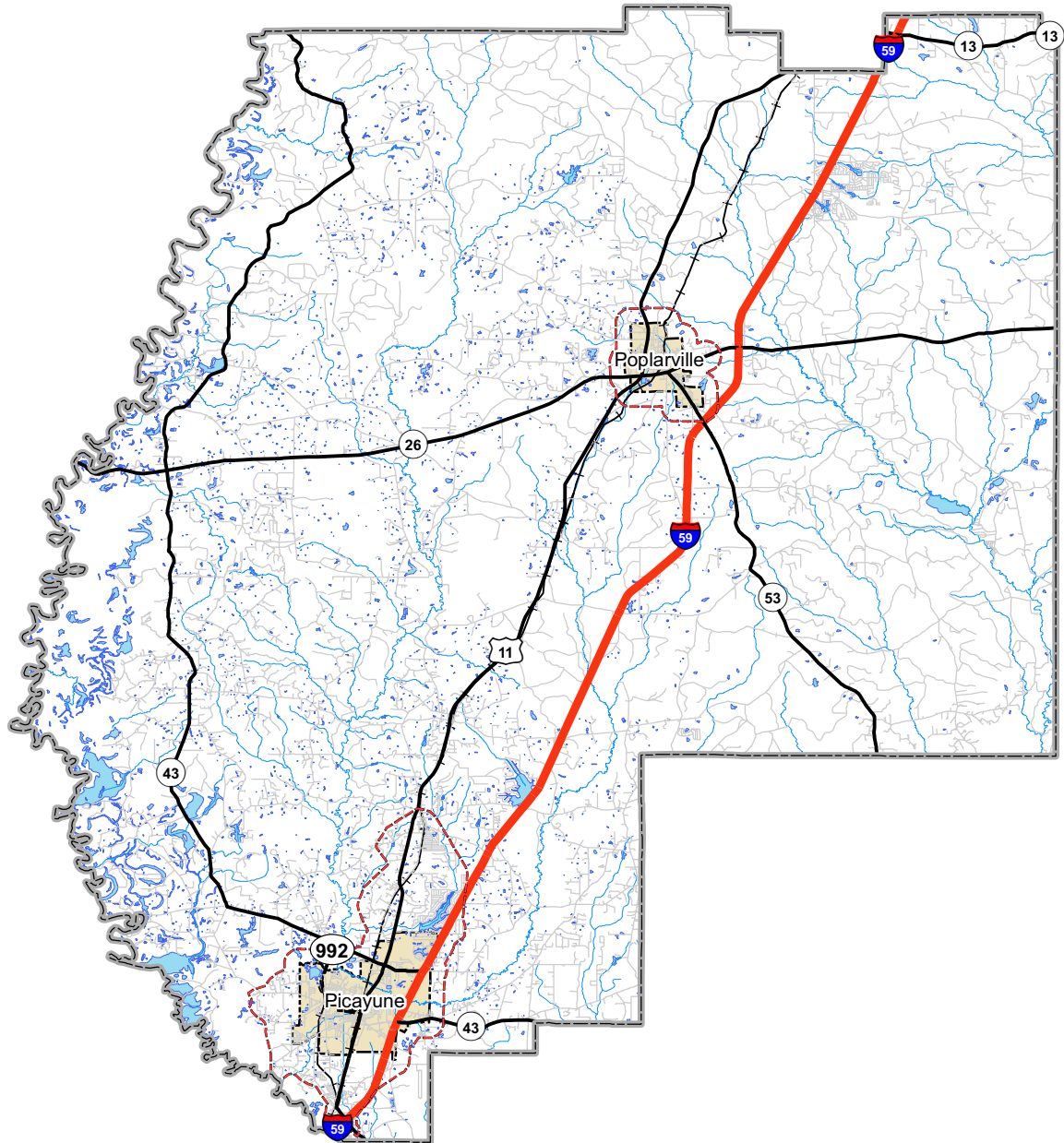


PEARL RIVER COUNTY, MISSISSIPPI

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

Table of Contents

- I. Introduction
- II. Area Description
- III. Strategic Goals of the County Wildfire Protection Plan
- IV. Mapping
- V. The County Risk Assessment
 - Critical Infrastructure
 - Vulnerable Facilities
 - Areas of Community Importance
 - High Occurrence Wildfire Areas
 - Fuel Hazards
- VI. Emergency Preparedness
- VII. Mitigation Projects and Structure Ignitability Recommendations
- VIII. Action Plan and Assessment Strategy
- IX. Potential Funding Sources
- X. References
- XI. Project Contact Information
- XII. CWPP Maps

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, Pearl River 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 March 2007, SMPDD officials began gathering geographical data, historical fire information, etc. Planners then met with the local 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 representatives from the Pearl River Emergency Management Office, the Mississippi Forestry Commission, The Nature Conservancy, the County Fire Coordinator and County Fire Marshal.

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, 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 be utilized to 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 and Flood Protection Plan and the Comprehensive Emergency Management Plan.

Area Description

Pearl River County is located in the southwest portion of Mississippi, adjacent to Louisiana. It is rural in character, with the City of Picayune being the largest incorporated municipality. The City of Poplarville, located in the northern portion of the county, is the only other incorporated area. The county is strategically located near Stennis Space Center and Interstates I-59 and I-10. Interstate 59 and US Highway 11 traverse the county north to south, border to border, providing direct access to the City of Hattiesburg to the north and the City of New Orleans, Louisiana to the south. State highways located within the county are 43, 53, 603, and 26. The Pearl River serves as the region's western border.

The population of Pearl River County in 2000 was 48,621, an increase of 25.6% since 1990. This most recent increase is part of a larger growth cycle spanning many decades. U. S. Census Bureau 2010 population estimate was 61,216, but officials now estimate that Pearl River County's population has nearly doubled, from approximately 50,000 to 100,000+ residents, since Hurricane Katrina devastated Gulf Coast communities in August of 2005. This phenomenal population increase is attributed to evacuees from Lower Hancock County, Mississippi and Louisiana relocating to Pearl River County. Respectively, residents relocating to Pearl River County are estimated at 40% from Hancock County and 60% from Louisiana. There are now seven (7) FEMA trailer sites housing evacuees in the county. This is placing a tremendous strain on the county's infrastructure, police and fire departments and this trend is expected to continue. Additionally, there are 13 new subdivisions being developed that will contain approximately 900 new homes.

Pearl River County contains 819 square miles, with land largely held by private landowners. Approximately 65% of county land area is located within commercial forests. A large number of lakes, ponds, creeks, and rivers are found in Pearl River County, comprising a total of 7.6 square miles. Public lands include the Desoto National Forest, Bogue Chitto National Wildlife Refuge, Pearl River County Game Refuge, Pearl River State Wildlife Management Area, Wolf River Game Management Area, and Walkiah Bluff Water Park. Notable features include Old Tar Landing, Gum Pond Landing, and the Crosby Arboretum. The Tiger Hammock Site near Picayune is listed on the National Register of Historic Places. Two designated Mississippi Landmarks are located in Pearl River County: the Brick by Brick Memorial and the Pontoon Bridge Battalion Memorial; both are monuments to American veterans.

The climate of Pearl River County is mild with mean annual temperatures in the upper 60's. Average winter temperatures range from 47 to 60 degrees Fahrenheit; average January temperature is 47 degrees. Summer temperatures range from 85 to 95 degrees Fahrenheit, with an average July temperature of 81 degrees. Rainfall averages approximately 42.2 inches annually with the majority of the accumulation from July to September. County wind speeds are generally less than 10 miles per hour but often increase during storms. Thunderstorms occur frequently and are sometimes accompanied by strong to severe winds, including tornadoes.

