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Community Wildfire Protection Plan An Action Plan for Wildfire Mitigation and Conservation of Natural Resources Berrien County, Georgia



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Appended Documents:

Berrien County Southern Wildfire Risk Assessment Summary Report

Berrien County Wildfire Pre-Suppression Plan

NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

Preface

The extreme weather conditions that are conducive to wildfire disasters (usually a combination of extended drought, low relative humidity and high winds) can occur in this area of Georgia as infrequently as every 10-15 years. This is not a regular event, but as the number of homes that have been built in or adjacent to forested or wildland areas increases, it can turn a wildfire under these weather conditions into a major disaster. Wildfires move fast and can quickly overwhelm the resources of even the best equipped fire department. Advance planning can save lives, homes and businesses.

This Community Wildfire Protection Plan (CWPP) includes a locally assessed evaluation of the wildland urban interface areas of the county, looking at the critical issues regarding access to these areas, risk to properties from general issues such as building characteristics and "firewise" practices and response from local firefighting resources. It further incorporates a locally devised action plan to mitigate these risks and hazards though planning, education and other avenues that may become available to address the increasing threat of wildland fire. The CWPP does not obligate the county financially in any way, but instead lays a foundation for improved emergency response if and when grant funding is available to the county.

The Plan is provided at no cost to the county and can be very important for county applications for hazard mitigation grant funds through the National Fire Plan, FEMA mitigation grants and Homeland Security. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities (counties) that seek grants from the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

This plan will:

- Enhance public safety
- Raise public awareness of wildfire hazards and risks
- Educate homeowners on how to reduce home ignitability
- Build and improve collaboration at multiple levels

The public does not have to fall victim to this type of disaster. Homes (and communities) can be designed, built and maintained to withstand a wildfire even in the absence of fire equipment and firefighters on the scene. It takes planning and commitment at the local level before the wildfire disaster occurs and that is what the Community Wildfire Protection Plan is all about.

I. OBJECTIVES

The mission of the following report is to set clear priorities for the implementation of wildfire mitigation in Berrien County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will protect this community and its essential infrastructure. It also includes a plan for wildfire suppression. Specifically, the plan includes community-centered actions that will:

- Educate citizens on wildfire, its risks, and ways to protect lives and properties,
- Support fire rescue and suppression entities,
- Focus on collaborative decision-making and citizen participation,
- Develop and implement effective mitigation strategies, and
- Develop and implement effective community ordinances and codes.

II. COMMUNITY COLLABORATION

The core team convened on September 20th, 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

Berrien County EMA
Berrien County Fire Departments
Nashville City Government
Berrien County Government
Georgia Forestry Commission

It was decided to conduct community assessments on the basis of the individual fire districts in the county. The chiefs of the various fire departments in the county assessed the selected areas and reconvened on November 10th, 2011 for the purpose of completing the following:

Risk Assessment Assessed wildfire hazard risks and prioritized mitigation actions

Fuels Reduction Identified strategies for coordinating fuels treatment

projects

Structure Ignitability Identified strategies for reducing the ignitability of

structures within the Wildland interface

Emergency Management Forged relationships among local government and fire

districts and developed/refined a pre-suppression plan

Education and Outreach Developed strategies for increasing citizen awareness and

action and to conduct homeowner and community leader

workshops.

III. COMMUNITY BACKGROUND & WILDFIRE HISTORY

Background

Berrien County, in southwest Georgia, was formed from parts of Coffee, Irwin, and Lowndes counties in February 1856. Berrien is Georgia's 116th county, with an area of 452 square miles. The county was named for John Macpherson Berrien, a Savannah lawyer who served variously as a judge (with a stint on the Supreme Court of Georgia), a state senator, a U.S. senator, and the attorney general under U.S. president Andrew Jackson. In the War of 1812 (1812-15) he was captain of the Georgia Hussars, a volunteer company from Savannah. He was also the first president of the Georgia Historical Society.

The county seat of Berrien is Nashville, incorporated in 1892 and the site of the county courthouse, which was built in 1898. Other incorporated towns in the county are Alapaha, Enigma, and Ray City.

Alapaha was incorporated in 1881 on the site of a Seminole village with the same name. Its city hall is located in the old Alapaha Station, the former depot for the now defunct Brunswick and Albany Railroad. Some believe that Alapaha was the Creek word for "other side"; others believe it was the word Timucuan Indians used for "bear." The Alapaha Station Celebration occurs the second weekend of each November.

Enigma was incorporated in 1906. Histories of the town's name are apocryphal, and so as one source opined, the name remains an enigma. The Georgia writer Harry Crews used Enigma as the setting for his first novel, *The Gospel Singer* (1968).

Ray City was incorporated in 1909 as Ray's Mill. The white settlement dates to 1863, when locals knew it as Rays Pond. The current name was adopted in 1915, after the town was moved to the railroad junction.

Informally, Berrien calls itself the "Bell Pepper Capital of the World," and the economy of the county is primarily agricultural, concentrating on tobacco, corn, soybeans, peanuts, cotton, vegetables, hogs, beef, and forest products. One of Georgia's first post roads opened in Berrien County in 1823 to enable residents to send their crops to Florida. A fifty-acre industrial park is located just east of Nashville.

Four buildings in Berrien County are on the National Register of Historic Places: the courthouse, the Alapaha Colored School, the Old Berrien County Jail, and the William G. Harrison/Eulalie Taylor House. The Alapaha Colored School was the only school for African American children in the northern part of the county from 1924 through 1953. Unusual in rural Georgia at the time for its size (it held four classrooms, rather than the usual one), the two-story, wood-frame building is one of a few still standing in the state. The classrooms accommodated eleven coeducational grades. The school closed in 1954 when all of Berrien County's African American schools were consolidated into Nashville schools. Thereafter, the building served as classroom space for World War II (1941-45) veterans taking General Education Development, or GED, classes and as a Masonic lodge; since 2002 it has housed the Alapaha Library and Museum.

The Old Berrien County Jail, located in Nashville, is also known as the Berrien Historical

Building and Agricultural Museum. The William G. Harrison/Eulalie Taylor House on Bartow Street in Nashville was built in the early twentieth century by the architect William G. Harrison and now holds law offices.

A state-supported park, the Paradise Public Fishing Area, is also located in the county. Its 1,060 acres include numerous lakes and ponds, making it attractive for outdoor recreation of all kinds, including fishing and picnicking.

The population, according to the 2010 U.S. census, is 19,286, an increase from the 2000 population of 16,235.

