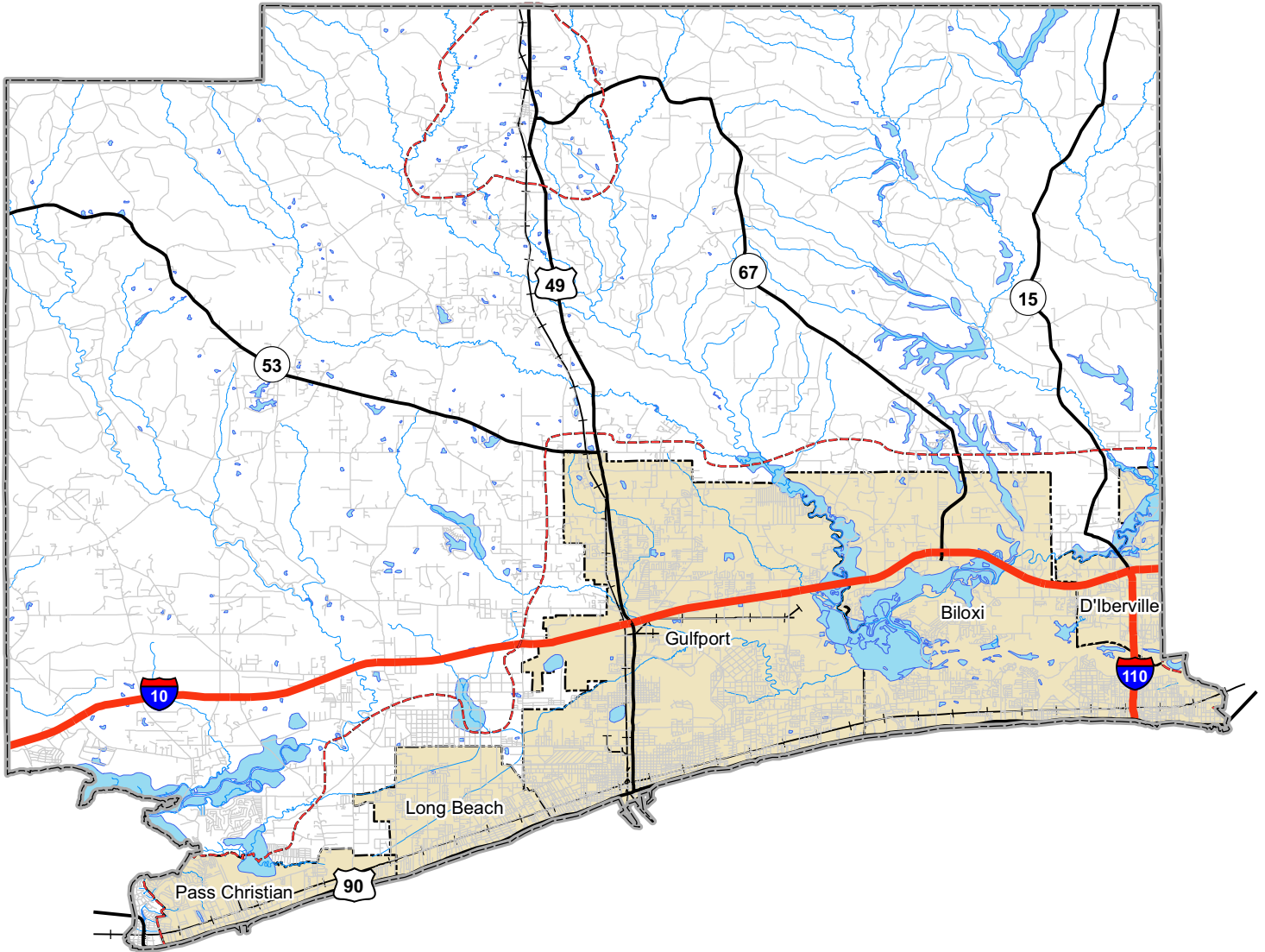


HARRISON COUNTY, MISSISSIPPI

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 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, Harrison 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 marshal 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 Harrison County Fire Service, the Mississippi Forestry Commission, The Nature Conservancy 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 be utilized to guide development and educate landowners, as well as to 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

Harrison County is centrally located along the southern border of Mississippi. Bordered on the south by the Mississippi Sound, this coastal region has a dynamic, diversified economy and is strategically positioned on the Gulf of Mexico/Interstate 10 corridor between Alabama and Louisiana. The county is the urban center for economic and social activities in the southern portion of Mississippi. The cities of Biloxi and Gulfport comprise over 50% of the county's population. The smaller incorporated areas of the county are Long Beach, Pass Christian, and D'Iberville. All of these incorporated areas are located in the coastal region of the county. Other significant unincorporated areas of the county include Pineville, Henderson Point, DeLisle, Lizana, Saucier, Woolmarket, and several others.

Harrison County benefits from excellent transportation routes by rail, air, and sea. U.S. Highway 49, the major north/south artery through the county terminates at U. S. Highway 90 in Gulfport. Interstate 10 traverses the county from east to west, providing easy accessibility to all major cities and markets. U.S. Highway 90 crosses the county from east to west directly along the beachfront, offering beautiful scenic vistas along the way as well as access to major tourist attractions and businesses in each of the incorporated cities. Major north-south connectors include Highways 603, 605, 607, Interstate 110, and Highways 57 and 67.

Air service from the Gulfport-Biloxi International Airport has expanded tremendously over recent years. Options for daily travel out of the Gulfport-Biloxi International Airport now include nonstop jet service to eleven destinations: Houston, Dallas-Fort Worth, Memphis, Atlanta, Chicago, Columbus, Greensboro, Orlando-Sanford, Fort Lauderdale, Tampa, and St. Petersburg-Clearwater. Seasonal flights to and from select Canadian cities are also offered. Construction is slated to begin on an 800-space parking garage immediately following a ground-breaking in late January 2008; surface parking expansion and improvements have already been completed. The expansion of the terminal area from 92,000 sq. ft. to 165,000 sq. ft. was completed in December 2007, providing two additional gates, a larger lobby and ticket area, an enlarged baggage claim and security area, and improved surface road ingress/egress to the airport. Enhanced air cargo capacity is also planned for the near future.

Through the development of a world-class deep-water port strategically positioned on the Gulf of Mexico with direct access to sea-lanes, air, rail, and interstate highways, the Mississippi Coast is fast becoming a leader in international trade. The State Port at Gulfport moves over 2.3 million tons of cargo annually, including such diverse products as tropical fruit, ilmenite ore, aluminum, steel, paper, forest products and heavy lift cargoes. Gulfport is ranked as the 3rd busiest container port on the Gulf of Mexico and is 17th in the United States. This bulk, break-bulk and container seaport encompasses 204 acres, has nearly 6,000 feet of berthing space and a channel depth of 36 feet. The Gulf Intracoastal Waterway lies 5 miles offshore from the port and crosses the port shipping channel. Interstate 10 is seven miles north of the port, allowing trucks to easily distribute products to 75% of U. S. markets within 24 hours. Although heavily damaged

in August 2005 by Hurricane Katrina, the port is making a strong comeback, handling over 1.6 million tons of cargo and shipping nearly 198,000 containers in CY 2006. A planned port expansion slated to begin in 2008 will significantly increase capacity.

