

# Community Wildfire Protection Plan An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

# **Baker County, Georgia**



August 2017

# **CONTENTS**

I. Executive Summary	3
II. Signature Page	4
III. Wildland/Urban Interface Fire Disasters	5
IV. Objective of the CWPP	6
V. Baker County History & Wildfire History	9
VI. County Base Maps	14
VII. What are "Communities at Risk"?	17
VIII. Southern Wildfire Risk Assessment & Risk Hazards Maps	19
IX. Mitigation & Action Plan	23
X. Grant Funding and Mitigation Assistance	29
XI. Glossary	30
XI. Sources of Information	32

# Attachments:

Baker County Southern Wildfire Risk Assessment Summary Report (SWRA)

## **Executive Summary**

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, the number of homes that have been built in or adjacent to forested or wildland areas, 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 includes an evaluation of the wildland fire susceptibility of wildland/urban interface "communities-at-risk", an analysis of fire service resources, a description of needed equipment and training, and an Action Plan to address the increasing threat of wildfire. 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.

#### The plan will:

- Enhance public safety
- Improve community sustainability
- Protect ecosystem health
- Raise public awareness of wildfire hazards and wildfire risk
- Educate landowners 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 engines and firefighters on the scene. It takes planning and commitment at the community level BEFORE the wildfire disaster occurs --- and that is what the Community Wildfire Protection Plan is all about.

# II. SIGNATURE PAGE

Connie Hobbs, Chairperson Baker County Board of County Commissioners	Date
Sherrie Bailey, County Manager Baker County	Date
Rachel Rish, EMA Director Baker County	Date
Andy Belinc, Fire Chief Baker County Fire & Rescue	Date
Christopher Cross, Chief Ranger Georgia Forestry Commission	Date

# III. WILDLAND/URBAN INTERFACE FIRE DISASTERS

Fire influenced and defined the landscape we call the United States, well before the arrival of the first Europeans. Scientists, in fact, think that fires started by lightning or Native Americans occurred over most of the Southeast every 3 to 7 years. These were typically low intensity fires (because of their frequency) which kept the forests open and "park-like" in appearance and prevented heavy accumulations of dense underbrush. When communities became well established across the South, wildfires began to impact public safety and had to be controlled. State forestry agencies became established between 1915 and 1928 and the landscape was generally segregated into communities (towns, cities or individual homes) and natural or wildland areas.

In the mid 1980's, following a new wave of development in what was previously forest or wildland areas, agencies across the country became aware of an increasingly common phenomena – wildfires were more and more frequently impacting communities . In 1985, a milestone year, over 1400 homes nationwide were lost to wildfire. The catastrophes became known as wildland/urban interface fires and occur when the fuel feeding the fire changes from natural vegetation (trees, shrubs and herbs) and begins to include manmade structures (homes, outbuildings and vehicles). Wildland/Urban Interface Fires can occur anywhere in the United States and can become major disasters when associated with extremes in weather (extended droughts, high winds, low relative humidity, etc.)

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 engines and firefighters on the scene. It takes planning and commitment at the community level BEFORE the wildfire disaster occurs --- and that is what the Community Wildfire Protection Plan is all about.



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

## IV. OBJECTIVE OF THE CWPP

The objective of this Community Wildfire Protection Plan (CWPP) is to improve public safety and reduce structural losses from wildfire in wildland/urban interface areas of Baker County.

The Wildland/Urban Interface is 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 edition).

There are three generally accepted types of interface areas:

- **1. "Boundary" wildland/urban interface** areas are characterized by development where groups of homes, subdivisions or other structures create a distinct and easily identified border with public or private wildlands, forests or parks.
- 2. "Intermix" wildland/urban interface areas are places where parcels of improved property and/or structures are scattered and interspersed within wildlands, forests or parks. Frequently, this is a subdivision that is not yet "built-out" with many undeveloped lots interspersed among occupied homes.
- **3. "Island" wildland/urban interface** (also called "occluded interface") are typically very small pockets of wildland or natural areas surrounded by development or even situated within an incorporated area. A park or greenspace within a city is an example of an island interface area.