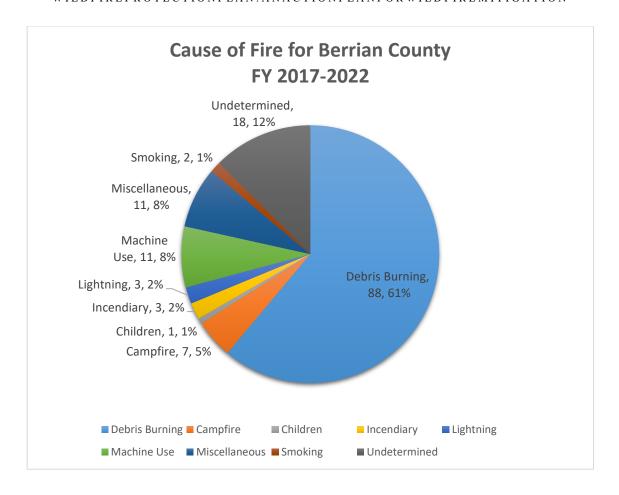
Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia

Wildfire History

Berrien County located in south central Georgia, with a large agricultural presence, is still almost 60% forested. Perhaps with the exception of the large blocks of woodlands in the flatwoods northeast of Nashville, there are homes and communities scattered throughout the county. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county even on the edges of the incorporated cities.

Berrien County is protected by organized Volunteer fire departments in the cities of Nashville, Enigma, Alapaha and Ray City along with three departments in the unincorporated area, New Lois and East and West Berrien. The Georgia Forestry Commission maintains a county protection unit located on Us Hwy 129 six miles north of Nashville near the center of the county to respond to wildfires throughout the county. The incorporated towns are serviced by pressurized water systems with hydrants available.

Over the past 54 years, Berrien County has averaged 81 reported wildland fires per year, burning an average of 391 acres per year. Using more recent figures over the past 10 years, this number has decreased only slightly to an average of 56 fires per year burning on average 354 acres annually. While the average number of wildfires annually has decreased by about 30% the average number of acres burned has decreased by only 10%.

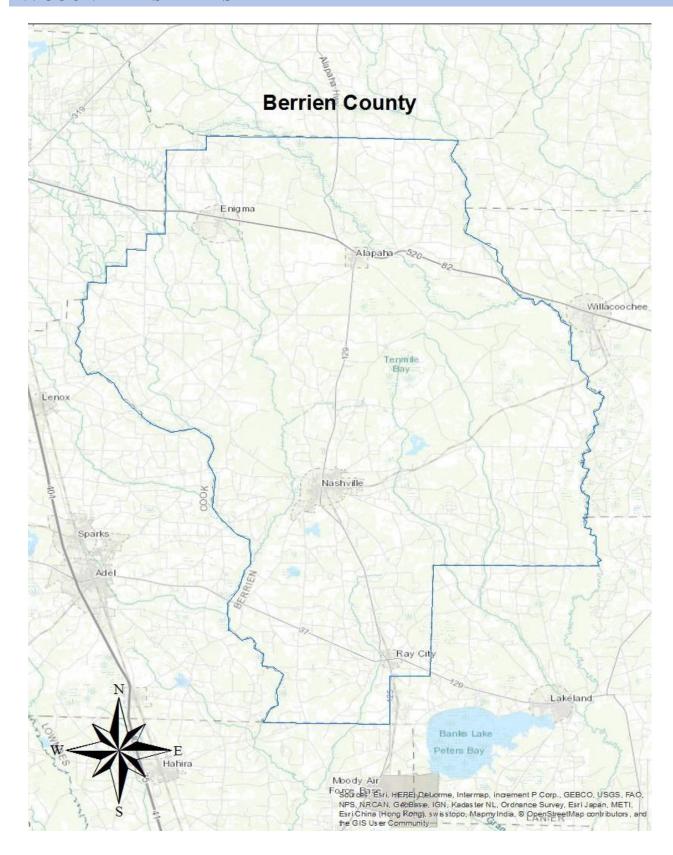


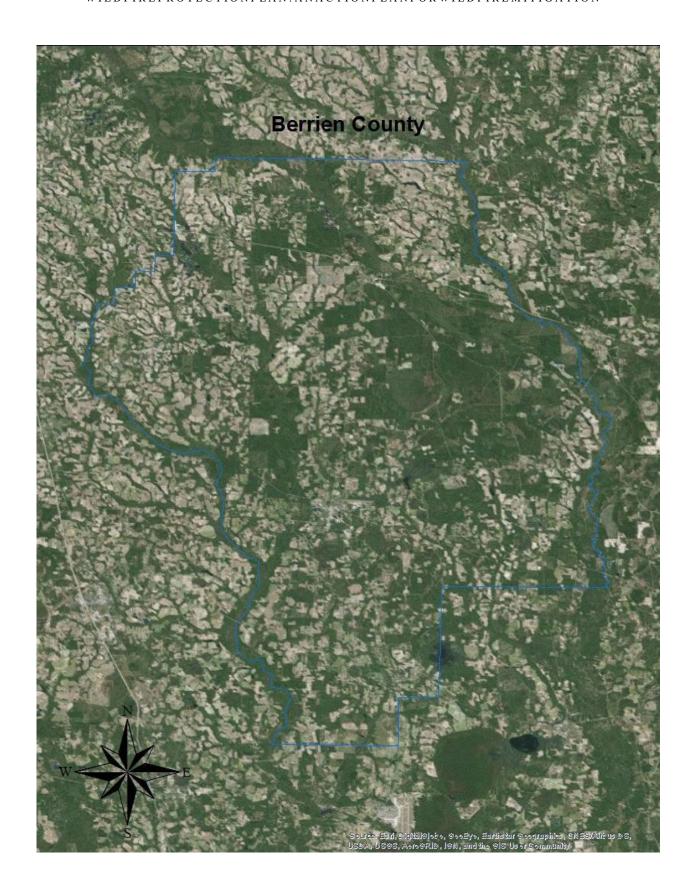
During FY 2017-2022 the leading cause, escaped Debris Burning, accounted for 61% of all wildfires. Undetermined fires accounted for 12%, followed by Machine Use and Miscellaneous Fires at 8% each.