Harrison County has a large military presence and population, with Keesler Air Force Base located in Biloxi, Naval Construction Battalion Center located in Gulfport and the Air National Guard Base in Gulfport.

The population of Harrison County in 2000 was 189,601, reflecting an increase of 14.7% since 1990. This most recent increase is a much steeper rate than the 4.9% recorded for the prior ten-year period from 1980-1990, and is consistent with a much larger, historic trend in population increase. By 2005, the county population had increased to 193,810. In 2000, the U. S. Census Bureau had projected an estimated population of 204,164 for Harrison County by 2010, but actual population has decreased since Hurricane Katrina devastated Gulf Coast communities in August of 2005. The estimated 2006 population in the aftermath of Katrina was 170,753, a significant decrease (9.9%) since 2000. The decrease is directly attributable to the loss of housing and population exodus following Hurricane Katrina. Despite the devastation of the storm, however, Harrison County is experiencing a remarkable recovery and the economy is strong. Once housing becomes available, there is considerable reason to believe that Harrison County's population will rebound.

Harrison County contains 581 square miles of land area and 395.2 square miles of water area; land is largely held by private landowners. Approximately 68% of county land area is located within commercial forests. Public lands include the Desoto National Forest, Wolf River Game Management Area, Little Biloxi State Wildlife Management Area, and Big Biloxi Recreation Area. Designated Mississippi Landmarks located in Harrison County include Beauvoir, the home and presidential library of Jefferson Davis; the Biloxi Lighthouse, a cast iron lighthouse dating from 1847; the Hurricane Katrina Memorial at the Biloxi Town Green; Hurricane Katrina Tree Sculptures along the Beach Boulevard/Hwy 90 corridor, created from the ruins of damaged live oak trees; the USS Biloxi Bell/USS Biloxi Mast, memorabilia from World War II; the Friendship Oak, over 500 years old, at the Gulf Coast campus of the University of Southern Mississippi; and the Gulf Islands National Seashore barrier islands, just off the coastline. One of the barrier islands, Ship Island, is the site of Fort Massachusetts, dating back to the Civil War. Beauvoir is also listed on the National Register of Historic Places.

Harrison 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. The driest month is October and the 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, Harrison 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 Harrison 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 Harrison 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 fire. Major transportation arteries through Harrison County such as Interstate 10, Interstate 110, U. S. Highway 49, and U. S. Highway 90 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.

Harrison County is divided into five fire grading districts, with eleven rural fire departments covering the unincorporated portions of the county. The 11 fire departments are manned by volunteers who act as first responders to the fires within the county. These rural fire response areas are: Cuevas, DeLisle, West Harrison, Henderson Point, Lizana, Saucier, Success, North Woolmarket, County Farm Road, West Wortham Road, and East Harrison. 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
Cuevas Grading District	Cuevas	22338 Fire Station Road, Pass Christian, MS 39571	17
West Harrison Grading District	DeLisle	25242 Cuevas-DeLisle Road, Pass Christian, MS 39571	27*
	West Harrison	10071 Vidalia Road, Pass Christian, MS 39571	
	Henderson Point (destroyed)	300 Livingston Street, Pass Christian, MS 39571	0

Fire Response Area	Fire Department	Station Location(s)	Total Number of Volunteers
Lizana Grading District	Lizana	16445 Lizana School Road, Gulfport, MS 39503	23
	West Wortham Rd. – Lizana #2	20121 West Wortham Road, Saucier, MS 39574	
	County Farm Road – Lizana #3	13243 County Farm Road, Gulfport, MS 39503	
Saucier Grading District	Saucier	23560 Old Still Road, Saucier, MS 39574	33
	Success	12342 School Road, Saucier, MS 39574	
North Woolmarket Grading District	North Woolmarket	16520 Switzer Park Road, Biloxi, MS 39532	26
	East Harrison	15445 Hwy 15, Biloxi, MS 39532	

*Includes firefighters for all stations in the fire grading district.

Strategic Goals of the County Wildfire Protection Plan

At the beginning of the planning process, the Harrison 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 Harrison County Wildland-Urban Interface (WUI)
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 strengthen subdivision regulations so that there is dependable water for public safety needs
 - Require elevated tanks
6. Make recommendations to improve the resources of the Volunteer Fire Department
 - Need five (5) new fire stations operating 24/7
 - Develop volunteer retention and recruitment programs
7. Identify strategies to encourage collaboration between Harrison County and the Mississippi Forestry Commission
 - Including improved 800 MHz radio communication between Harrison County and MFC
8. Identify sites for new water towers and new fire station construction that are consistent with high growth/development areas
9. Seek funding for purchase of Rapid Response Brush Trucks

Mapping

The Harrison 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 Harrison County Base Map, Harrison County Risk Assessment Ratings, Harrison County Fire Data 2000-2006, High Occurrence Wildfire Areas, Arson Fires 2000-2004, Harrison 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 is highly vegetated with many areas where wildland meets development. For this reason, the Harrison 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 areas of critical infrastructure including roadways for evacuation, water towers, utilities and 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 as well as several different causes of fires. Fire causes include lightning, campfire, smoking, debris burning, arson, and equipment use. MFC data for Harrison County shows a total of 243 fires in the year 2000, 116 fires in 2001, 87 fires in 2002, 87 fires in 2003, 67 fires in 2004, 105 fires in 2005, and 206 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 Harrison 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 in northwest Harrison County. Area 2 is geographically located to the east of Area 1, east of Highway 49 and south of Highway 63. Area 3 is located on the western side of the county and south of Highway 53. Area 4 is located north of Gulfport/Biloxi and south of Highway 67.

A great number of the fires within Harrison County, approximately 47%, are attributed to arson. According to MFC wildfire data, 279 out of 600 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. Geographic data reflecting fire cause are currently unavailable for 2005 and 2006.

The Harrison 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.

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 in compiling the following list of county areas at risk from wildfire.

The Steering Committee attempted to identify large facilities that may be at risk 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 their potential to 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:

- Emergency Communications Towers: near North Woolmarket Elementary; at Lizana Volunteer Fire Department 4; at Saucier-Advance Road near West Wortham; Highway 53 across from Wallace-Saucier Road

There is a good buffer at all of the emergency communication sites listed above. There is nominal smoke or fire risk. The towers are rated low.

- Water Towers: near Saucier Elementary; County Farm Road; Highway 67

The water towers located throughout the county were rated low. The structures have a low ignitability potential and are well maintained with good buffers.