Because of relatively high annual precipitation amounts, Pearl River 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 Pearl River 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 Pearl River County is not currently considered to be in a drought condition.

While climate conditions and debris can cause ignitability, certain industrial operations and facilities can also raise the threat of wildfire. Major transportation arteries through Pearl River County including Interstate 59, Interstate 10, and US Highway 11 are used daily to transport flammable, toxic and/or explosive materials, thus exposing the county to potential transportation incidents involving hazardous materials. In addition, there are several natural gas and oil pipelines that are located throughout the county as well as a pumping station, propane storage facilities and a transfer station. Volunteer Fire Departments within the county serve as first responders if an incident involving hazardous materials occurs.

Pearl River County is divided into twelve rural fire response areas covering the unincorporated portions of the county. The 12 fire districts/response areas are manned by volunteers who act as first responders to the fires within the county. These rural fire response areas are: Amackertown, Carriere, Crossroads, Derby/Whitesand, Henleyfield, McNeill, Nicholson, North Central, Northeast, Pine Grove, Southeast, and Steephollow. All Fire Response Areas within the county, including Station Location(s), and Number of Volunteers, are listed below. 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
Fire District #1	Northeast VFD	Station 1 – 462 Hillsdale-Gumpond Rd., Lumberton Station 2 – 2700 Highway 13 East, Lumberton	13
Fire District #2	Derby/Whitesand VFD	Station 1 – 672 Derby/Whitesand Road, Poplarville Station 2 – 28 Robert James Road, Poplarville	15
Fire District #3	Amackertown VFD	Station 1 – 8160 Highway 43 N, Poplarville Station 2 – 9655 Highway 43 N, Poplarville	12
Fire District #4	Crossroads VFD	6868 Highway 43 N, Poplarville	15

Fire Response Area	Fire Department	Station Location(s)	Total Number of Volunteers
Fire District #5	North Central VFD	Station 1 – 1089 Springhill Road, Poplarville Station 2 – 227 Otis Jones Road, Lumberton	16
Fire District #6	Steephollow VFD	Station 1 – 15 Barth Road, Poplarville Station 2 – 4277 Highway 53 S, Poplarville Station 3 – 1748 Progress/Silver Run Road, Poplarville	18
Fire District #8	McNeill VFD	Station 1 – 106 Library Street, McNeill Sub Station – 744 Henleyfield McNeill Road, McNeill	17
Fire District #9	Henleyfield VFD	5583 Highway 43 N, Carriere	20
Fire District #10	Pine Grove VFD	Station 1 – 86 Pine Grove Road, Picayune Station 2 – 262 Liberty Road, Picayune	11
Fire District #11	Carriere VFD	Station 1 – 7414 Highway 11 S, Carriere Station 2 – 4 West Lakeshore Drive, Carriere Station 3 – 483 Sycamore Road, Carriere	38
Fire District #12	Southeast VFD	Station 1 – 311 Mount Carmel Road, Picayune Station 2 – 298 Salem Road, Picayune	29
Fire District #13	Nicholson VFD	1981 Highway 11 S, Picayune	18

Note: None of the stations listed above are manned. Volunteers only

Strategic Goals of the County Wildfire Protection Plan

At the beginning of the planning process, the Pearl River 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 Pearl River 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:
 - Identify new funding mechanisms
 - Increase wildland firefighting training
 - Provide better/proper equipment needed to fight wildland fires
 - Identify recruitment and retention strategies for volunteers
 - Seek funding to employ additional paid full-time firefighters
6. Identify strategies to improve firefighting capability of Mississippi Forestry Commission and to encourage collaboration and better communication between PRC and MFC
7. Identify education and outreach programs on wildfire prevention and techniques for proper burning for county residents
8. Strengthen subdivision regulations and county ordinances that will help reduce the risk of wildfire

Mapping

The Pearl River County Wildfire Protection Plan contains seven maps created by the Southern Mississippi Planning and Development District (SMPDD) Geographic Information Systems Department. These maps were created for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Pearl River County Base Map, Pearl River County Risk Assessment Ratings, Pearl River County Fire Data 2000-2006, High Occurrence Wildfire Areas, Arson Fires 2000-2004, Pearl River County Fire Response Area, 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 is highly vegetated with many areas where wildland meets development. For this reason, the Pearl River 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 E-911 communication tower. 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. MFC data for Pearl River County shows a total of 395 fires in the year 2000, 154 fires in 2001, 163 fires in 2002, 114 fires in 2003, 165 fires in 2004, 236 fires in 2005, and 316 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 Pearl River 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 four 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 just west of Poplarville and west of Highway 26. Area 2 is geographically located east of Poplarville and just south of Highway 26. Area 3 is located south of Poplarville between Highway 11 and Highway 59. Area 4 is located in the southeast corner of Pearl River County around Highway 53.

A majority of the fires within Pearl River County between 2000 and 2004, approximately 56%, are attributed to arson. According to MFC wildfire data, 553 out of 991 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 Pearl River County Fire Response Area map reflects the county fire station response areas with respective boundaries, as well as each volunteer fire station location. In addition, a map reflecting all wildfires 2000-2006 as well as fire district boundaries and department locations has been included. Wildfires 2000-2006 by Fire Response Area will aid in the assessment of numbers of fires and their general location within each district.

The 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 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.

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 and Facilities

- Pearl River Central High School

The high school is rated low. While it is not in a vulnerable area, it does function as a shelter.

- Pearl River Baptist Association

The facility is located in a wooded area and serves as a shelter. It is rated a medium risk.

- Union Baptist Church

There is a moderate fire and smoke risk. The church serves as a shelter and is rated medium.

- Steephollow Baptist Church

There is a moderate fire and smoke risk. The church serves as a shelter and is rated medium.

- Central Water Works Water Tower at Savannah-Millard Road

The water tower is rated medium due to its importance and because there are chlorine tanks on site.

- Central Water Works Tower at Highway 53 South

The water tower is rated medium due to its importance and because there are chlorine tanks on site. There is also heavy vegetation at the site.

- Central Water Works Tower at Derby/Whitesand Road

The water tower is rated medium due to its importance and because there are chlorine tanks on site.

- Pearl River County Jail

There is a moderate risk for smoke but a good buffer allowing for little or no fire risk. Due to its function as a correctional facility, however, the jail is rated as medium.

- Interstate 59

Due to its function as a heavily traveled road and its use to transport hazardous materials, the interstate is determined to be a high risk.

- Norfolk Southern Railroad

Due to its function, its cargo of hazardous materials and its location within no more than one-half mile to all schools, the railroad is deemed to be a high risk.

Vulnerable Facilities

- Collins Pipeline at Pine Grove
- Collins Pipeline at Highway 26 and Old Crossroads
- Tennessee Gas Pipeline in northeast portion of county

Several pipelines containing various forms of petroleum (including crude oil and natural gas) traverse the county. Due to their function and impact if lost or destroyed, they are all rated as high risk.

- Chevron Facility at Highway 43 South

The facility is surrounded by woods. Due to its location and its function and impact if lost or damaged, the facility is ranked a high risk.

- Exxon Pumping Station

Because of its function and impact if lost or damaged, the facility is ranked a high risk.