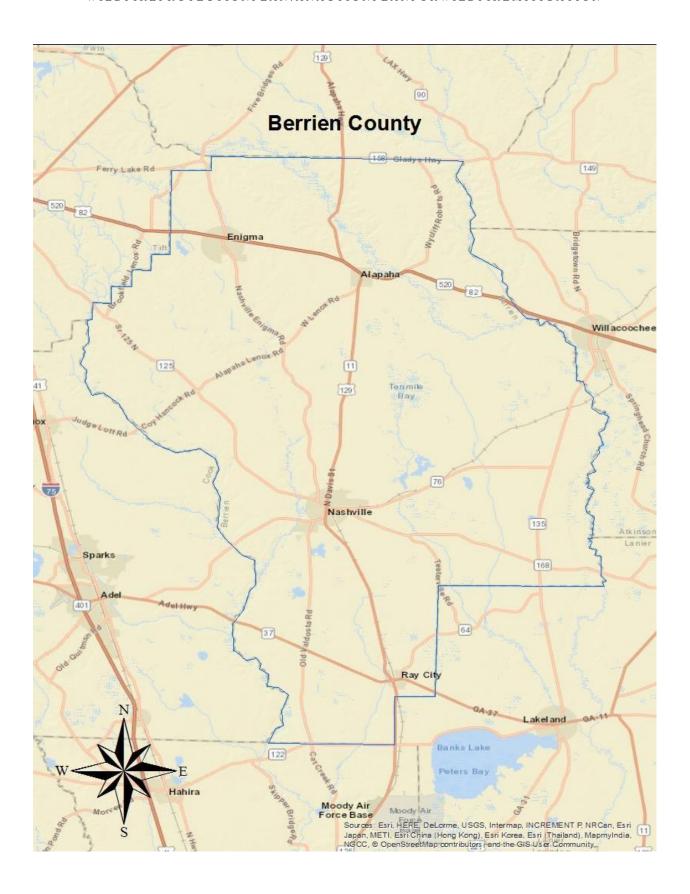
A chart on the following page, outlines the number of fires, and the amount of acres burned for this past year (2022) in Berrien County. It also specifies fire incident averages, as well as average acres burned for the past five years.

County: Berrien Year: 2022 Generate List					
Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
<u>Campfire</u>	1		8.70	1.40	4.05
Debris: Ag Fields, Pastures, Orchards, Etc	2		6.56	1.20	1.76
Debris: Construction Land Clearing	0		0.00	0.40	0.53
Debris: Escaped Prescribed Burn	4		79.32	4.20	37.18
Debris: Household Garbage	0		0.00	0.80	1.27
Debris: Residential, Leafpiles, Yard, Etc	6		11.43	3.00	5.79
Debris: Site Prep - Forestry Related	0		0.00	1.00	2.08
<u>Incendiary</u>	1		14.78	0.80	5.73
<u>Lightning</u>	1		4.79	0.40	1.05
Machine Use	3		10.63	1.40	3.16
Miscellaneous: Cutting/Welding/Grinding	0		0.00	0.20	0.48
Miscellaneous: Other	0		0.00	0.80	3.51
Miscellaneous: Structure/Vehicle Fires	1		3.19	0.40	1.26
<u>Undetermined</u>	2		2.61	2.80	14.81
Totals for County: Berrien Year: 2022	21		142.01	18.80	82.64

IV. COUNTY BASE MAPS







V. COMMUNITY WILDFIRE RISK ASSESSMENT

The Wildland-Urban Interface

There are many definitions of the Wildland-Urban Interface (WUI), however from a fire management perspective it is commonly defined as an area where structures and other human development meet or intermingles with undeveloped wildland or vegetative fuels. As fire is dependent on a certain set of conditions, the National Wildfire Coordinating Group has defined the wildland-urban interface as a set of conditions that exists in or near areas of wildland fuels, regardless of ownership. This set of conditions includes type of vegetation, building construction, accessibility, lot size, topography and other factors such as weather and humidity. When these conditions are present in certain combinations, they make some communities more vulnerable to wildfire damage than others. This "set of conditions" method is perhaps the best way to define wildland-urban interface areas when planning for wildfire prevention, mitigation, and protection activities.

There are three major categories of wildland-urban interface. Depending on the set of conditions present, any of these areas may be at risk from wildfire. A wildfire risk assessment can determine the level of risk.

- 1. "Boundary" wildland-urban interface is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.
- 2. "Intermix" wildland-urban interface areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.
- **3.** "Island" wildland-urban interface, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands.

(courtesy Fire Ecology and Wildfire Mitigation in Florida 2004)



Wildland Urban Interface (WUI) is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels.

Wildland Urban Interface Hazards

Firefighters in the wildland urban interface may encounter hazards other than the fire itself, such as hazardous materials, utility lines and poor access.

Hazardous Materials

• Common chemicals used around the home may be a direct hazard to firefighters from a flammability, explosion potential and/or vapors or off gassing. Such chemicals include paint, varnish and other flammable liquids, fertilizer, pesticides, cleansers, aerosol cans, fireworks, batteries and ammunition. In addition, some common household products such as plastics may give off very toxic fumes when they burn. Stay out of smoke from burning structures and any unknown sources such as trash piles.

Illicit Activities

 Marijuana plantations or drug production labs may be found in the wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered.

Propane Tanks

 Both large (household size) and small (gas grill size) liquefied propane gas (LPG) tanks can present hazards to firefighters, including explosion. See the "LPG Tank Hazards" discussion for details

Utility Lines

• Utility Lines may be located above and below ground and may be cut or damaged by tools or equipment. Don't spray water on utility lines or boxes.

Septic Tanks and Fields

 Below ground structures may not be readily apparent and may not support the weight of engines or other equipment.

New Construction Materials

• Many new construction materials have comparatively low melting points and may "off gas" which is extremely hazardous vapors. Plastic decking materials that resemble wood are becoming more common and may begin softening and losing structural strength at 180 degrees F, though they normally do not sustain combustion once direct flame is removed. However, if they continue to burn they exhibit the characteristics of flammable liquids.

Pets and Livestock

Pets and livestock may be left when residents evacuate and will likely be highly stressed
making them more inclined to bite and kick. Firefighters should not put themselves at
risk to rescue pets or livestock.

Evacuation Occurring

• Firefighters may be taking structural protect actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property and firefighters may need to disengage from fighting fire to contact law enforcement officers for assistance. In most jurisdictions firefighters do not have the authority to force evacuations. Firefighters should not put themselves at risk trying to protect someone who will not evacuate!