- All Volunteer Fire Departments

The fire departments strategically located throughout the county are of critical importance, especially in the event of wildfire. However, little risk of fire or smoke at the stations has been identified. All stations are ranked as low.

■ Kansas City Southern Railroad

The right-of-ways are cleared regularly along the KCS line. While the possibility of fire on the rail or in the rail area is not probable, the potential for severe damage exists. For that reason, the KCS Railroad is a medium risk.

Vulnerable Facilities

■ High Pressure Gas Stacked Line

Located off Wolf River Road and above V. Saucier Road, the line is of low risk. There is some grass but little underbrush at the site.

■ Fazzio Feed Store

The feed store is located on Highway 53, and there is a sizeable amount of wooded area. Furthermore, a large amount of hazardous materials is stored on site. The facility is rated medium-high.

■ Propane Storage

West of CC Camp Road on Highway 53 is a propane storage area. The tanks are older and carry a risk of leakage at any time. For this reason, the site is rated medium-high.

■ Propane Storage

There is also a propane storage area off of J.P. Ladner Road just west of Vidalia Road. The site is surrounded by woods and could pose a serious threat of wildfire. The area is ranked a medium-high risk.

■ Propane Storage

A third propane storage area is located on the west side of Highway 49 north of Saucier. The area is ranked a medium-high risk.

■ Advance Disposal

Located at the foot of County Farm Road, this site stores as much as 10,000 – 15,000 gallons of diesel at one time. However, the ignitability factor is low and a good buffer exists between the site and the wildland. The waste disposal facility is rated a low risk.

Areas of Community Importance

■ Harrison Central High School

The school has a slight smoke risk but no fire risk. Because it can function as a shelter, it is rated medium.

■ Lizana Elementary

The school has a slight smoke risk but no fire risk. Because it can function as a shelter, it is rated medium.

■ West Wortham Elementary and Middle School

The school has a slight smoke risk but no fire risk. Because it can function as a shelter (special needs), it is rated medium.

■ North Woolmarket Elementary and Middle School; St. Patrick High School

The schools above have little smoke or fire risk. They are rated as low.

■ DeSoto National Forest

The national forestland is well maintained. The Mississippi Forestry Commission is currently removing the undergrowth. The area is a low risk.

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

■ Canal Road Area

North and South of Interstate 10 there is an area with a medium risk that could use permanent fire breaks.

Emergency Preparedness

Emergency preparedness for each of the county volunteer fire departments is continually reviewed and assessed by the Harrison County Fire Service. 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 Harrison County are listed below with the corresponding MSRB classification.

Mississippi State Rating Bureau Public Protection Classification List

District	Class
Cuevas VFD	8 or 10
DeLisle VFD	8 or 10
West Harrison VFD	8 or 10
Henderson Point VFD	Destroyed by Katrina
Lizana VFD	8 or 10
Saucier VFD	8 or 10
Success VFD	8 or 10
North Woolmarket VFD	8 or 10
County Farm Rd. VFD	8 or 10
West Wortham VFD	8 or 10
East Harrison	8 or 10

Class 8 applies 5 miles and under from fire station
Class 10 applies over 5 miles from fire station

In general, each station is well-equipped and able to respond to the needs of the areas it serves. However, Steering Committee members did identify improvements that could be made to provide better service within the districts. The Henderson Point station was destroyed in Hurricane Katrina but is being replaced.

Often times, it is necessary for Harrison County volunteer firefighters to work side-by-side with the Mississippi Forestry Commission. In an attempt to better this relationship and improve the firefighting efforts by both agencies, it is recommended that biannual meetings be established to discuss their respective roles and responsibilities. These meetings would allow inter-agency concerns to be addressed as well as to provide training opportunities and project coordination. For instance, the Harrison County Fire Service has no cross-talk communications with MFC when responding to a fire. It would be helpful for the two agencies to have radio communication through a shared channel.

The Steering Committee also identified manpower concerns. The county is fortunate to have a paid firefighter at each station. However, recruiting and retaining the volunteers is an issue. New firefighters are often issued worn-out, old gear or have to purchase their own. It is recommended that grants be sought or fundraisers implemented to provide new gear as needed.

Additional recruitment techniques should also be implemented. Some volunteer fire departments across the country are 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. However, the effectiveness of this program in recruiting new volunteers may not be feasible because firefighters must be 21 in Harrison County. It is suggested that the county consider lowering the age to 18 but continue to require drivers to be at least 21 years old.

If the age requirement is lowered to 18, an apprentice firefighter program working with local youth may also be 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 and apprenticeship could lead to a career as a volunteer firefighter.

Another recruitment suggestion is for the creation and maintenance of an on-going recruitment program which identifies the current manpower needs as well as those over the next five years. Creating recruitment kits to keep on-hand for prospective candidates, as well as enlisting the local community through newspaper inserts and recruitment flyers placed at local restaurants and other businesses may be successful.

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

In addition to the MSRB Rating and manpower issues, equipment is an important factor in emergency preparedness. A current inventory of large equipment with description, age and location is provided below. Currently, the departments utilize a variety of large firefighting equipment with no immediate needs identified. However, smaller firefighting equipment has been identified as an action item later in this plan. Small, rapid response brush trucks are needed to better fight wildland fires.

Harrison County Fire District Equipment List

Department	Year	Make/Model	Type	Owner	Grant	Station
Cuevas	1996	Ford F-800	Tanker 64, 1800 gallon	County		
	1998	Ford F-Series	Engine 62, 1000 gallon	County		
	2005	Kenworth T-300	Engine 61, 1000 gallon	County		
	1990	Ford E350	Ambulance	County	^	
	2003	Freightliner FL70	Tanker 63, 2000 gallon	County		
DeLisle	2005	Kenworth T-300	Engine 12, 1000 gallon	County		
	2005	Kenworth T-300	Engine 11, 1000 gallon	County		
	2005	Kenworth T-300	Engine, 1000 gallon	County		
West Harrison	1996	Ford F-800	Tanker 16, 1800 gallon	County		
	2005	Kenworth T-300	Engine 12, 1000 gallon	County		
	1998	Ford F-Series	Engine 15, 1000 gallon	County		
	2003	Freightliner FL70	Tanker 17, 2000 gallon	County		
	2008	Ford F-350 P/U	Rescue Truck	County	*1	**1
Henderson Point						
Lizana	1998	Ford F-Series	Engine 74, 1000 gallon	County		
	2003	Freightliner FL70	Tanker 76, 2000 gallon	County		
	2005	Kenworth T-300	Tanker 77, 2000 gallon	County		
	2005	Kenworth T-300	Engine 71, 2000 gallon	County		
Saucier	1998	Ford F-Series	Truck	County	*2	
	1998	Ford F-Series	Engine 43	County		
	1998	Ford F-Series	1000 Gallon Tank		*1	
	1998	Ford F-Series	Engine 2, 1000 gallon	County	**2	
	2003	Freightliner FL70	Tanker 45, 2000 gallon	County		
	2004	Peterbuilt 330	Engine 41, 2000 gallon	County		
	2005	Kenworth T-300	Tanker 47, 1000 gallon	County		
Success	2000	GMC C-8500	Engine 42, 1000 gallon	County		
	2000	International Grizzley	Tanker 44, 2000 gallon	County		