This CWPP will provide Baker County with an evaluation of the wildland fire susceptibility of wildland/urban interface "communities-at-risk" and can be a valuable guide and action plan to address the increasing threat of wildfire. The plan will:

- Enhance public safety
- Improve community sustainability
- Protect ecosystem health
- Raise public awareness of wildfire hazards and wildfire risk
- Educate landowners on how to reduce home ignitability
- Build and improve collaboration at multiple levels

This Community Wildfire Protection Plan will be very important to County efforts to seek hazard mitigation grant funding through the National Fire Plan, FEMA mitigation grants, and others. 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.

The minimum requirements for a Community Wildfire Protection Plan as described in the HFRA are:

- Collaboration: A Community Wildfire Protection Plan must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.
- Prioritized Fuel Reduction: A Community Wildfire Protection Plan must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.
- Treatment of Structural ignitability: A Community Wildfire Protection Plan must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

This plan should be looked at as a working document (i.e.; a guide) for local, state and federal agencies to reach common wildfire protection goals. A CWPP committee should meet on a continuing basis from year to year to review accomplishments, discuss impediments, revise outdated portions of the CWPP and develop new, meaningful wildfire protection goals for Baker County.

#### **CWPP PLAN PARTICIPANTS**

The development of this plan was a collaborative effort for the people of Baker County. The individuals listed below made up the "CWPP Core Committee" and are responsible for much of the Plan's content.

#### **CWPP Core Committee**

Andy Belinc, Fire Chief, Baker County
Christopher Cross, Chief Ranger, Baker / Mitchell Unit

#### **Georgia Forestry Commission Representatives**

Christopher Cross, Chief Ranger
Harold Jackson, Ranger
Forest Jenson, Ranger
William Singleton, Ranger
Charles Watson, Ranger
Will Fell, CWPP Program Specialist
Jim Harrell, CWPP Program Specialist
Beryl Budd, Wildfire Prevention Specialist ( Revised 2017)

#### **Meeting Dates**

CWPP Core Committee Meeting: July, 7, 2009

The CWPP Core Committee contributed to the CWPP development by:

Initiation Agreed on the need to develop a Community Wildfire Protection Plan

Risk Assessment Assessed the wildfire hazard of "Communities-at-risk"

Fuels Reduction Identified and prioritized areas for fuel treatment projects

Structure Ignitability Identified strategies for reducing the ignitability of structures within the

wildland/urban interface

Emergency Response Updated and improved strategies for coordinated wildland fire response

Education and Outreach Outlined a public education initiative to increase citizen awareness of

residential wildfire protection (Firewise Communities Program))

#### **OTHER INTERESTED PARTIES**

It is important that a collaborative approach be taken in the development of a successful Community Wildfire Protection Plan. This means allowing for the involvement of multiple interested parties in the Core CWPP Committee that develops the CWPP and providing the opportunity for other interested stakeholders in the community (county) to review and comment on the CWPP. Collaboration is a requirement of the Healthy Forests Restoration Act.

During development of the Baker County CWPP, opportunities for collaboration were provided by:

- Major stakeholders were invited to participate as members of the CWPP Core Committee.
- A news release was placed in the local paper (Camilla Enterprise) on (June 30, 2010) explaining
  the objectives of the Baker County CWPP, the planning process and the procedure for obtaining
  a draft copy for review and/or comment.

# **V. BAKER COUNTY HISTORY & WILDFIRE HISTORY**



Baker County, in southwest Georgia, was formed from Early County in 1825. Before the Civil War (1861-65) parts of Baker in turn formed all or parts of Calhoun, Dougherty, Miller, and Mitchell counties. The county was named for Colonel John Baker, a Puritan and hero of the Revolutionary War (1775-83).

In 1828 the settlement of Byron (near Albany) was designated the first county seat, but residents complained that the location was too close to

the Lee County border. Subsequently, the county seat was moved to Newton in 1831. Newton, named for another Revolutionary War hero, Sergeant John Newton, was incorporated in 1872.

One of the last battles in the Creek Indian War of 1836 took place in Baker County. Several county militias attacked and defeated the Creeks at Chickasawhatchee Creek Swamp in July of that year.

Much of Baker County's history is marked by flooding from the Flint River. The courthouse, built in 1906, was damaged by the floods of 1925, 1929, and 1994. The current courthouse is located in a 1930s-era school; the old courthouse has been repaired and today houses the public library and the historical society. The area around the town square that was submerged by the 1994 flood is now overgrown, and most of its former structures are gone.