Limited Access

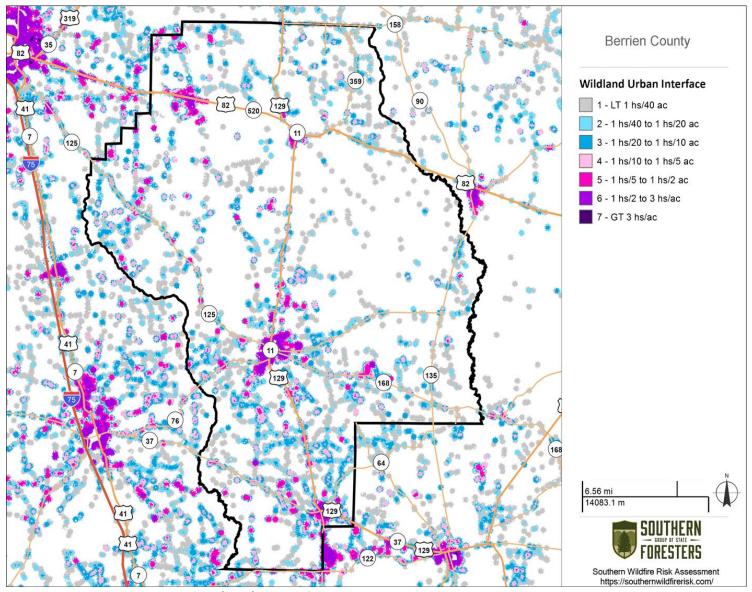
 Narrow one-lane roads with no turn around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized up and an evacuation plan for all emergency personnel should be developed. The wildland fire risk assessment conducted in 2011 by the Berrien County Fire Departments identified a number of hazards and risks to communities in the wildland urban interface. The risk assessment instrument used to evaluate wildfire hazards to Berrien County's WUI was the Hazard and Wildfire Risk Assessment Checklist. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard's identified for Berrien County:

- Unpaved roads and private driveways
- Narrow roads without drivable shoulders and with overhanging trees
- Short or inadequate culverts leading to private drives
- Dead end roads lacking turnarounds
- Minimal defensible space around structures
- Homes with wooden siding
- Unmarked septic tanks in yards
- Lack of pressurized or non-pressurized water systems available
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- Lack of enforcement of addressing ordinance
- High occurrence of wildfires in the several locations
- High Density Mobile Home Parks
- Lack of fire proof skirting on mobile homes and raised housing.

VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARDS MAPS

The Southern Wildfire Risk Assessment tool, developed by the Southern Group of State Foresters, was released to the public in July 2014. This tool allows users of the Professional Viewer application of the Southern Wildfire Risk Assessment (SWRA) web Portal (SouthWRAP) to define a specific project area and summarize wildfire related information for this area. A detailed risk summary report is generated using a set of predefined map products developed by the Southern Wildfire Risk Assessment project which have been summarized explicitly for the user defined project area. A risk assessment summary was generated for Berrien County. The SouthWRAP (SWRA) products included in this report are designed to provide the information needed to support the following key priorities:

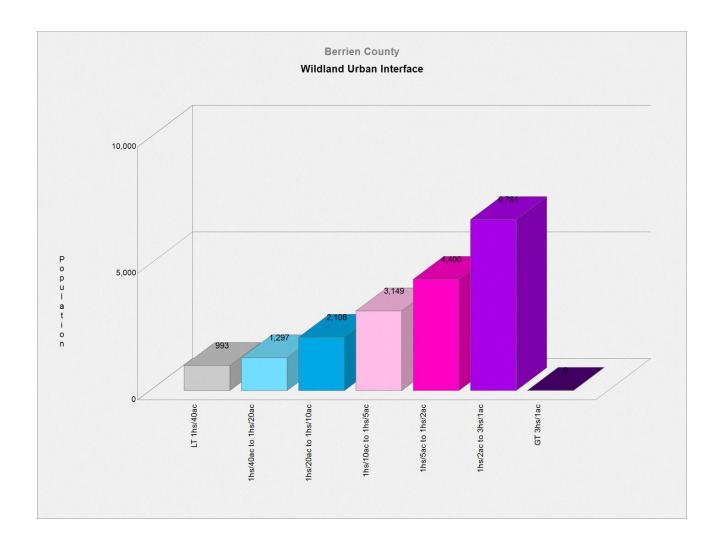
- Identify areas that are most prone to wildfire
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning
- Provide the information necessary to justify resource, budget and funding requests
- Allow agencies to work together to better define priorities and improve emergency response, particularly across jurisdictional boundaries
- Define wildland communities and identify the risk to those communities
- Increase communication and outreach with local residents and the public to create awareness and address community priorities and needs
- Plan for response and suppression resource needs
- Plan and prioritize hazardous fuel treatment

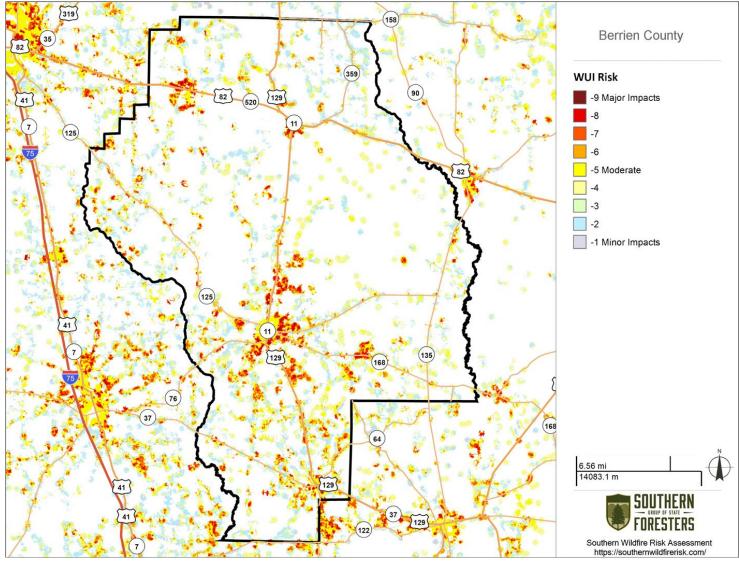


The Wildland Urban Interface (WUI) layer reflects housing density depicting where humans and their structures meet or intermix with wildland fuels.

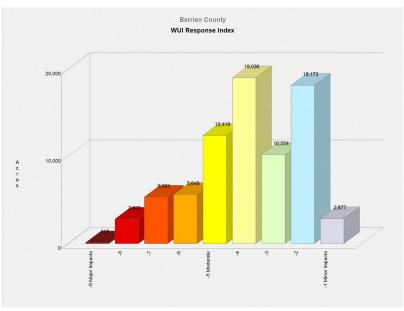
WUI housing density is categorized based on the standard Federal Register and U.S. Forest Service SILVIS data set categories, long considered a de facto standard for depicting WUI. However, in the SWRA WUI data the number of housing density categories is extended to provide a better gradation of housing distribution to meet specific requirements for fire protection planning activities. While units of the actual data set are in *houses per sq. km.*, the data is presented as the *number of houses per acre* to aid with interpretation and use by fire planners in the South.