Department	Year	Make/Model	Type	Owner	Grant	Station
	2005	Kenworth T-300	Truck	County	*2	
North Woolmarket	1996	Ford F-800	Tanker 53, 1800 gallon	County		
	1998	Ford F-Series	Engine 52, 1000 gallon	County		
	2003	Freightliner FL70	Tanker 54, 2000 gallon	County		
	2005	Kenworth T-300	Engine 51, 2000 gallon	County		
County Farm	1996	Ford F-800	Tanker 79, 1000 gallon	County		
	2005	Kenworth T-300	Pumper 73, 1000 gallon	County		
West Wortham	1998	Ford F-Series	Engine 72, 1000 gallon tank	County		
	2003	Freightliner FL70	Tanker 78, 2000 gallon	County		
	2005	Kenworth T-300	Truck, 1000 gallon tank	County	**3	
		Ford Expedition	SUV	County		
East Harrison	1996	Ford F-800	Tanker 34, 1800 gallon	County		
	2004	Freightliner V234	Engine 31, 1000 gallon	County		
	2005	Kenworth T-300	Tanker 35, 2000 gallon	County		
	2005	Kenworth T-300	Engine 33, 1000 gallon	County		
	2002	Dodge Truck ½ ton	Rescue Truck 3	County	*1	
	1985	Ford Grumman	Pumper, 1000 gallon	County	^	

^ Donated after Hurricane Katrina

* ¹On Loan from West Wortham Station; ²on loan from Henderson Point Station

** ¹Facility destroyed; equipment loaned to other stations; ²Surplus Truck; ³Canal Road 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 were identified or found to be necessary at this time. These sites are generally well maintained and have moderate to low ignitability potential.

The sites identified as Vulnerable Facilities involve the use or transport of ignitable materials or hazardous materials. There is an increased potential for wildfire at or near these sites due to the natural characteristics of these operations.

No specific fuel reduction recommendations were identified by the committee. Projects were limited to a community outreach and education program on wildfire protection and Firewise practices.

COUNTY

Develop a homeowner education program

Encourage large developments to become Firewise USA Communities (e.g. Tradition)

Implement a maintenance program to eradicate/control Cogon grass

LANDOWNERS

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

Space trees according to recommended minimums

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

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.

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. Revise existing inventory of private ponds and other water sources that firefighters can use to fill pumpers. Dry hydrants needing maintenance can also be identified during this process.

Responsibility: Harrison County Fire Service, Harrison County GIS Department

Funding: GIS Department

Timetable for Completion: Summer 2008

Expected Outcome: More access to water to fight wildfires

Assessment Timetable: Fall 2008; update list every 2–3 years

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

Responsibility: Harrison County Fire Service 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, listing specific fire concerns in the area and steps that homeowners can take to reduce ignitability potential. Include the responsibilities (liabilities) that private property owners incur by burning debris.

Responsibility: Harrison County Fire Service 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 organization newsletter or other 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. 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: Harrison County Fire Service

Funding: Volunteer Fire Departments, grants, Mississippi Forestry Commission

Timetable for Completion: 1-2 times per year in coordination with Fire Prevention Week

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: Harrison County Fire Service, 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: Harrison County Fire Service, Zoning 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 or response more effective

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

Responsibility: Harrison County Fire Service, Harrison 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

8. Provide GPS capability for all pumper trucks.

Responsibility: Harrison County Fire Service and Board of Supervisors

Funding: potential grant opportunities

Timetable for Completion: Spring 2009

Expected Outcome: Improved technology to aid in fire response and ability to have water sources mapped

Assessment Timetable: Summer 2009

9. Seek funding for the purchase of Rapid Response Brush Trucks

Responsibility: Harrison County Fire Service and Board of Supervisors

Funding: potential grant opportunities

Timetable for Completion: Spring 2009

Expected Outcome: Improved firefighting capabilities, particularly in light of the MFC manpower shortage

Assessment Timetable: Summer 2009

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. Harrison County Hazard Mitigation Plan
2. Harrison County Comprehensive Emergency Management Plan
3. Firewise
Around Your Home brochure
www.firewise.org
4. USDA Forest Service
Preparing a Community Wildfire Protection Plan
March 2004