- Sulphur Storage @ Amackertown Fire District

Due to the stored hazardous materials on site, the facility is rated a high risk.

- Airport at Poplarville

- Airport at Picayune

Both airport facilities are rated as medium because of the flammable liquid and hazardous materials on site.

- Circle T Fertilizer Plant

Because of the large amounts of hazardous materials at the facility, it is rated high.

- Magnolia Gas Propane Storage at Highway 53 South and Highway 26 West

Because of the large amounts of hazardous materials at the facility, it is rated high.

- FEMA Trailer Staging Area

There is a high ignitability risk with all of the trailers in one location. The risk is medium-high.

- Weyerhaeuser Industries

Located on Sones-Chapel Road, ammonium nitrate is stored at the facility. This hazardous material causes the facility to be a medium-high risk.

Areas of Community Importance

- New Country Living Personal Care Home

There are both smoke and fire risks at this personal care home located on George Ford Road. The overall risk assessment is high.

■ Our Place Care Home

Little if any fire risk is present at this site. There is a potential smoke risk; therefore, it is rated medium.

■ Shady Oaks Personal Care Home

Little if any fire risk is present at this site. There is a potential smoke risk; therefore, it is rated medium.

■ Little Ambassadors Day Care

The area is surrounded by sage fields, causing a substantial fire risk. The day care is rated as high risk.

■ Robette's Day Care

The facility is located in a wooded area on Richardson Road and is rated medium-high.

■ Kid's Kingdom Day Care

There is a moderate fire and smoke risk at this facility located on Highway 43 North. It is ranked medium.

■ Whitesand Community Center

This area is well maintained, has low fuel ignitability and low incidence of fire in the past. It received a low rating.

■ Henleyfield Community Center

There is a moderate risk for smoke but a good buffer allowing for little or no fire risk. Its overall rating is medium.

■ Old Steep Hollow Church Museum

There is a moderate fire and smoke risk. Its importance as a cultural/historical building earns it a risk of medium.

■ Gumpond Baptist Church

There is a moderate fire and smoke risk. The overall rating is medium.

■ Springhill Baptist Church

Being surrounded by heavy vegetation and woods, the church is at high risk.

- Crosby Arboretum

Probably the most recognizable attraction in Pearl River County, the Crosby Arboretum is in a heavily wooded area and would be a tremendous loss to the community if damaged or destroyed. The risk factor is high.

Areas of Concern (may or may not be High Occurrence Wildfire Areas)

- Derby/Whitesand Road
- Southeast of Picayune city limits
- Southwest of Picayune city limits
- Barth Community (near Hancock County line)

Emergency Preparedness

Emergency preparedness for each of the county volunteer fire departments is continually reviewed and assessed by the Pearl River County Emergency Management Department. This assessment involves factors such as equipment availability and age, public protection classification, and manpower. Mutual aid agreements exist between 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 Pearl River County are listed below, with the corresponding MSRB classification.

Mississippi State Rating Bureau Public Protection Classification List

District	Class
Northeast VFD	9
Derby/Whitesand VFD	9
Amackertown VFD	9
Crossroads VFD	9
North Central VFD	9
Steephollow VFD	9
McNeill VFD	8
Henleyfield VFD	8
Pine Grove VFD	8
Carriere VFD	8
Southeast VFD	8
Nicholson VFD	8

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.

Although Pearl River County has been growing tremendously in the last few years, most employment is located in nearby cities. For this reason, many of the volunteer firefighters find it necessary to commute to work outside their fire districts or even the county. This increases response time and decreases the number of firefighters that are able to respond to a call.

In many cases, volunteer firefighters work side-by-side with the Mississippi Forestry Commission. This has been a fairly successful relationship but improvements could be made. The fire coordinator reports that 75% of the time the volunteer firefighters have a woods fire contained before MFC is on the scene. It is recommended that biannual meetings be established to share these types of problems and develop solutions. The roles and responsibilities of each agency need to be better understood.

The Steering Committee also identified manpower concerns including recruitment and retention. It is difficult to recruit and retain volunteer firefighters and some of this can be attributed to fatigue, fuel cost and time efficiencies, according to the fire coordinator. Creation of full-time paid firefighter positions, increased incentives and a community outreach awareness program were identified as objectives to address manpower issues. It is also possible that training needs will change in the future to include a need for more wildfire fighting capabilities.

As part of this project, research was conducted to identify incentives and recruitment techniques used for other volunteer fire departments across the nation. Steering Committee members suggested that incentives be provided to volunteer firefighters in Pearl River County in an effort to increase retention.

A community outreach program should be implemented to encourage young adults to consider volunteer firefighting. This program could be implemented through the local high school where students could be made aware of the opportunity to serve and might consider doing so at the legal age.

Another community outreach/recruitment effort is for volunteer fire departments to become involved with the local Boy Scouts of America through the explorer program (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, and after a set period of probation, may be able to ride along on service calls in a support function. The youth would support by providing drinks, supplies or other equipment that is needed on-site. This program could also act as a probation period leading to a career as a volunteer firefighter.

It is suggested that the fire service create and maintain an on-going recruitment program which identifies the current manpower needs as well as those expected over the next five years. Creating and having recruitment kits on-hand for prospective candidates and enlisting the local community through newspaper inserts and recruitment flyers placed at local restaurants and other businesses may also be successful.

Adding recruitment information to the county website, local cable service announcements and any community mail-out or newsletter, as well as coordinating recruitment efforts with other county departments (e.g. Public Works) will save on cost and reach potential recruits who would otherwise be missed.

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 to 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 and complimentary membership to county sponsored/owned amenities (parks, pools, concerts).

In addition to the MSRB Rating and manpower issues, equipment status has been assessed. A list of current large equipment with description, age and location is provided below. The departments utilize a variety of large firefighting equipment, but they have specifically requested additional smaller equipment, such as brush trucks, to access smaller roads in the county. The trucks could be placed strategically at fire stations throughout the county.

The county also reports problems in communicating electronically with the MFC. They request that radio channels be shared to improve two-way communication.

It is suggested that the Pearl River County Emergency Management Agency review its equipment on an annual basis as it continues to age. It is generally recommended that trucks be replaced every 15 to 17 years. Better equipment will not only result in better emergency preparedness but may also affect the insurance ratings of the homeowners.

Access to water to fight fires has been identified as an issue in Pearl River County. It is recommended that the county inventory private ponds and other water sources to fill up pumpers in the county. These problems should also be shared with the newly formed Pearl River County Water Utility Board, which has received funds to make water infrastructure improvements for the county.