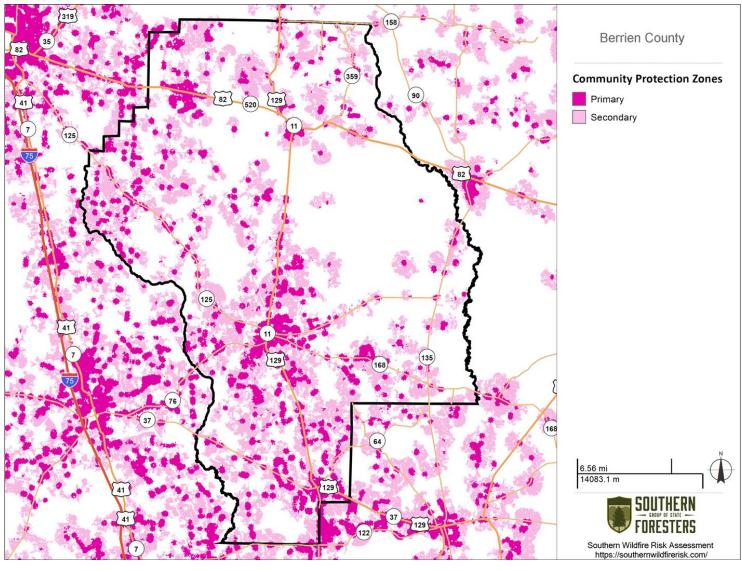
Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
LT 1hs/40ac	993	5.3 %	47,689	47.2 %
1hs/40ac to 1hs/20ac	1,297	6.9 %	18,509	18.3 %
1hs/20ac to 1hs/10ac	2,108	11.3 %	15,506	15.3 %
1hs/10ac to 1hs/5ac	3,149	16.8 %	10,603	10.5 %
1hs/5ac to 1hs/2ac	4,400	23.5 %	5,994	5.9 %
1hs/2ac to 3hs/1ac	6,761	36.1 %	2,752	2.7 %
GT 3hs/1ac	0	0.0 %	0	0.0 %
Tota	18,708	100.0 %	101,053	100.0 %



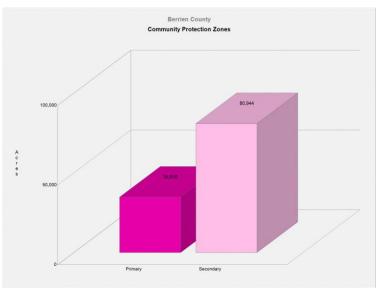


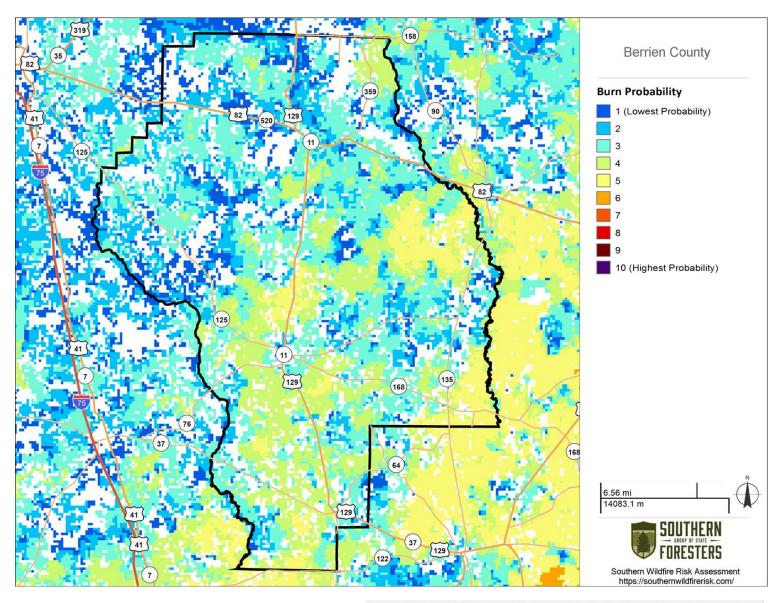
The Wildland Urban Interface (WUI) Risk Index layer is a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the Wildland Urban Interface and rural areas is key information for defining potential wildfire impacts to people and homes.





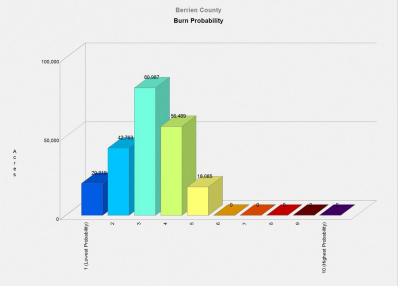
Community Protection Zones (CPZ) represent those areas considered highest priority for mitigation planning activities. CPZs are based on an analysis of the Where People Live housing density data and surrounding fire behavior potential. Rate of Spread data is used to determine the areas of concern around populated areas that are within a 2-hour fire spread distance. This is referred to as the Secondary CPZ.

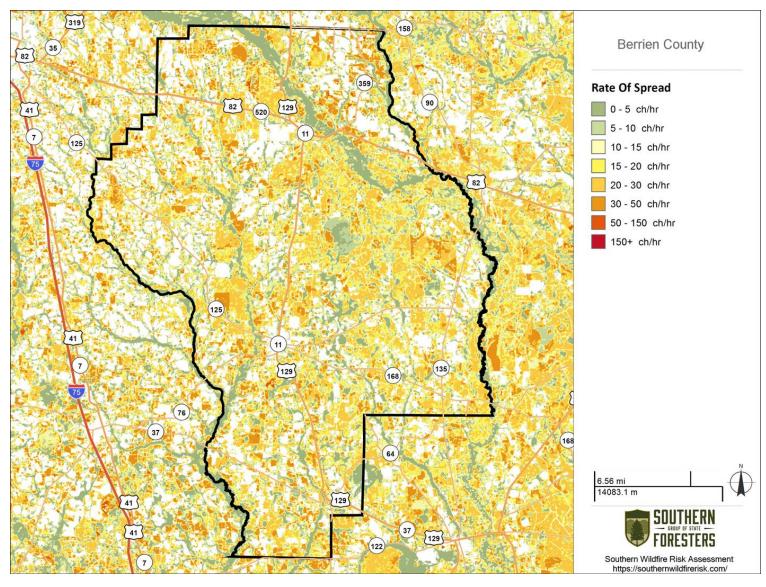




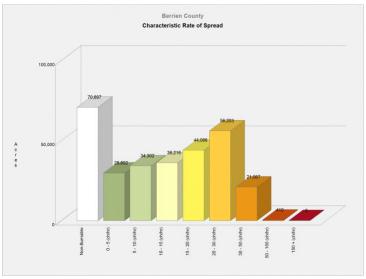
The Burn Probability (BP) layer depicts the probability of an area burning given current landscape conditions, percentile weather, historical ignition patterns and historical fire prevention and suppression efforts.