Baker County encompasses almost 350 square miles and, according to the 2010 U.S. census, has a population of 3,451, a decrease from the 2000 population of 4,074. The county is governed by a five-person commission with a manager, and the school system comprises one school, a prekindergarten through seventh-grade elementary school. Baker County shares a high school with Mitchell County. Farmers in the county produce beef cattle, , cotton, hogs, peanuts, poultry, and soybeans.

Flint River Flood, 1994

The Joseph W. Jones Ecological Research Center specializes in natural resources management and conservation, particularly of longleaf pine and water resources. The privately owned facility offers educational programs and workshops. The 28,000-acre Ichauway Plantation, once owned by Coca-Cola magnate Robert Woodruff and established as a quail-hunting preserve in the 1920s, is part of the Jones Center's 29,000-acre "outdoor laboratory."

Among the Baker County landmarks listed on the National Register of Historic Places are Notchaway Baptist Church and its cemetery; the county courthouse; and two plantations, Pine Bloom, a Greek

revival—style structure that was home to Governor Alfred H. Colquitt, and Tarver Plantation, also Greek revival.

#### WILDFIRE HISTORY

The Georgia Forestry Commission (GFC) is the state agency responsible for providing leadership, service, and education in the protection and conservation of Georgia's forest resources. Commission professionals provide a wide variety of services including fire detection, issuing burn permits, wildfire suppression and prevention services, emergency and incident command system expertise, rural fire department assistance, forest management assistance to landowners and communities, the marketing and utilization of forest resources and nature services, and growing and selling quality tree seedlings for planting.

Forestry is a \$28.7 billion a year industry in the State of Georgia creating 128,000 jobs statewide. Forestry is a valuable commodity to the residents of Baker County.

The Mitchell/Baker Office of the Georgia Forestry Commission Unit is located at: 9116 Highway 37, Camilla, GA, 31730.

#### **GFC Personnel**

Christopher Cross, Chief Ranger Bryant Jenson, Ranger I Harold Jackson, Ranger I William C. Singleton, Ranger I Neil C. Watson, Ranger I

#### Wildland Firefighting Equipment at the Mitchell/Baker Unit

- 4 Truck/tractor transports with JD 650 crawler tractor
- 1 Type VI engine
- 1 Type VII engine

Over the past 5 years, 2012-2016, the leading causes of wildfire in Baker County have been: (#1) arson, (#2) escaped prescribed burns and (#3) escaped fires from agricultural fields.

Wildfire Cause	<u>FY 2010</u>	<u> 5 Year Average</u>
Incendiary (Arson)	3 fires/6.14 acres	3.80 fires/33.99 acres
Escaped Rx Burns	4 fires/4.90 acres	2.60 fires/5.12 acres
Escaped Debris Fires (Ag Fields)	2 fires/12.89 acres	2.20 fires/ 7.07 acres

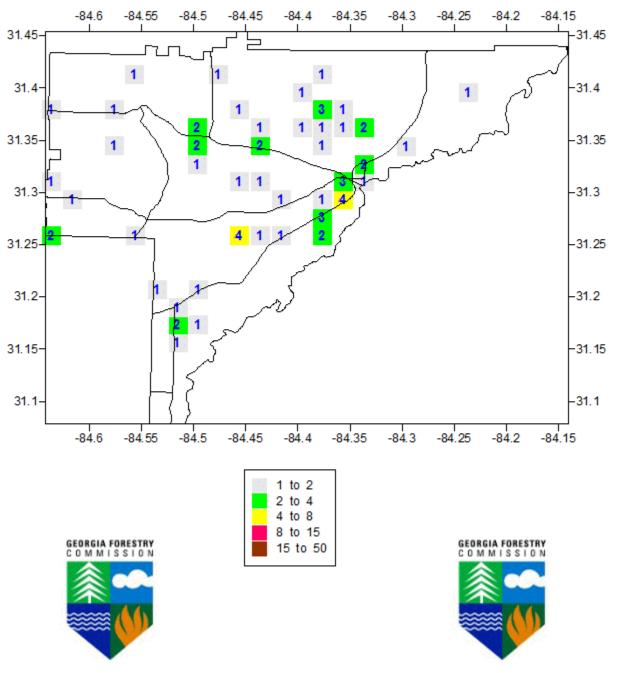
County = Baker	Cause	Fires	Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	2	6.24	0.60	1.59
Children	Children	1	1.25	0.80	0.58
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	3	5.14	1.80	6.36
Debris: Construction Land Clearing	Debris: Construction Land Clearing	1	15.81	0.60	3.42
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	9	59.40	4.80	15.32
Debris: Household Garbage	Debris: Household Garbage	0	0.00	0.20	0.56
Debris: Other	Debris: Other	2	0.30	0.40	0.06
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	0	0.00	0.40	0.49
Incendiary	Incendiary	1	0.36	0.40	1.27
Lightning	Lightning	0	0.00	0.20	18.00
Machine Use	Machine Use	4	12.53	1.60	4.10
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences		6.01	1.40	4.43
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	1	2.87	0.80	0.86
Smoking	Smoking	1	0.28	0.20	0.06
<u>Undetermined</u>	Undetermined	6	46.09	2.20	15.68
Totals for County: Baker Year: 2017		34	156.28	16.40	72.77