Pearl River County Fire District Equipment List

Department	Year	Make/Model	Type
Northeast VFD	2005	Freightliner	Pumper 3
	1994	Ford	Rescue/Brush Truck
	1992	GMC	Tanker/Pumper 1
	1977	Ford	Mini-Pumper
Derby/Whitesand VFD	2006	Kenworth	Pumper 1
	2004	Ford	Rescue/Brush Truck
	1990	Dodge	Brush Truck
	1982	Ford	Pumper 2

Department	Year	Make/Model	Type
	1976	Ford	Tanker
Amackertown VFD	2006	Freightliner	Pumper 1
	1995	GMC	Pumper/Tanker
	1993	Chevy	Rescue/Brush Truck
	1980	Ford	Pumper 2
Crossroads VFD	2006	Freightliner	Pumper 1
	1991	Ford	Rescue/Brush Truck
	1990	GMC	Tanker/Pumper
	1974	Ford	Pumper
North Central VFD	2006	Freightliner	Pumper 1
	1993	Chevy	Rescue/Brush Truck
	1993	Chevy	Rescue/Brush Truck
	1992	Chevy	Brush Truck
	1985	Peterbilt	Tanker/Pumper 1
	1976	Kenworth	Tanker
Steephollow VFD	2004	Freightliner	Pumper 1
	1991	Ford	Rescue/Brush Truck
	1987	Ford	Pumper 2
	1987	Mack CH613	Tanker
	1985	Dodge	Brush Truck
	1972	Ford	Pumper 3
McNeill VFD	2004	Freightliner	Pumper 1
	2002	Chevy ¾ ton	Truck
	1997	Ford	Rescue Truck
	1993	GMC	Tanker
	1989	Ford	Brush Truck
	1985	Chevy	Brush Truck
Henleyfield VFD	2003	Ford	Brush Truck
	2001	Freightliner	Tanker
	2000	Freightliner	Pumper 1
	1994	Ford	Rescue Truck
Pine Grove VFD	2005	Freightliner	Pumper 1
	2004	Ford	Rescue/Brush Truck
	1999	Majic	Rescue Boat/Trailer
	1991	Ford	Tanker/Pumper 1
	1990	Chevy	Tanker/Pumper 2
	1984	Ford	Pumper 2
Carriere VFD	2003	Freightliner	Pumper 1
	2003	Freightliner	Tanker
	1999	Freightliner	Pumper 2
	1999	Freightliner	Med. Rescue Truck
	1992	Ford	Brush Truck
	1989	Ford	Brush Truck
	1987	Ford	Pumper 3

Department	Year	Make/Model	Type
	1983	Chevy	Tanker
Southeast VFD	2006	Ford	Rescue CAS Unit
	2003	International	Pumper 1
	1992	GMC	Tanker/Pumper 1
	1985	Chevy	Brush Truck
	1977	Ford	Mini Pumper
Nicholson VFD	2003	GMC	Tanker/Pumper 1
	1999	Freightliner	Pumper 1
	1985	Chevy	Brush Truck

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 treatment projects for Critical Infrastructure sites, 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. However, the risk of wildfire should always be considered as nearby lands continue to be converted to large residential developments.

High occurrence wildfire areas and fuel hazard area mitigation projects were limited to a community outreach and education program. The Steering Committee also identified the need for these areas to be re-visited in the future for creation and implementation of other mitigation projects.

The structure ignitability recommendations below can be formulated and then distributed to homeowners. These recommendations, as condensed from information found at 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 as follows:

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.

Structure Ignitability Recommendations

COUNTY

Develop a homeowner education program

Encourage new, large residential developments to become Firewise USA Communities (e.g. Wildwood)

Develop maintenance program to eradicate/control Cogon grass

Perform home assessments to help residents identify ways to create defensible space

Partner with MFC to work with large, private landowners to identify areas with standing dead trees and then remove them and/or create fire breaks (e.g. Weyerhaeuser)

LANDOWNERS

Provide a clearing of at least 30 feet around structure for firefighting equipment access

Space trees at recommend distances

Remove "ladder fuels" that can link grasses to tree tops

Maintain the irrigation system

Prune tree limbs so the lowest is between 6' - 10' from the ground

Remove leaf clutter from roof and yard

Mow regularly

Remove dead and overhanging branches

Store firewood away from the house

Don't keep combustible materials under decks or elevated porches

Make trellises of non-flammable metal

Prevent sparks from entering house by covering vents with wire mesh no larger than 1/8"

Use construction materials that are fire-resistant or non-combustible when possible

Action Plan and Assessment Strategy

The Action Plan is an outline of the work to be completed. The Assessment Strategy portion of the CWPP will ensure that Mitigation Projects and Action Plan items are accomplished in a timely manner and monitored to measure the project's success.

1. Purchase of brush trucks that could be strategically placed at fire stations to better fight wildfires.

Responsibility: Pearl River County Emergency Management Agency, Volunteer Fire Departments, Board of Supervisors

Funding: \$150,000 each, possibly through Homeland Security or other grant funds

Timetable for Completion: 3 years or as grants become available

Expected Outcome: Better access and firefighting capability

Assessment Timetable: review progress annually

2. Establish biannual meetings between the Mississippi Forestry Commission and the Pearl River County Volunteer Fire Departments.

Responsibility: Pearl River County Emergency Management Agency 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. Create community outreach and education program including mail-out and county website, listing specific fire concerns in the area and steps that homeowners can take to reduce ignitability potential. Include the roles and responsibilities (liability) that private property owners incur by burning debris.

Responsibility: Pearl River County Emergency Management Agency 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 regular 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 2008

4. 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: Pearl River County Emergency Management Agency, Volunteer Fire Departments, Mississippi Forestry Commission

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: Pearl River County Emergency Management Agency, 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: Pearl River County Emergency Management Agency, 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. Identify and map private ponds and other water sources to fill up pumpers in the county.

Responsibility: Pearl River County Emergency Management Agency, County GIS Department

Funding: Grant or GIS department

Timetable for Completion: Spring 2009

Expected Outcome: More access to water to fight wildfires

Assessment Timetable: Summer 2009 – update every 2 years

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

Responsibility: Pearl River County Emergency Management Agency, Pearl River County 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

9. Hiring of additional full-time firefighting staff for Pearl River County.

Responsibility: Pearl River County Emergency Management Agency, Pearl River County Board of Supervisors

Funding: Grant or Board of Supervisors

Timetable for Completion: 2 years or as grant becomes available

Expected Outcome: More time and resources to dedicate to fire prevention, etc.

Assessment Timetable: in 2 years or as grant applications are made

Potential Funding Sources

1. Assistance to Firefighters Grant Program
Website: 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
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
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
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
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
Program Description: Provide support to local U.S. fire departments and emergency service personnel
7. Responder Knowledge Base Website
Website: www.rkb.mipt.org
Program Description: Website contains information on currently available products, standards, training and grants

8. Grants Office
Website: www.firegrants.info and 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. Pearl River County Hazard Mitigation and Flood Protection Plan
Updated November 2004
2. Pearl River County Comprehensive Emergency Management Plan
Revised January 2007
3. Firewise
Around Your Home brochure
www.firewise.org
4. USDA Forest Service
Preparing a Community Wildfire Protection Plan
March 2004