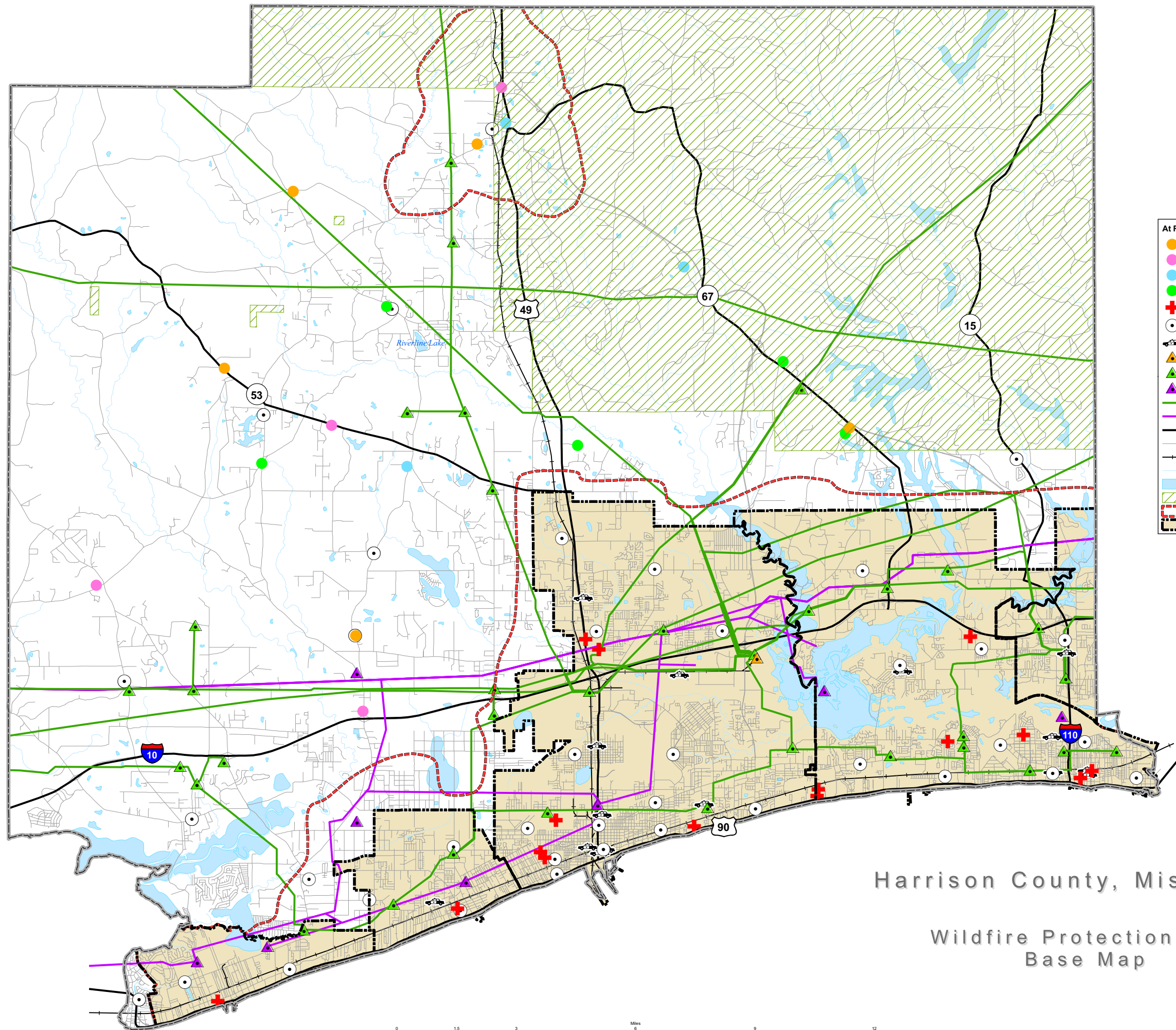
Project Contact Information

1. Harrison County Fire Service
20121 W. Wortham Road
Saucier, MS 39574
Phone: (228) 832-0638
Fax: (228) 831-3358
www.harrison.co.ms.us

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

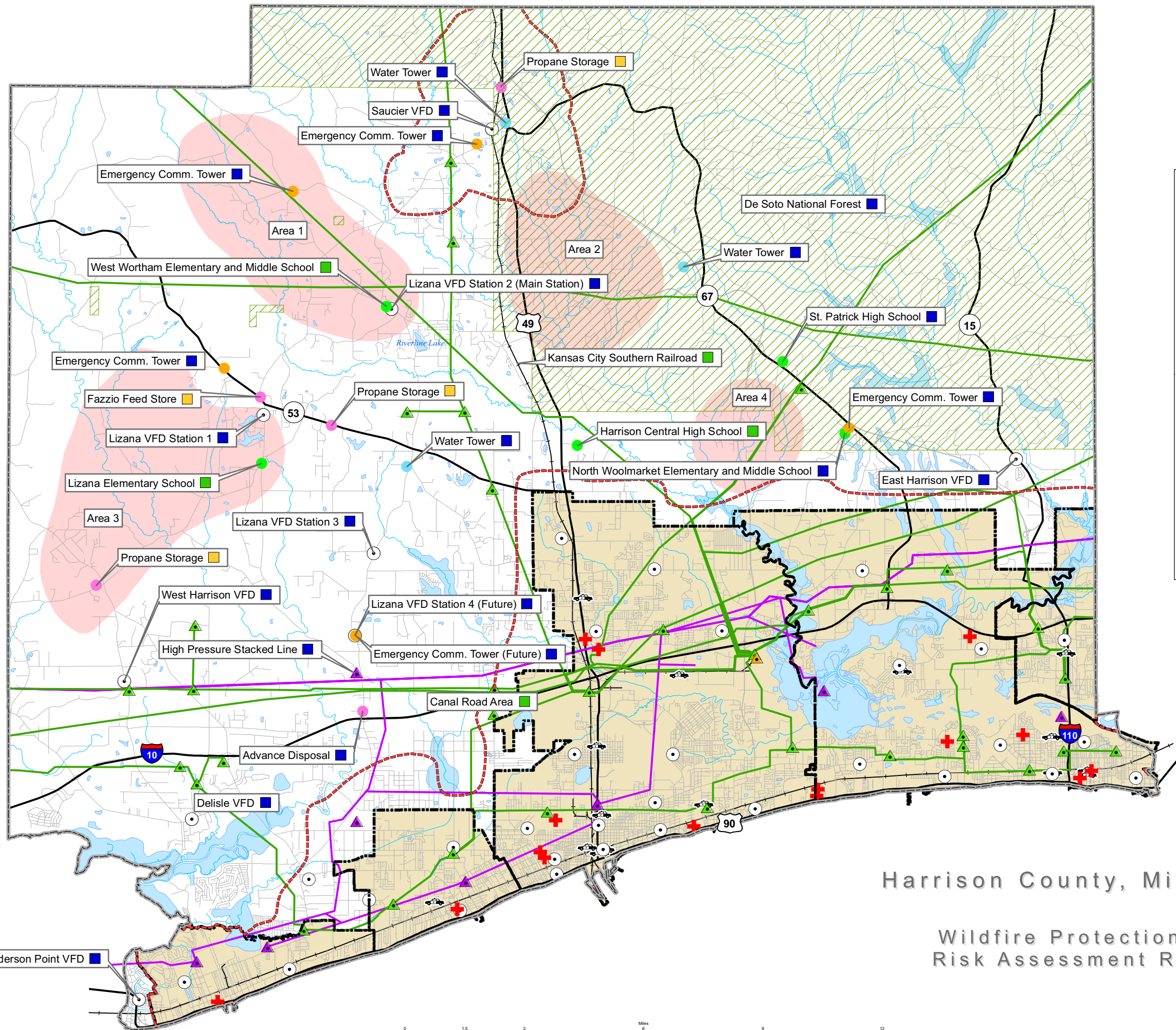
4. Southern Mississippi Planning and Development District
9229 Highway 49
Gulfport, MS 39503
Phone: (228) 868-2311
Fax: (228) 868-7094
www.smpdd.com



- At Risk Areas**
- Emergency Comm. Tower
 - Vulnerable Facilities
 - Water Tower
 - Shelters
 - ✚ Hospital/Personal Care
 - Fire Department
 - 🚓 Law Enforcement
 - ⚡ Electric Power Plant
 - ⚡ Electric Sub Station
 - ⚡ Oil/Gas Facility
 - Electric Transmission Line
 - Oil/Gas Pipeline
 - Highway
 - Road
 - Railroad
 - Stream
 - Waterbody
 - ▨ National Forest
 - ▨ WUI
 - ▨ Incorporated City