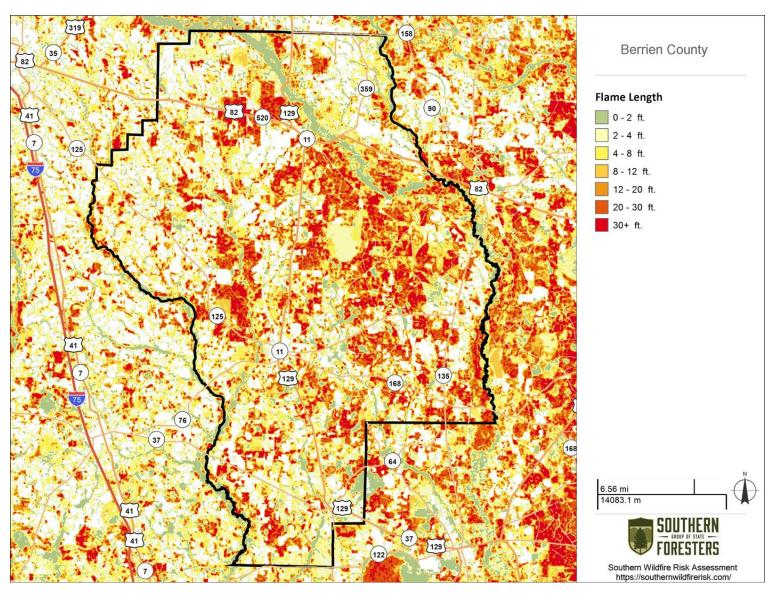




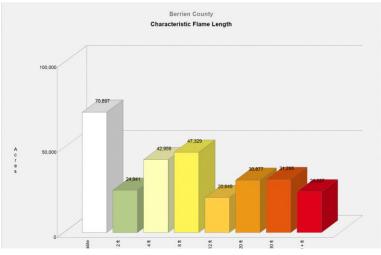


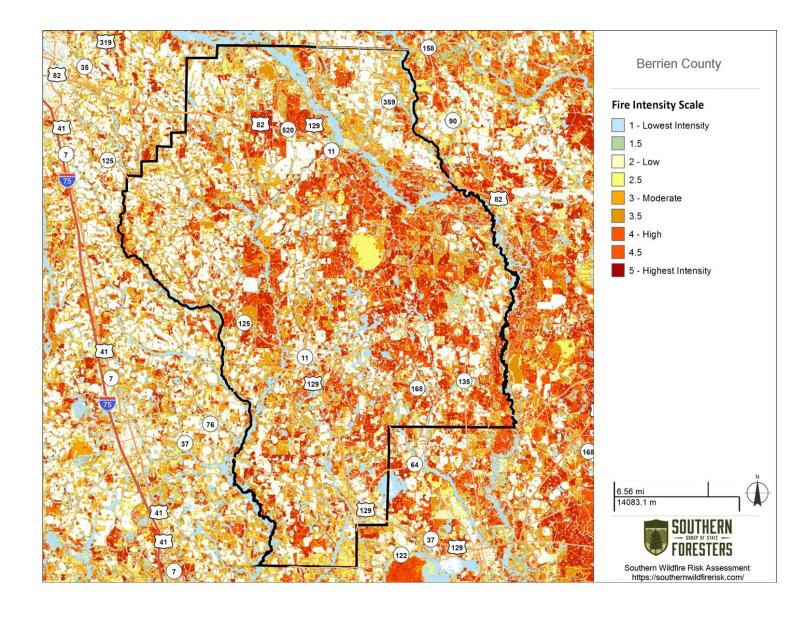
Characteristic Rate of Spread is the typical or representative rate of spread of a potential fire based on a weighted average of four percentile weather categories. Rate of spread is the speed with which a fire moves in a horizontal direction across the landscape, usually expressed in chains per hour (ch/hr) or feet per minute (ft/min). For purposes of the Southern Wildfire Risk Assessment, this measurement represents the maximum rate of spread of the fire front. Rate of Spread is the metric used to derive the Community Protection Zones.





Characteristic Flame Length is the typical or representative flame length of a potential fire based on a weighted average of four percentile weather categories. Flame Length is defined as the distance between the flame tip and the midpoint of the flame depth at the base of the flame, which is generally the ground surface. It is an indicator of fire intensity and is often used to estimate how much heat the fire is generating. Flame length is typically measured in feet (ft). Flame length is the measure of fire intensity used to generate the response index outputs for the SWRA.





Characteristic Fire Intensity Scale (FIS) specifically identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist based on a weighted average of four percentile weather categories. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consist of 5 classes where the order of magnitude between classes is tenfold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities. Refer to descriptions below.

• Class 1, Very Low:

Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.

• Class 2, Low:

Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.

• Class 3, Moderate:

Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.

• Class 4, High:

Large Flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.

• Class 5, Very High:

Very large flames up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire-induced winds. Indirect attack marginally effective at the head of the fire. Great potential for harm or damage to life and property.

VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As South Georgia continues to see increased growth from other areas seeking less crowded and warmer climes, new development will occur more frequently on forest and wildland areas. Berrien County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

Over the past 20 years, much has been learned about how and why homes burn during wildland fire emergencies. Perhaps most importantly, case histories and research have shown that even in the most severe circumstances, wildland fire disasters can be avoided. Homes can be designed, built and maintained to withstand a wildfire even in the absence of fire services on the scene. The national Firewise Communities program is a national awareness initiative to help people understand that they don't have to be victims in a wildfire emergency. The National Fire Protection Association has produced two standards for reference: NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

In 2013 Georgia Legislature adopted the International Wildland Urban Interface Code. This code, created in 2012, is approved for Georgia counties to adopt as may be needed to minimize risk in high risk areas. The code is available through the International Code Council http://shop.iccsafe.org/2015-_international--_wildland--_urban--_interface--_coder--_soft--_cover--_41972.html

When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

The following recommendations were developed by the Berrien County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county and city officials. A priority order was determined based on which mitigation projects would best reduce the hazard of wildfire in the assessment area.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Primary Protection for Community and Its Essential Infrastructure				
Treatment Area	Treatment Types	Treatment Method(s)		
1. All Structures	Create minimum of 30-feet of defensible space**	Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.		
2. Applicable Structures	Reduce structural ignitability**	Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.		
3. Community Clean-up Day National Wildfire Preparedness Day (First Saturday in May)	Cutting, mowing, pruning**	Cut, prune, and mow vegetation in shared community spaces.		
4. Driveway Access	Right of Way Clearance	Maintain vertical and horizontal clearance for emergency equipment. See that adequate lengths of culverts are installed to allow emergency vehicle access.		
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds. Work with road department to improve standards for new culvert installation and replacement sufficient to allow access of firefighting equipment.		