Project Contact Information

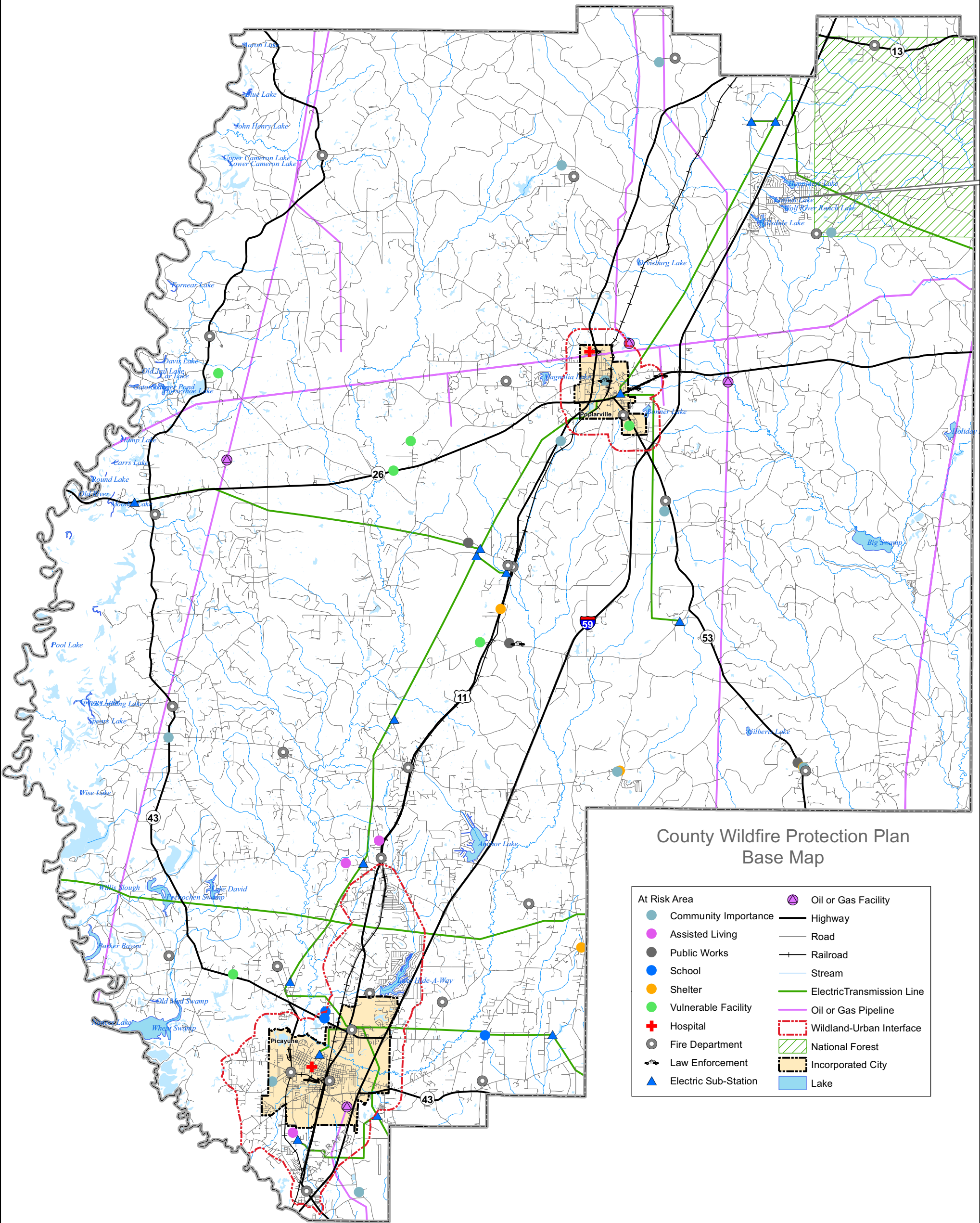
1. Pearl River County Emergency Management Agency
530 Highway 26 East
Poplarville, MS
Phone: (601) 795-3058
Fax: (601) 795-4589

2. Mississippi Forestry Commission
477 South Gate Road
Hattiesburg, MS 39401
Phone: (601) 583-4240
Fax: (601) 583-2500
www.mfc.state.ms.us

3. The Nature Conservancy
405 Briarwood Drive, Suite 101
Jackson, MS 39206
Phone: (601) 713-3355
Fax: (601) 982-9499
www.tnc.org

4. Southern Mississippi Planning and Development District
9229 Highway 49
Gulfport, MS 39503
Phone: (228) 868-2311
Fax: (228) 868-7094
www.smpdd.com