Harrison County, Mississippi

Wildfire Protection Plan Base Map



At Risk Area

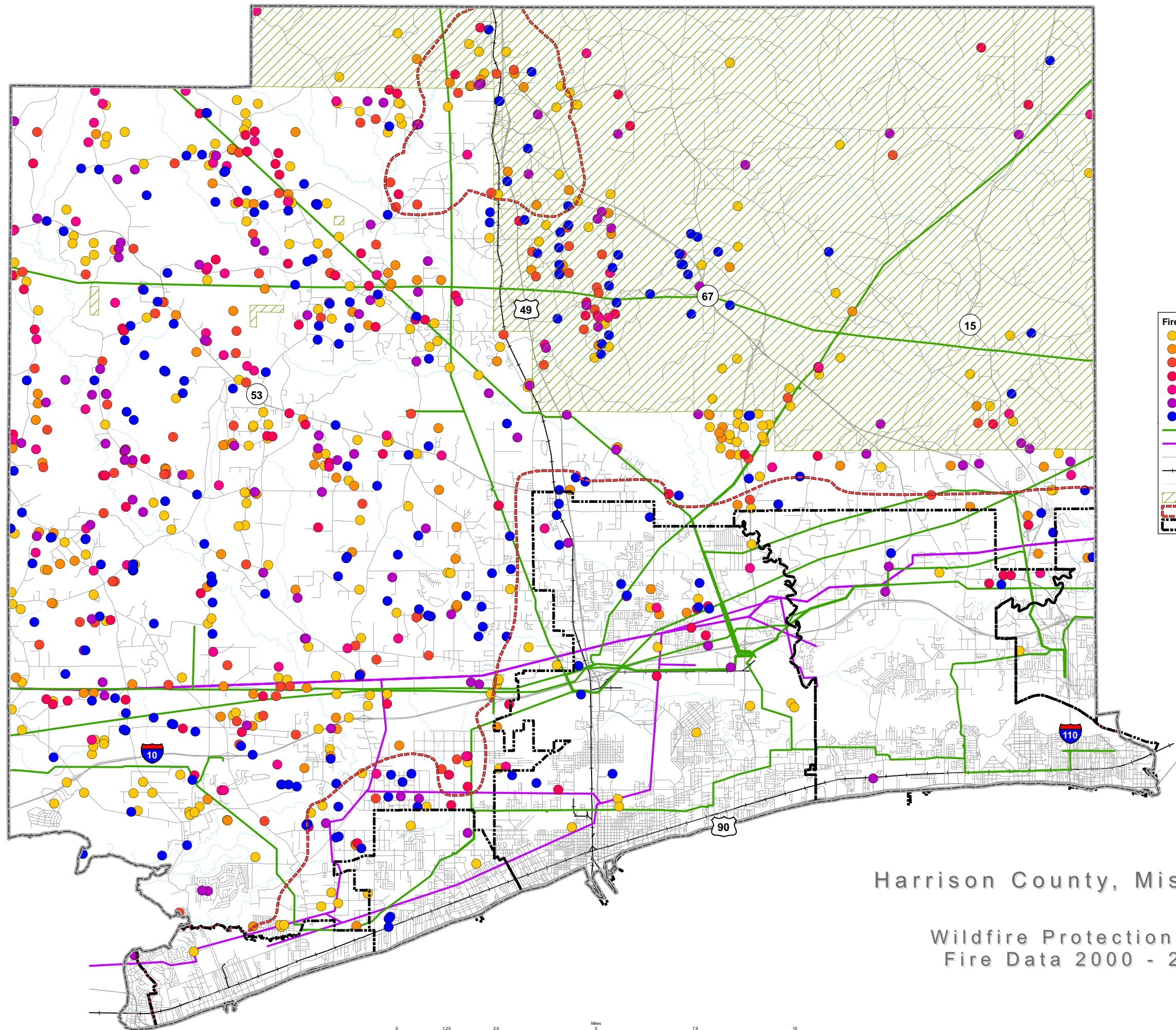
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- Highway
- Road
- Railroad
- Stream
- Waterbody
- High Occurrence Area
- National Forest
- WUI
- Incorporated City