Acreage Burned /Number of Fires/Average Size Baker County FY 2007-2016					
Year	Acreage Burned	Number of Fires	Average Size	Statewide Average Size	
2007	116.85	18	6.49	18.64	
2008	118.68	15	7.91	4.56	
2009	43.76	16	2.74	3.90	
2010	132.57	19	6.98	3.93	
2011	141.29	35	4.04	17.56	
2012	278.63	19	14.66	5.08	
2013	158.14	18	8.79	4.53	
2014	8.27	6	1.38	5.02	
2015	13.10	8	1.64	4.42	
2016	28.06	16	1.75	6.29	

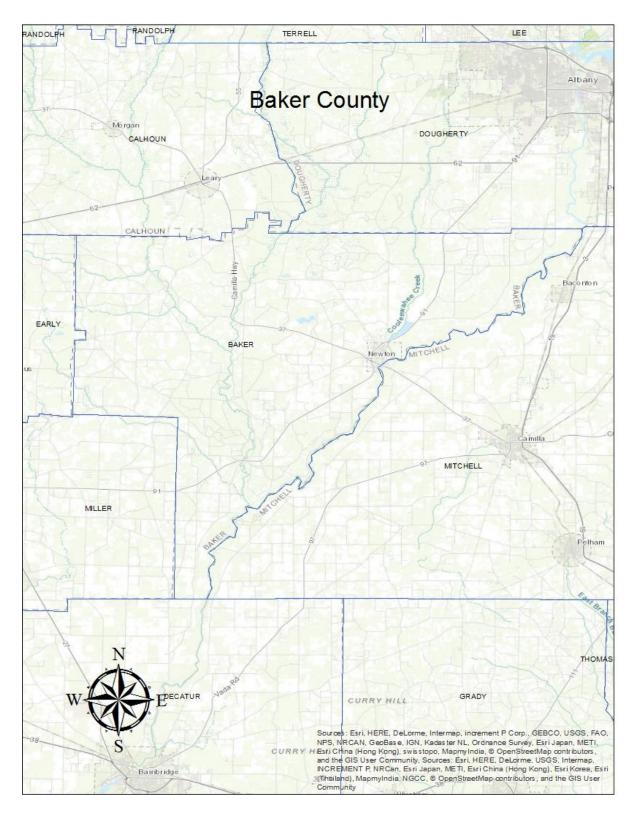
# Number of Fires by Cause, Baker County, FY 2007 to 2016