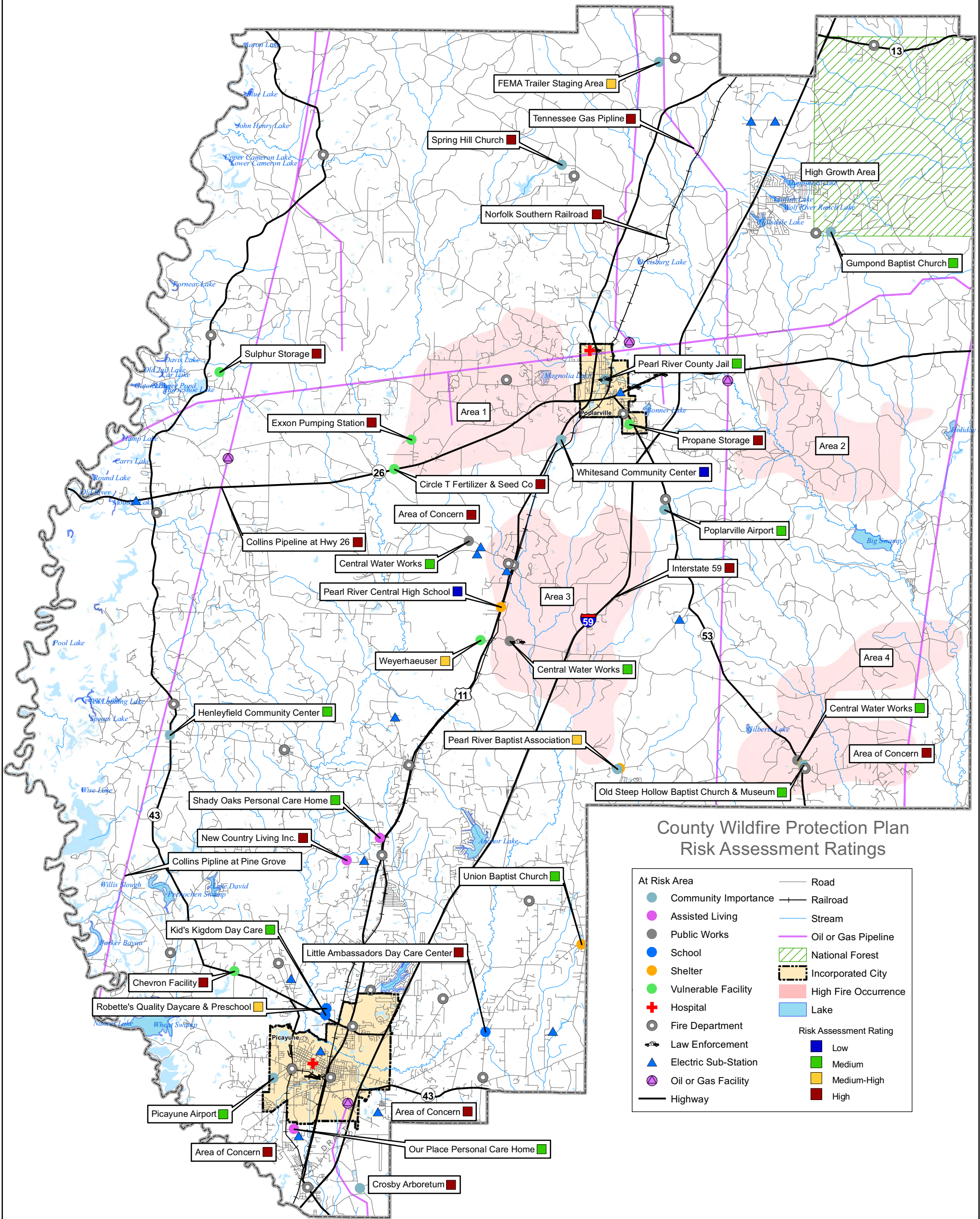
Pearl River County, Mississippi



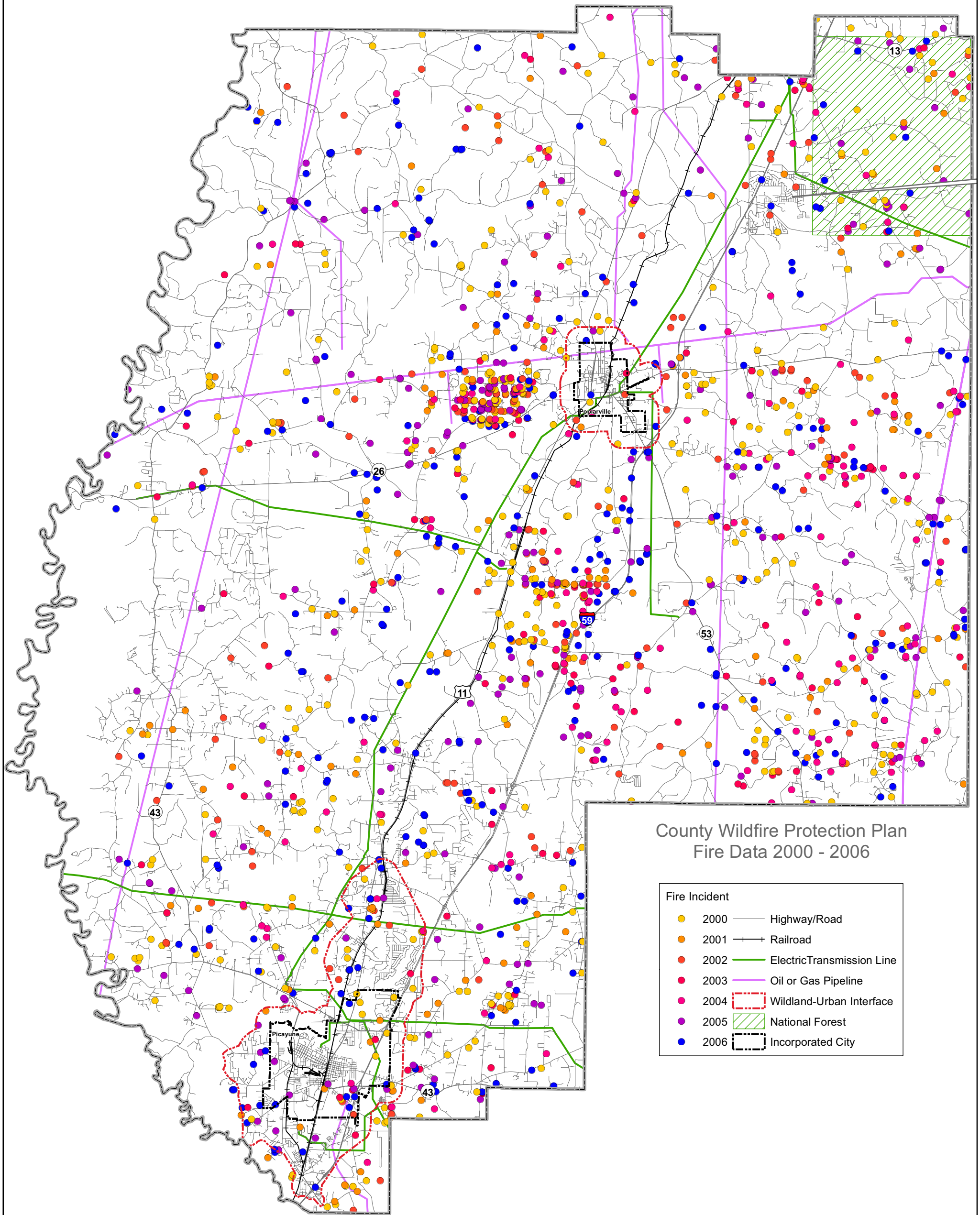
County Wildfire Protection Plan
Base Map

At Risk Area	Oil or Gas Facility
Community Importance	Highway
Assisted Living	Road
Public Works	Railroad
School	Stream
Shelter	Electric Transmission Line
Vulnerable Facility	Oil or Gas Pipeline
Hospital	Wildland-Urban Interface
Fire Department	National Forest
Law Enforcement	Incorporated City
Electric Sub-Station	Lake

Pearl River County, Mississippi



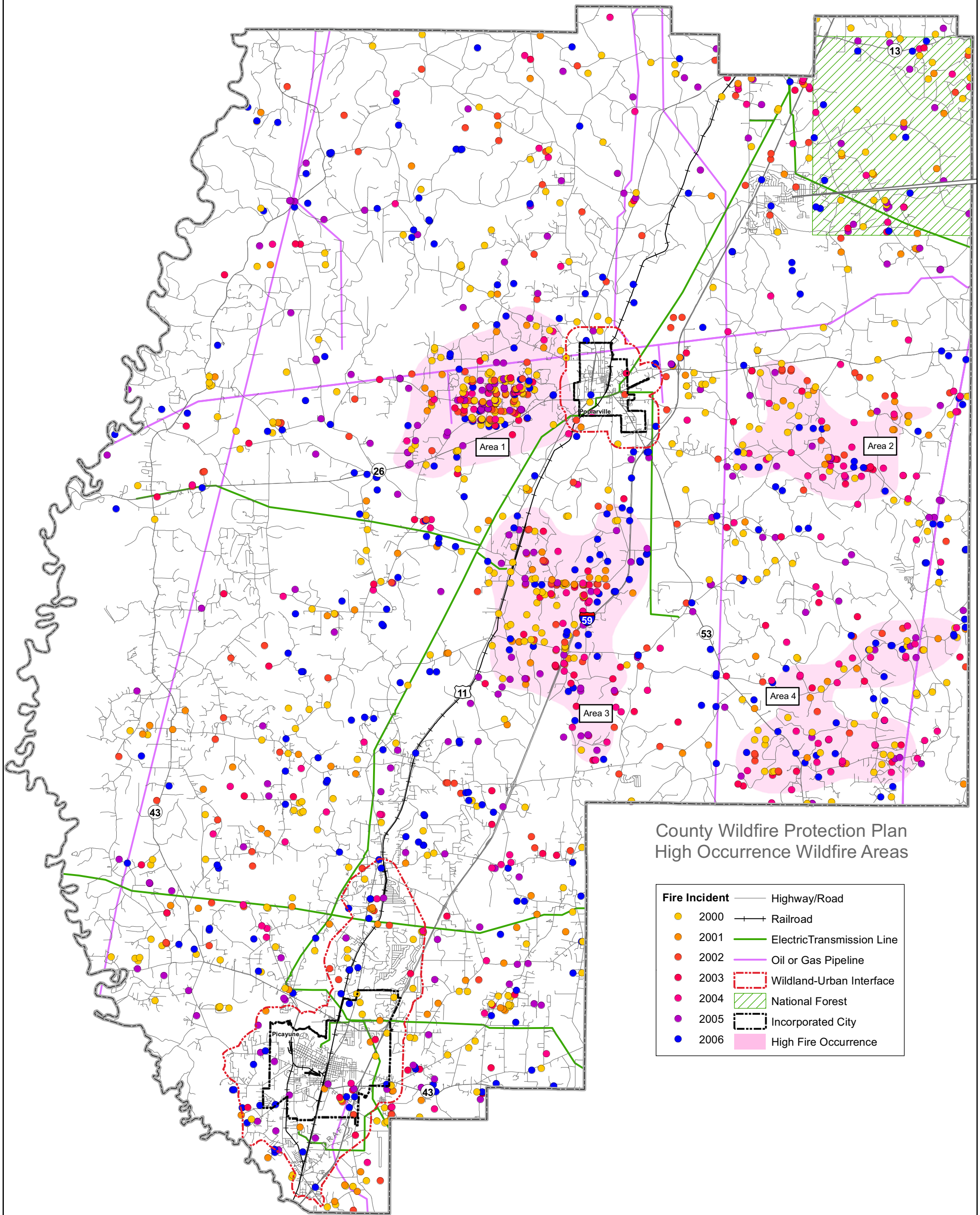
Pearl River County, Mississippi



County Wildfire Protection Plan
Fire Data 2000 - 2006

Fire Incident	
● 2000	— Highway/Road
● 2001	—+— Railroad
● 2002	— Electric Transmission Line
● 2003	— Oil or Gas Pipeline
● 2004	- - - Wildland-Urban Interface
● 2005	▨ National Forest
● 2006	▭ Incorporated City