Risk Assessment Rating

- Low
- Medium
- Medium-High
- High

Harrison County, Mississippi

Wildfire Protection Plan Risk Assessment Ratings



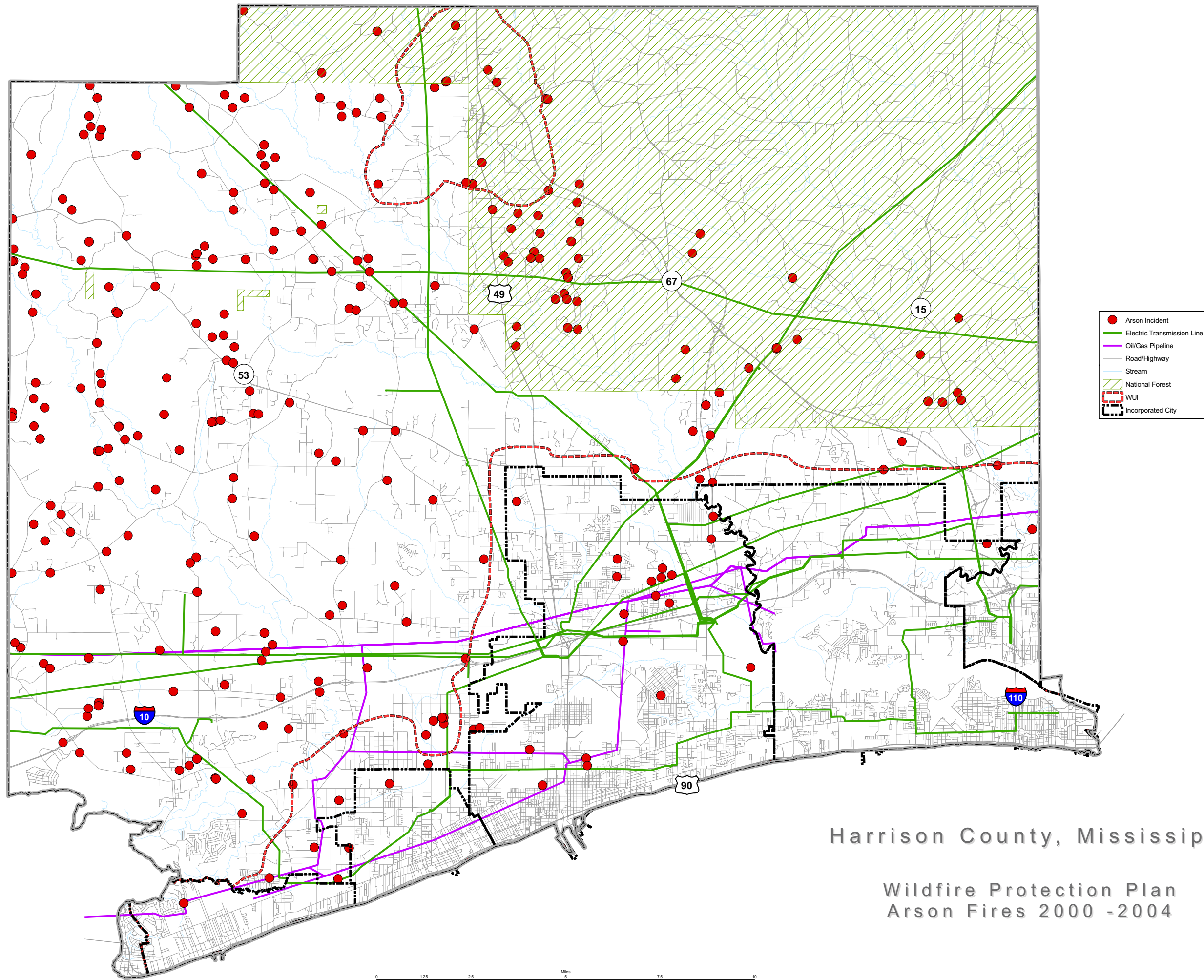
Fire Incident

- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006

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

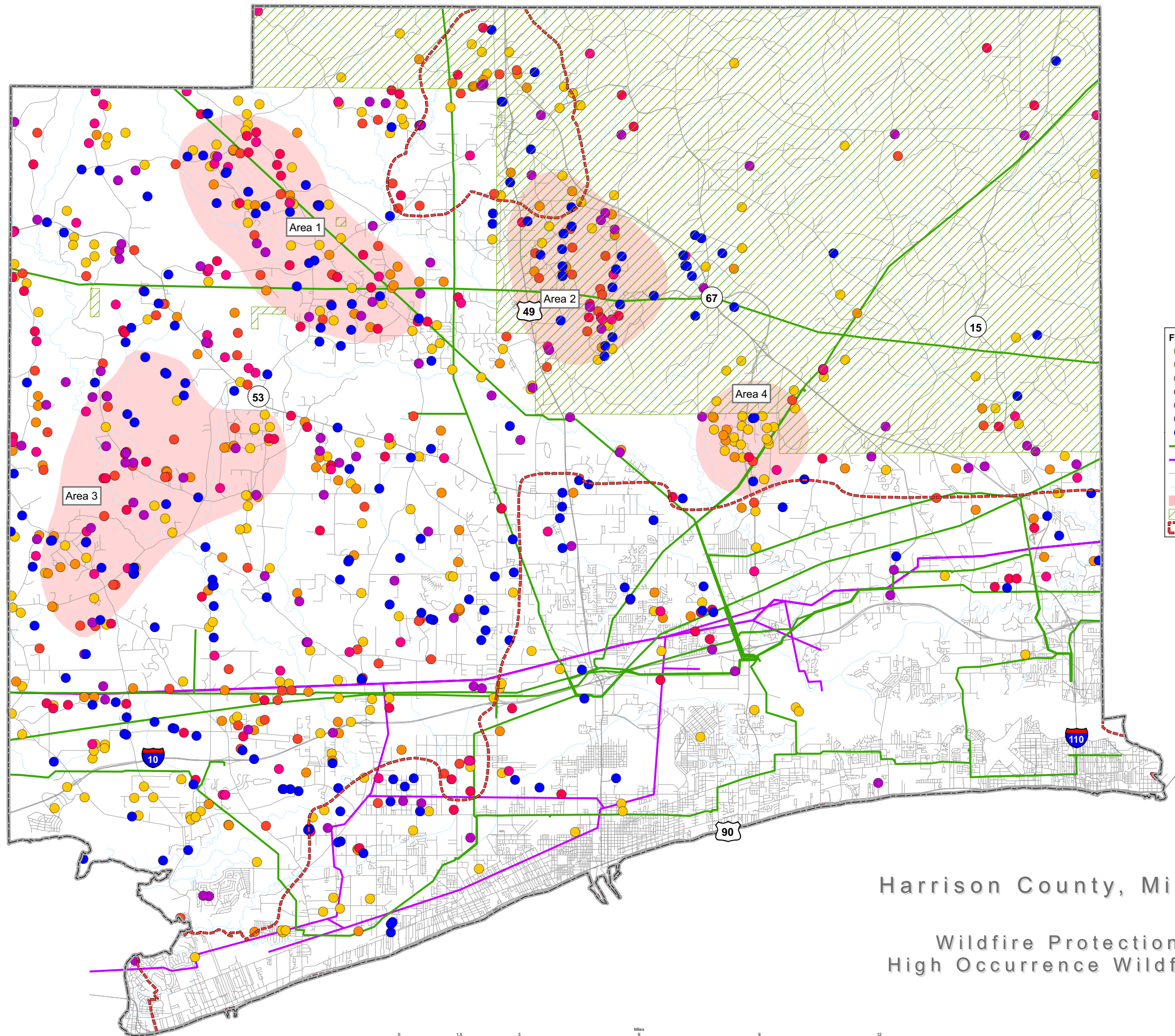
Harrison County, Mississippi

Wildfire Protection Plan
Fire Data 2000 - 2006



Harrison County, Mississippi

Wildfire Protection Plan
Arson Fires 2000 -2004



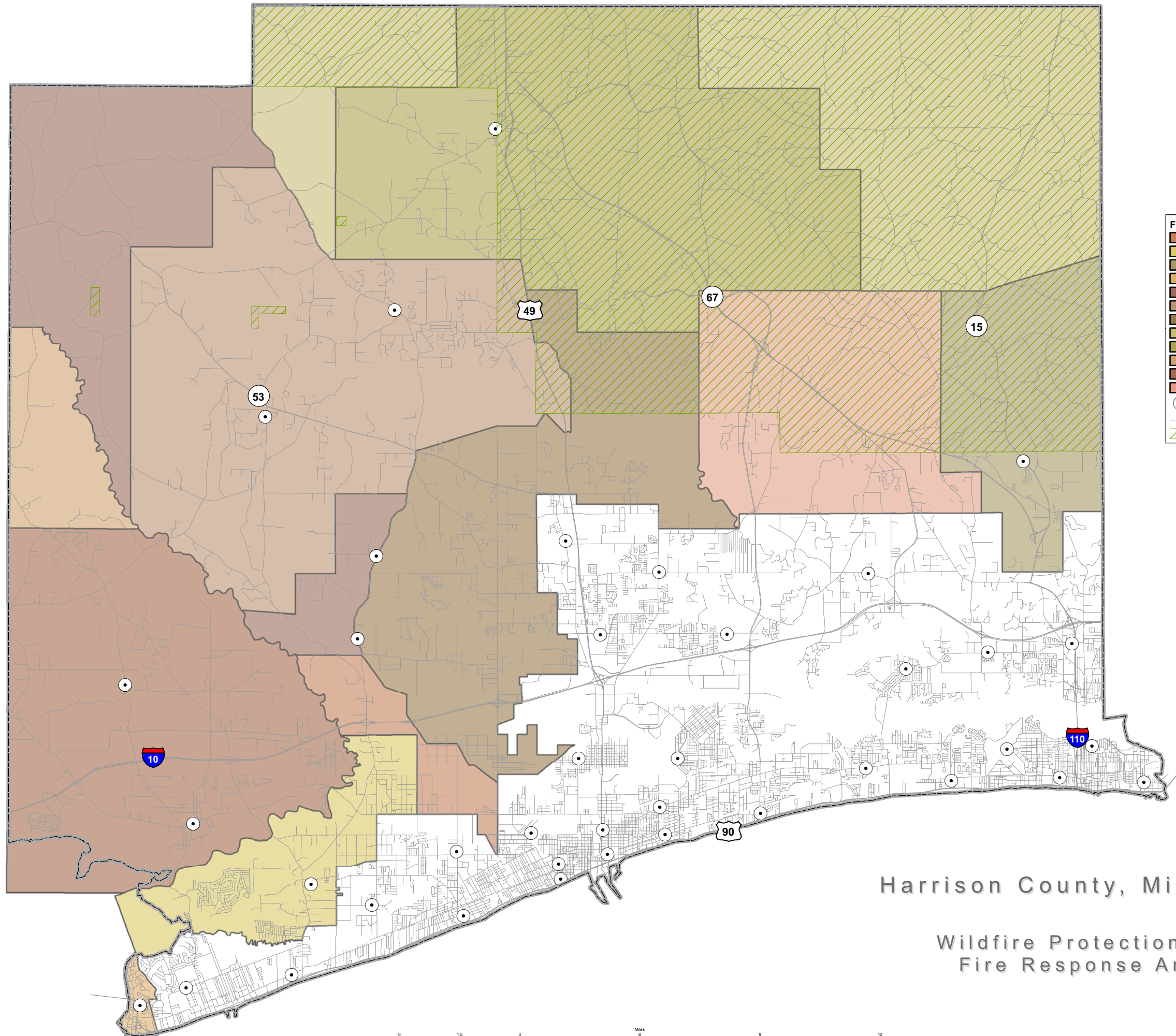
Fire Incident

- 2000
- 2001
- 2002
- 2003
- 2004
- 2005
- 2006

— Electric Transmission Line
 — Oil/Gas Pipeline
 — Road/Highway
 — Stream
 High Occurrence Area
 National Forest
 WUI

Harrison County, Mississippi