6. Codes and Ordinances	Examine existing codes and ordinances. International Wildland Urban Interface Code	Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns Review Subdivision and development ordinances for public safety concerns. Also review density standards for mobile home parks and require fireproof skirting. Enforce uniform addressing ordinance.			
Proposed Community Wildla	and Fuel Reduction Prio	prities			
Treatment Area	Treatment Types	Treatment Method(s)			
1. Adjacent WUI Lands	Reduce hazardous fuels	Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas. Seek grant for mowing or prescribed burning in WUI areas.			
2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.			
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.			
Proposed Improved Community Wildland Fire Response Priorities					
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Locate additional dry hydrants or drafting locations needed. Locate and pre-clear helicopter dip sites. Map location of dry hydrants.			

		Wildland hand tools, Indian Pumps and lightweight Wildland PPE Gear.	
3. Water Handling	Equipment	Investigate need for additional tanker trucks and skid unit drafting equipment	
4. Response	Equipment	Investigate funding for Brush trucks.	
5. Road Names	Road Signage	Timely replacement of missing road signs. "Dead End" or "No Outlet" Tags on Road Signs	
6. Personnel	Training	Obtain Wildland Fire Suppression training for Fire Personnel.	

^{**}Actions to be taken by homeowners and community stakeholders

Proposed Education and Outreach Priorities

1. Conduct "How to Have a Firewise Home" Workshop for Berrien County Residents

Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Target local schools, community groups and local senior centers.

Distribute materials promoting firewise practices and planning through local community and governmental meetings.

2. Conduct "Firewise" Workshop for Community Leaders

Arrange for GFC Firewise program to work with local community leaders and governmental officials on the importance of "Firewise Planning" in developing ordinances and codes as the county as the need arises. Identify "Communities at Risk" within the county for possible Firewise community recognition.

3. Spring Clean-up Event

Conduct clean-up event every spring involving the Georgia Forestry Commission, Berrien County Fire Departments and community residents. National Wildfire Preparedness Day, sponsored by the National Fire Protection Association, is held annually on the first Saturday in May. Set up information table with educational materials and refreshments. Initiate the event with a morning briefing by GFC Firewise coordinator and local fire officials detailing plans for the day and safety precautions. Activities to include the following:

- · Clean flammable vegetative material from roofs and gutters
- Trim shrubs and vines to 30 feet away from structures
- Trim overhanging limbs
- Clean hazardous or flammable debris from adjacent properties

Celebrate the work with a community cookout, with Community officials, GFC and Berrien County Fire Departments discussing and commending the work accomplished.

4. Informational Packets

Develop and distribute informational packets to be distributed by Building inspections, realtors and insurance agents. Included in the packets are the following:

- Be Firewise Around Your Home
- Firewise Guide to Landscape and Construction
- Firewise Communities USA materials
- · Ready Set Go publications
- Fire Adapted Community information

5. Wildfire Protection Display

Create and exhibit a display for the Fourth of July, Alapaha Station Festival, Career Day at schools and other local events. Display can be independent or combined with the Georgia Forestry Commission display.

Hold Fire Safety Festival at individual Fire Stations to promote Community Firewise Safety and develop community support and understanding of local fire departments and current issues.

6. Press

Invite the local news media to community "Firewise" functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Berrien County. Utilize social media when possible.



Prescribed burning of woodlands is the best management practice to reduce hazardous fuel accumulation. The Georgia Forestry Commission can provide a prescribed burning plan, establish fire breaks, and can also provide equipment standby and assist with burning when personnel are available.

VIII. ACTION PLAN

Roles and Responsibilities

The following roles and responsibilities have been developed to implement the action plan:

Role	Responsibility			
Hazardous Fuels and Structural Ignitability Reduction				
Berrien County WUI Fire Council	Create this informal team or council comprised of concerned residents, officials from Berrien County Fire Departments and Georgia Forestry Commission along with the County EMA Director. Meet periodically to review progress towards mitigation goals, appoint and delegate special activities, work with federal, state, and local officials to assess progress and develop future goals and action plans. Work with residents to implement projects and firewise activities.			
Key Messages to focus on	 Defensible Space and Firewise Landscaping Debris Burning Safety Firewise information for homeowners Prescribed burning benefits 			

Communications objectives	 Create public awareness for fire danger and defensible space issues Identify most significant human cause fire issues Enlist public support to help prevent these causes Encourage people to employ fire prevention and defensible spaces in their communities. 	
Target Audiences	 Homeowners Forest Landowners and users Civic Groups School Groups 	
Methods Spring Clean-up Day (National V	 News Releases Radio and TV PSA's for area stations and cable access channels Personal Contacts Key messages and prevention tips Visuals such as signs, brochures and posters Vildfire Preparedness Day)	
Event Coordinator	Coordinate day's events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.	
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.	
Publicity Coordinator	Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.	
Work Supervisor	Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, Berrien County Fire Departments and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local city and county officials, develop safety protocol. Supervise work and monitor activities for safety the day of the event.	

Funding Needs

The following funding is needed to implement the action plan:

Project	Estimated Cost	Potential Funding Source(s)
Create a minimum of 30 feet of defensible space around structures	Varies	Residents will supply labor and fund required work on their own properties.
2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material.	Varies	Residents will supply labor and fund required work on their own properties.
3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.	No Cost	To be adopted by city and county governments.
4. Spring Cleanup Day	Varies	Community Business Donations.
5. Fuel Reduction Activities	\$35/acre	FEMA & USFS Grants

Assessment Strategy

To accurately assess progress and effectiveness for the action plan, the Berrien County WUI Fire Council will implement the following:

- Annual wildfire risk assessment will be conducted to re-assess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning, and clearing of defensible space) will be incorporated into an annual renewal of the original action plan.
- Mitigation efforts that could not be funded in the requested year will be incorporated into the annual renewal of the original action plan.
- Continuing educational and outreach programs will be conducted and assessed for effectiveness. Workshops will be evaluated based on attendance and post surveys that are distributed by mail 1 month and 6 months following workshop date.
- The Berrien County WUI Council will publish an annual report detailing mitigation projects initiated and completed, progress for ongoing actions, funds received, funds spent, and in-kind services utilized. The report will include a "state of the community" section that critically evaluates mitigation progress and identifies areas for improvement. Recommendations will be incorporated into the annual renewal of the action plan.
- An annual survey will be distributed to residents soliciting information on individual
 mitigation efforts on their own property (e.g., defensible space). Responses will be
 tallied and reviewed at the next Berrien County WUI Council meeting. Needed actions
 will be discussed and delegated.