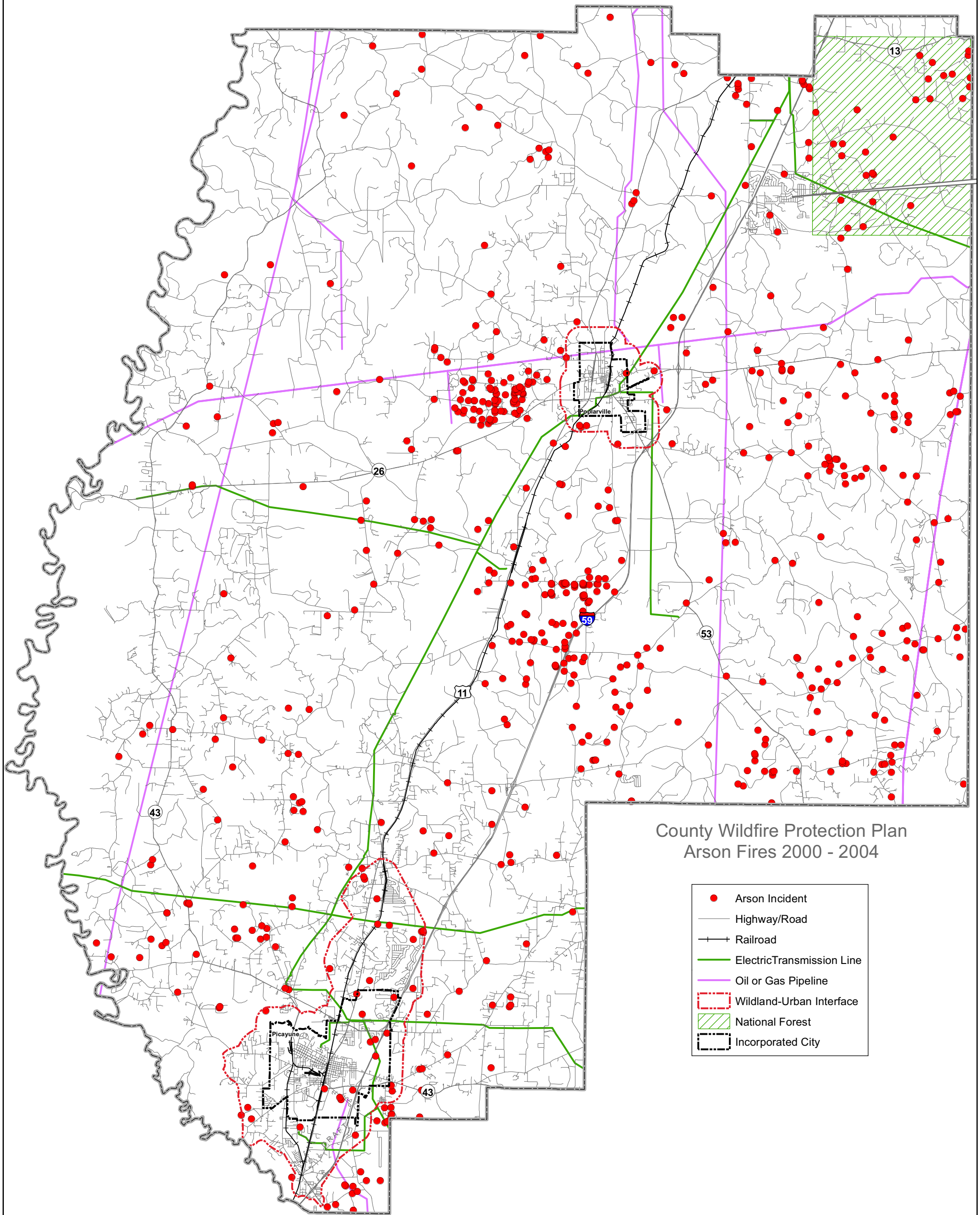
Pearl River County, Mississippi



County Wildfire Protection Plan High Occurrence Wildfire Areas

Fire Incident	Symbol/Color	Feature	Symbol/Color	Feature
2000	Yellow dot	Highway/Road	Grey line	Highway/Road
2001	Orange dot	Railroad	Black line with cross-ticks	Railroad
2002	Red dot	Electric Transmission Line	Green line	Electric Transmission Line
2003	Pink dot	Oil or Gas Pipeline	Purple line	Oil or Gas Pipeline
2004	Magenta dot	Wildland-Urban Interface	Dashed red line	Wildland-Urban Interface
2005	Purple dot	National Forest	Hatched green area	National Forest
2006	Blue dot	Incorporated City	Dashed black line	Incorporated City
		High Fire Occurrence	Pink shaded area	High Fire Occurrence