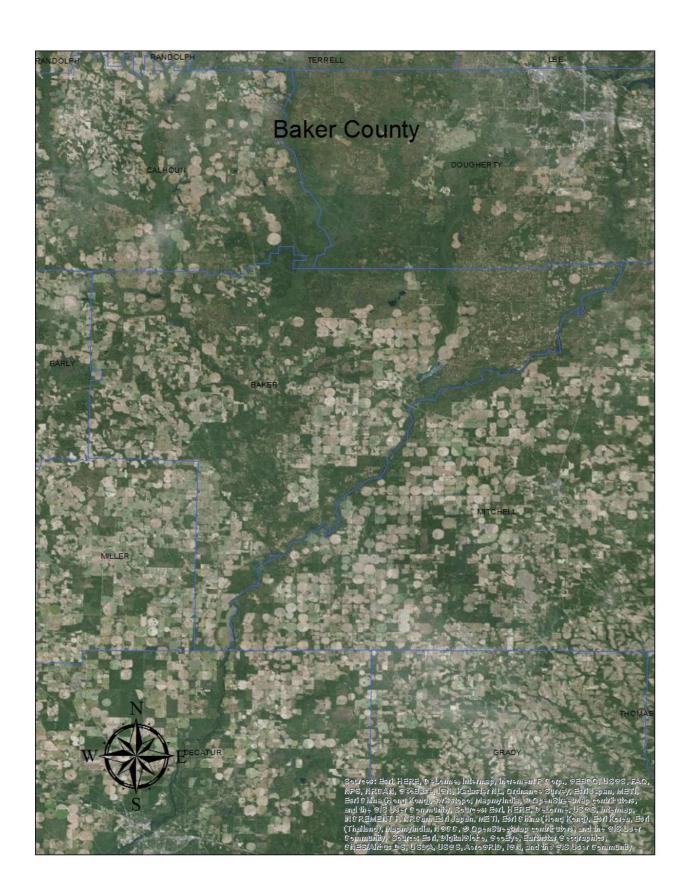
Year	Campfire	Children	Debris Burning	Incendiary	Lightning	Machine Use	Misc.	Railroad	Smoking
2007	1	1	5	8	0	2	0	0	1
2008	0	1	6	4	0	2	2	0	0
2009	0	0	8	0	0	5	2	0	1
2010	0	1	8	3	0	1	6	0	0
2011	0	1	11	1	1	16	4	0	1
2012	0	2	4	3	4	4	2	0	0
2013	0	1	9	1	1	2	4	0	0
2014	0	0	1	0	0	2	3	0	0
2015	0	1	6	0	0	0	1	0	0
2016	1	1	10	0	0	0	4	0	0

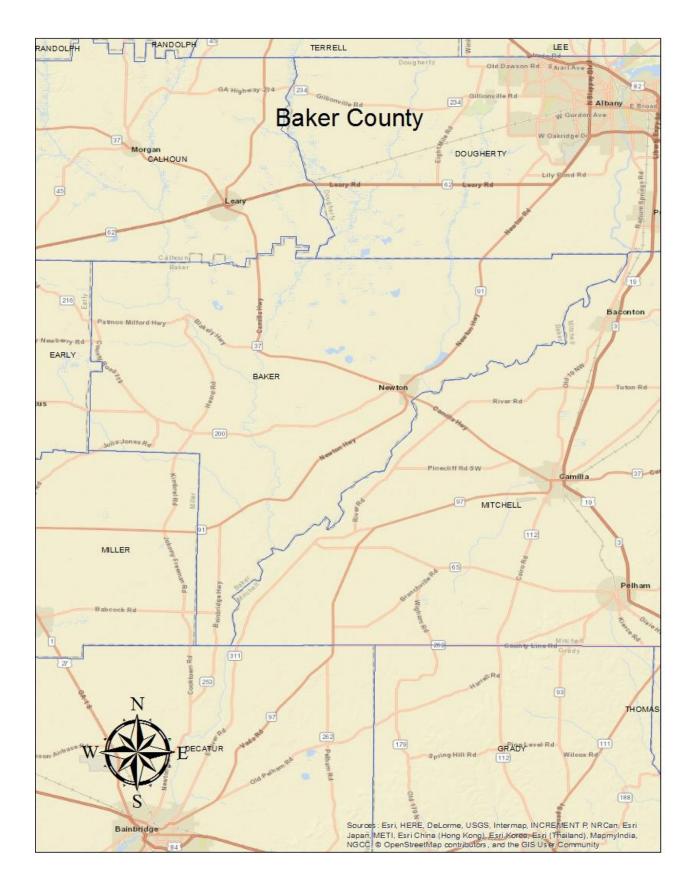
# Fire Occurrence Map for Baker County for Fiscal Year 2012-2016



# **VI. COUNTY BASE MAPS**







# VII. WHAT ARE "COMMUNITIES-AT-RISK"?

Communities-at-risk are locations where a group of two or more structures in close proximity to a forested or wildland area places homes and residents at some degree of risk from wildfire. Other characteristics of the "community" such as the closeness of structures, building materials, accumulated debris near the structures, access in and out and the distance from the nearest fire station or a permanent water source (pond or dry hydrant) may contribute to the risk.