Wildfire Protection Plan High Occurrence Wildfire Areas

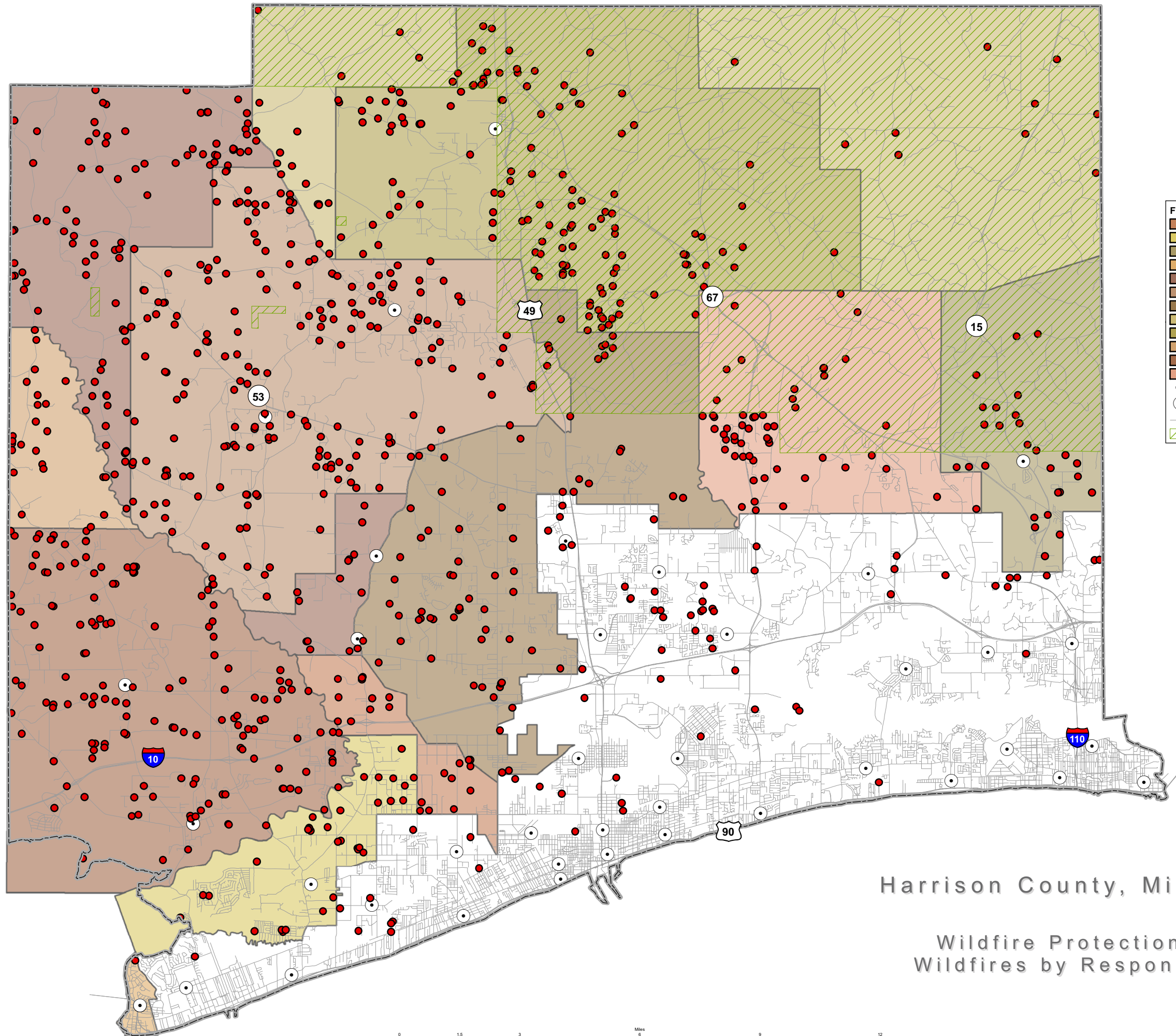


Fire District

- Cuevas
- Cuevas Grade
- East Harrison
- Henderson Point
- Lizana
- Lizana Grade
- Orange Grove
- Saucier
- Saucier Grade
- West Harrison
- West Harrison Grade
- Woolmarket
- Fire Department
- Road/Highway
- National Forest

Harrison County, Mississippi

Wildfire Protection Plan
Fire Response Areas



Fire District

- Cuevas
- Cuevas Grade
- East Harrison
- Henderson Point
- Lizana
- Lizana Grade
- Orange Grove
- Saucier
- Saucier Grade
- West Harrison
- West Harrison Grade
- Woolmarket
- All Fires 2000 -2006
- Fire Department
- Road/Highway
- National Forest

Harrison County, Mississippi

Wildfire Protection Plan
Wildfires by Response Area