Ultimately it is our goal to help the communities by identifying the communities threatened with a high risk to wildfire and educate those communities on methods to implement on reducing those risks.

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. An agreed-upon schedule for meeting to review accomplishments, solve problems, and plan for the future should extend beyond the scope of this plan. Without this follow up this plan will have limited value.

IX. MITIGATION ASSISTANCE & GRANT FUNDING

Community Protection Grant: US Forest Service sponsored prescribed fire program. Communities with "at-risk" properties that lie within ten miles of a National Forest, National Park Service or Bureau of Land Management tracts may apply with the Georgia Forestry Commission to have their land prescribe burned free-of-charge. Forest mastication, where it is practical with Georgia Forestry Commission equipment, is also available under this grant program.

FEMA Mitigation Policy MRR-2-08-01: through GEMA – Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Program (PDM).

- 1. To provide technical and financial assistance to local governments to assist in the implementation of long term, cost effective hazard mitigation accomplishments.
- 2. This policy addresses wildfire mitigation for the purpose of reducing the threat to allrisk structures through creating defensible space, structural protection through the application of ignition resistant construction and limited hazardous fuel reduction to protect life and property.
- 3. With a completed registered plan (addendum to the State Plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP funding if the county is declared under a wildfire disaster.

Georgia Forestry Commission: Plowing and prescribed burning assistance, as well as forest mastication, can be obtained from the GFC as a low-cost option for mitigation efforts.

The Georgia Forestry Commission Firewise Community Mitigation Assistance Grants – Nationally recognized Firewise Communities can receive up to \$5000 grants to help address potential wildfire risk reduction projects. Grant submission can be made through local Georgia Forestry Commission offices or your Regional Wildfire Prevention Specialist.

The International Association of Fire Chiefs (IAFC) and American International Group, Inc. (AIG) offer grants to assist local fire departments in establishing or enhancing their community fuels mitigation programs while educating members of the community about community wildfire readiness and encouraging personal action.

X. GLOSSARY

Community-At-Risk -A group of two or more structures whose proximity to forested or wildland areas places homes and residents at some degree of risk.

Critical Facilities – Buildings, structures or other parts of the community infrastructure that require special protection from an approaching wildfire.

CWPP – The Community Wildfire Protection Plan.

Defensible Space – The immediate landscaped area around a structure (usually a minimum of 30 ft.) kept "lean, clean and green" to prevent an approaching wildfire from igniting the structure.

Dry Hydrant - A non-pressurized pipe system permanently installed in existing lakes, ponds and streams that provides a suction supply of water to a fire department tank truck.

FEMA – The Federal Emergency Management Agency whose mission is to support our citizens and first responders to ensure that as a nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.

Fire Adapted Community – A community fully prepared for its wildfire risk by taking actions to address safety, homes, neighborhoods, businesses and infrastructure, forest, parks, open spaces, and other community assets.

Firewise Program -A national initiative with a purpose to reduce structural losses from wildland fires.

Firewise Community/USA – A national recognition program for communities that take action to protect themselves from wildland fire. To qualify a community must have a wildfire risk assessment by the Georgia Forestry Commission, develop a mitigation action plan, have an annual firewise mitigation/education event, have dedicated firewise leadership, and complete the certification application.

Fuels – All combustible materials within the wildland/urban interface or intermix including, but not limited to, vegetation and structures.

Fuel Modification – Any manipulation or removal of fuels to reduce the likelihood of ignition or the resistance to fire control.

Hazard & Wildfire Risk Assessment – An evaluation to determine an area's (community's) potential to be impacted by an approaching wildland fire.

Healthy Forests Initiative - Launched in August 2002 by President Bush (following passage of the Healthy Forests Restoration Act by Congress) with the intent to reduce the risks severe wildfires pose to people, communities, and the environment.

Home Ignition Zone (Structure Ignition Zone) - *Treatment area for wildfire protection. The* "zone" includes the structure(s) and their immediate surroundings from 0-200 ft. Mitigation – An action that moderates the severity of a fire hazard or risk.

National Fire Plan – National initiative, passed by Congress in the year 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future.

National Fire Protection Association (NFPA) - An international nonprofit organization established in 1896, whose mission is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education.

National Wildfire Preparedness Day – Started in 2014 by the National Fire Protection Association as a day for communities to work together to prepare for the approaching wildfire season. It is held annually on the first Saturday in May.

Prescribed Burning (prescribed fire) – The use of planned fire that is deliberately set under specific fuel and weather condition to accomplish a variety of management objectives and is under control until it burns out or is extinguished.

Ready, Set, Go - A program fire services use to help homeowners understand wildfire preparedness, awareness, and planning procedures for evacuation.

Southern Group of State Foresters – *Organization whose members are the agency heads of the forestry agencies of the 13 southern states, Puerto Rico and the Virgin Islands.*

Stakeholders—Individuals, groups, organizations, businesses or others who have an interest in wildland fire protection and may wish to review and/or contribute to the CWPP content.

Wildfire or Wildland Fire – An unplanned and uncontrolled fire spreading through vegetative fuels.

Wildland/Urban Interface - The presence of structures in locations in which the authority having jurisdiction (AHJ) determines that topographical features, vegetation, fuel types, local weather conditions and prevailing winds result in the potential for ignition of the structures within the area from flames and firebrands from a wildland fire (NFPA 1144, 2008).

XI. SOURCES OF INFORMATION

Publications/Brochures/Websites:

- FIREWISE materials can be ordered at www.firewise.org
- Georgia Forestry Commission www.georgiafirewise.org
- Examples of successful wildfire mitigation programs can be viewed at the website for National Database of State and Local wildfire Hazard Mitigation Programs sponsored by the U.S. Forest Service and the Southern Group of State Foresters www.wildfireprograms.com
- Information about a variety of interface issues (including wildfire) can be found at the USFS website for Interface South: www.interfacesouth.org
- Information on codes and standards for emergency services including wildfire can be found at www.nfpa.org
- Information on FEMA Assistance to Firefighters Grants (AFG) can be found at www.firegrantsupport.com
- Information on National Fire Plan grants can be found at http://www.federalgrantswire.com/national-fire-plan--rural-fire-assistance.html
- Southern Wildfire Risk Assessment website SouthWRAP www.SouthernWildfireRisk.com
- Fire Adapted Communities www.fireadapted.org
- Ready, Set, Go <u>www.wildlandfirersg.org</u>
- National Wildfire Preparedness Day www.wildfireprepday.org

Appended Documents:

Berrien County Southern Wildfire Risk Assessment Summary Report (SWRA)

All files that make up this plan are available in an electronic format from the Georgia Forestry Commission.



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