Improvements to the community infrastructure (roads, utilities, etc.) may be beyond the capabilities of the homeowners. However, if access by emergency vehicles can be enhanced by widening the entrance right-of-way(s), creating "hammerhead-T's" or other ways for fire trucks to operate safely and identifying residences with reflective "911 addresses" wildfire protection can be greatly improved.

In addition, modifications in and around individual residences may need to be budgeted by the residents over time (for example, making a roof more fire resistant may have to wait until it is time to replace the current roof covering). Moving firewood away from the home, skirting raised decks and keeping roofs free of accumulated flammable debris are improvements that are within most family budgets.

In most instances, communities-at-risk will benefit from (vegetative) fuel reduction within 100 feet of homes and outbuildings through prescribed burning or by mechanical means. Fuel management with the home ignition zone (within 100 feet of the home) either by removing highly flammable vegetation or by replacing the vegetation with fire resistant plan species will significantly improve wildfire safety.

While there may be relatively few "communities" that fit the above description in Baker County that does not mean there is not a significant risk of structural damage during the severe weather conditions that are conducive to a disastrous wildfire (severe drought, low relative humidity and high winds).

Baker County is very rural and is home to a number of large plantations. In addition, there are numerous individual (isolated) homes and outbuildings on large properties that could be damaged or destroyed by a wildfire. On these properties, the owner(s) must be educated so they can assume a greater responsibility for wildfire protection - - - by making improvements to the landscape and structures that will provide some wildfire protection until the fire services can arrive. This can only be accomplished if rural residents know how to make their homes and properties "Firewise".

Community	Score	Hazard Rating
Sheffield Road	120	Extreme
Drennon Circle (Newton)	103	Very High
Patmos-Milford Community	102	Very High
Hawkinstown	98	High

These assessments, in the above chart, were conducted by Chief Ranger Chris Cross during the months of June and July, 2010. The Georgia Forestry Commission's Hazard and Wildfire Risk Assessment Scoresheet was used. This document evaluates communities (groups of homes) based upon six criteria: community access, surrounding vegetation, building construction, fire protection, utilities and additional rating factors. The quantitative wildfire hazard ratings range from a low rating of less than 50 points to an extreme rating with over 120 points.

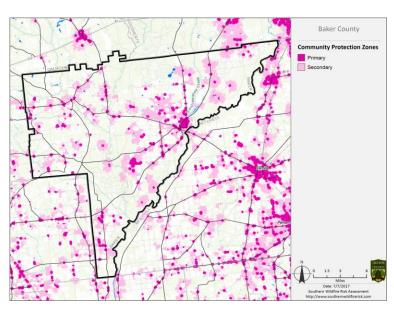


Mastication and brushcutting equipment, such as pictured above, are very effective in mowing understory fuels and can be effective in reducing fuel loads in areas close to structures or where prescribed burning may not be practical.

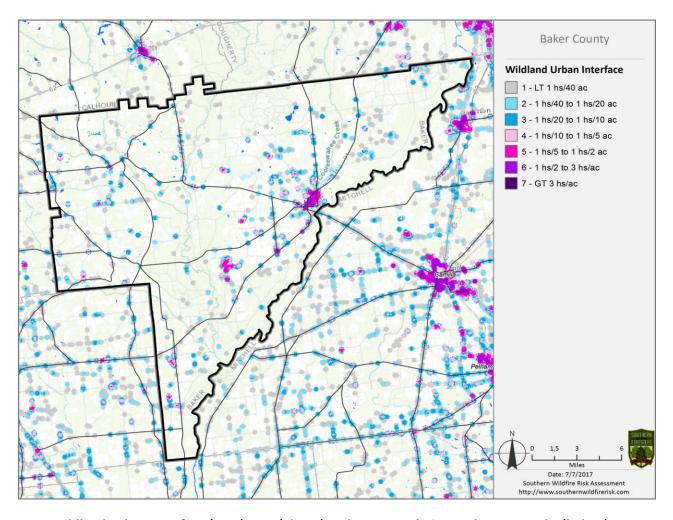
#### **VIII. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARDS MAPS**