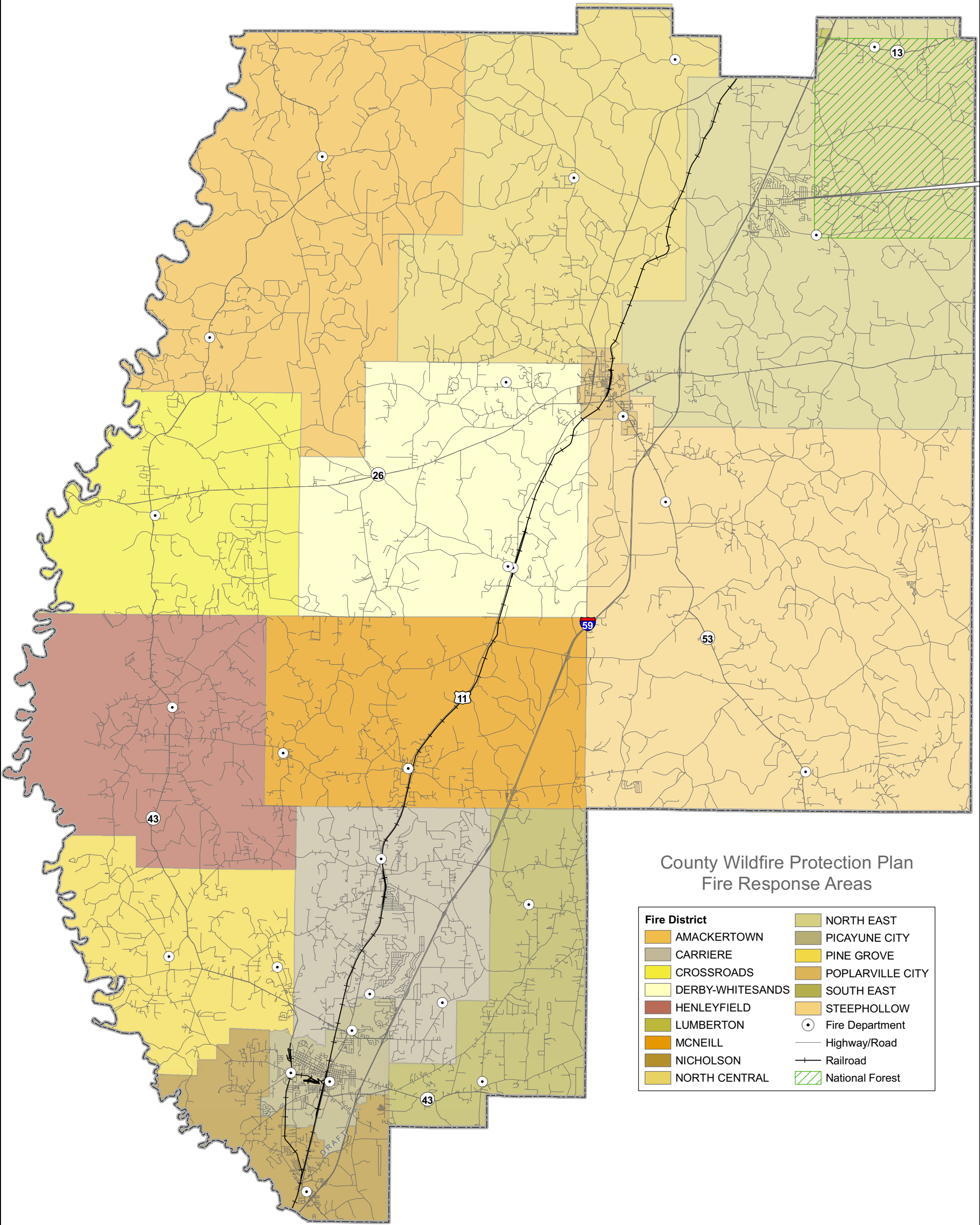
Pearl River County, Mississippi



County Wildfire Protection Plan
Arson Fires 2000 - 2004

- Arson Incident
- Highway/Road
- +— Railroad
- Electric Transmission Line
- Oil or Gas Pipeline
- - - Wildland-Urban Interface
- ▨ National Forest
- - - Incorporated City

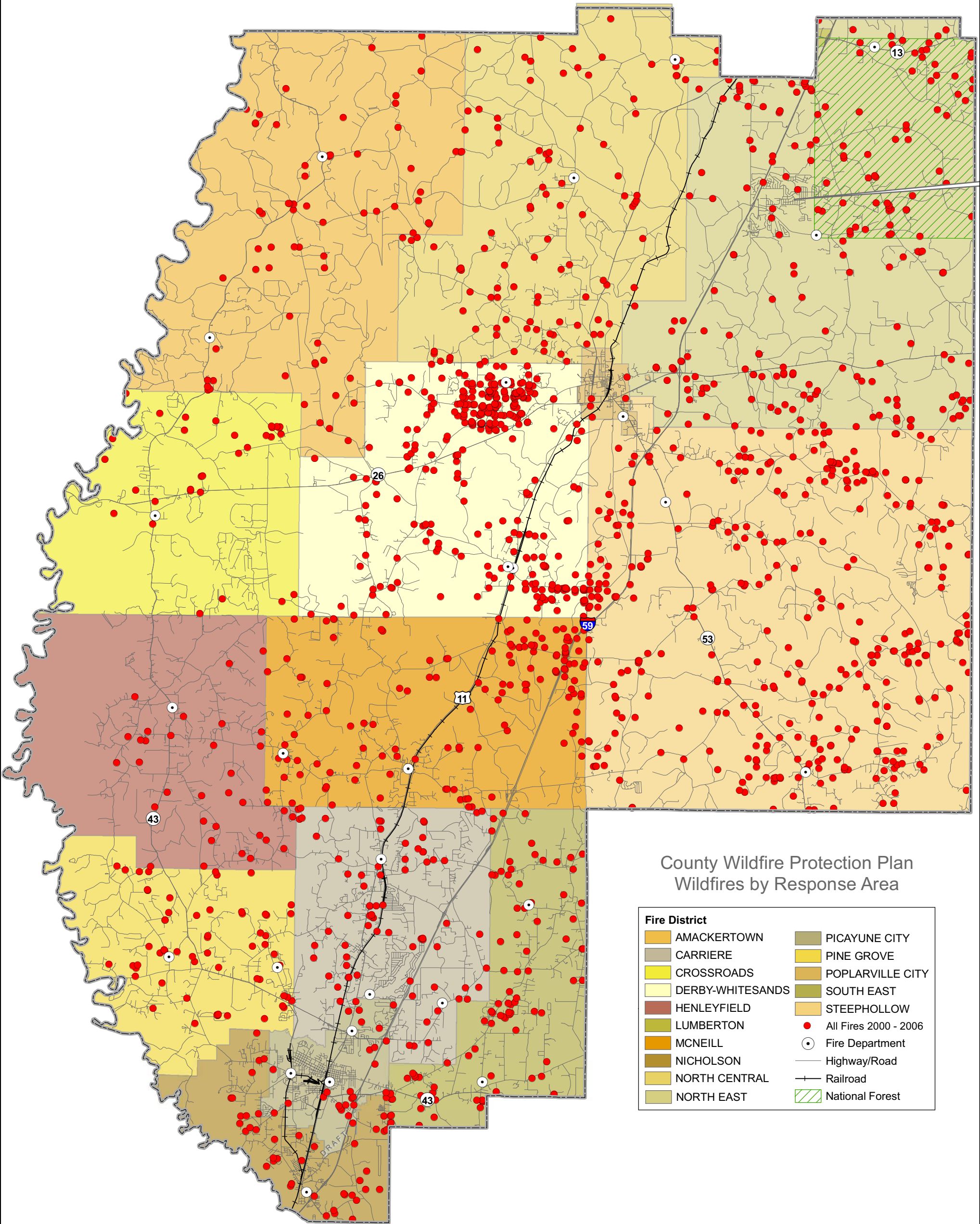
Pearl River County, Mississippi



County Wildfire Protection Plan
Fire Response Areas

Fire District	
	AMACKERTOWN
	CARRIERE
	CROSSROADS
	DERBY-WHITESANDS
	HENLEYFIELD
	LUMBERTON
	MCNEILL
	NICHOLSON
	NORTH CENTRAL
	NORTH EAST
	PICAYUNE CITY
	PINE GROVE
	POPLARVILLE CITY
	SOUTH EAST
	STEEPHOLLOW
	Fire Department
	Highway/Road
	Railroad
	National Forest

Pearl River County, Mississippi



County Wildfire Protection Plan
Wildfires by Response Area

Fire District	
	AMACKERTOWN
	CARRIERE
	CROSSROADS
	DERBY-WHITESANDS
	HENLEYFIELD
	LUMBERTON
	MCNEILL
	NICHOLSON
	NORTH CENTRAL
	NORTH EAST
	PICAYUNE CITY
	PINE GROVE
	POPLARVILLE CITY
	SOUTH EAST
	STEEPHOLLOW
	All Fires 2000 - 2006
	Fire Department
	Highway/Road
	Railroad
	National Forest