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 Baker County. The SouthWRAP (SWRA) products included in this report are designed to provide the information needed to support the following key priorities:

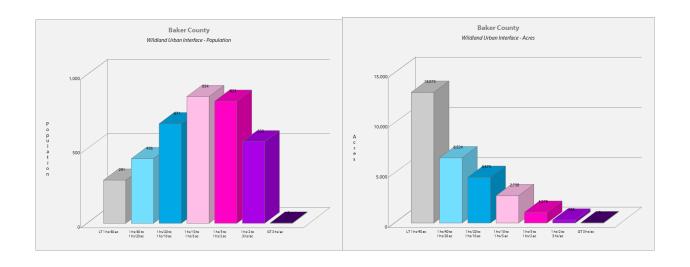
- Identify areas that are most prone to wildfire
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning
- Provide the information necessary to justify resource, budget and funding requests
- Allow agencies 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

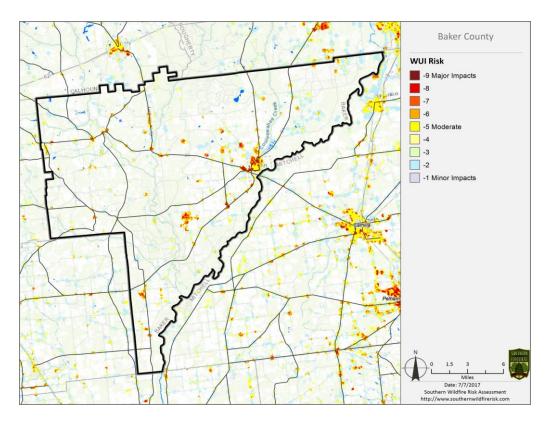


Community Protection Zones Map from the Baker County SWRA Report

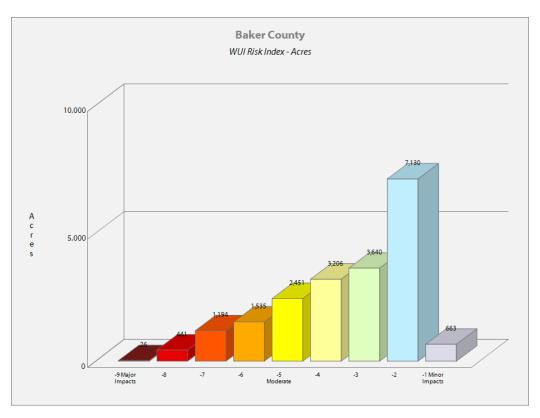


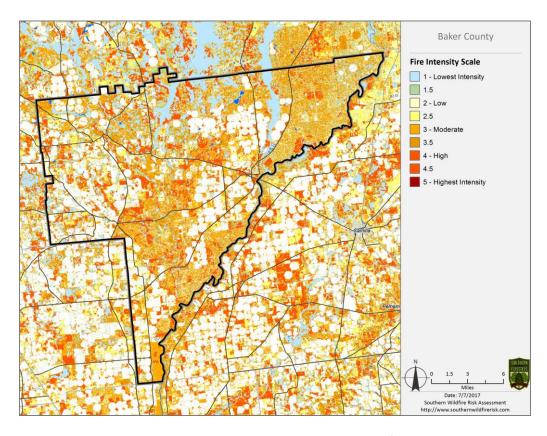
Wildland Urban Interface (WUI) map (above) and WUI Population and Acres graphs (below)



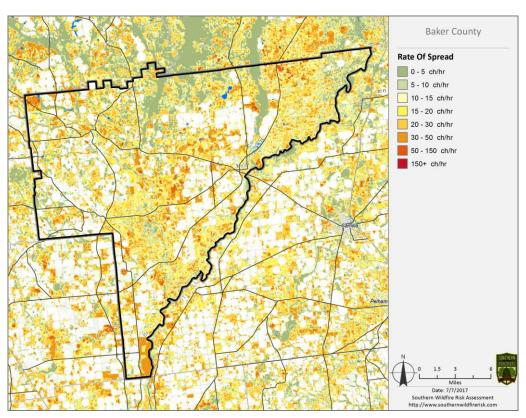


Wildland Urban Interface (WUI) Risk map, above, and WUI Risk Acres graph, below





Above, Fire intensity Scale map, and below, Rate of Spread map



# IX. MITIGATION & ACTION PLAN

#### FIRE SERVICE CAPABILITY

Structural fire protection in Baker County is provided by two volunteer fire departments: Newton/Baker Fire & Rescue and Patmos Volunteer Fire department. Ichaway Plantation has a fire department and also frequently responds in support.

#### Newton/Baker Fire & Rescue

2 engines

2 water tankers

2 brush trucks

Patmos Volunteer Fire Department

1 – 3,000 gallon engine

2 water tankers (800 gal. & 1,500 gal.)

The above fire departments have wildland hand tools and some personal protective equipment designed for wildland (brush) fires. These Fire Departments are not equipped with fire shelters.

Some of the county's firefighters have completed the Incident Management Training Courses: I-100 and I-700, however, none (or very few) have had the basic wildfire training courses (S-130, Standards for Survival and S-190, Basic Wildfire Behavior).

Both of the fire departments have a water supply truck of some type.

There are several areas of the county where (because of the county's terrain) there is no radio communication with the emergency operations center. A communications repeater system is needed to ensure continuous communication.

There are no pressurized fire hydrants and only a few dry hydrants in the county.

#### **Recommendations for Improved Emergency Response**

- 1. Improve volunteer firefighter safety by acquiring wildland fire personal protective equipment and providing basic wildland fire training.
- 2. Establish a system of dry hydrants throughout the county to provide a water source for structural fire suppression in remote areas.
- 3. Improve radio communications by the addition of a communications repeater tower.
- 4. Basic ICS training courses and Ready Set Go training is recommended for personnel.

#### PROTECTING EXISTING STRUCTURES

#### **Critical Facilities**

Critical facilities are unique structures which require special consideration in the event of an emergency such as a wildland/urban interface fire. Every county will have some critical facilities and some more urbanized counties will have many. Critical facilities include: a nursing home that may need special consideration because the smoke accompanying a wildfire may be hazardous to the health of elderly residents, a law enforcement dispatch center is a critical facility that will need special consideration to insure there is no disruption of emergency communications in the event of a disastrous wildfire. Other examples of critical facilities are ethanol plants, auto salvage yards and facilities that produce chemicals that could be hazardous to the local population if released into the atmosphere.

Owner/operators of critical facilities need to be aware of the hazards that an approaching wildfire could present. There may be immediate action that could be taken by owner/operators to lessen the impact of a wildfire in the immediate area (such as the elimination of encroaching wildland vegetation in and around the critical facility.

Critical Facility:

5 Points Peanut Company

#### **RECOMMENDATION:**

Contact owner/operators of Critical Facility in person or by letter to provide an evaluation of any hazards and suggest what owner/operators might do to mitigate the hazards and improve wildfire protection.

#### **Public Education Needs**

"Firewise" structures are homes and other buildings in the wildland/urban interface that have been built, designed or maintained to survive a wildfire event even in the absence of firefighters on the scene. Over the past fifty years, many Georgia residents have left the city or the suburbs to build homes in or adjacent to forested areas with a desire to be "close to nature". Unfortunately, this has resulted in neighborhoods or single-family dwellings with one way in and out, with long narrow driveways, no pressurized hydrants or draft source for water and so close to wildland fuel that even the best equipped fire department could not be successful in a severe wildfire event. Most of these homeowners don't understand the risk associated with living in the wildland/urban interface and expect to be rescued by the fire department in the event of a wildfire emergency.

The key to the reduction of structural losses in the wildland/urban interface cannot rest solely with improved response by the local fire services. There will never be enough fire trucks and firefighters to adequately protect homes in the wildland/urban interface. A major part of the solution to this problem lies with the <a href="https://example.com/homeowner">homeowner</a> – homeowners in the wildland/urban interface must become "partners" with the fire services and assume some responsibility for maintaining their home (structure) and landscape (yard) so that ignitions in and around the home are less likely should a wildfire occur in the immediate area. This means a home with no debris on the roof and in the gutters, wood decks that are skirted underneath, chunky bark or lava rock mulch near the house instead of pine straw or cypress mulch and a "lean, clean and green" landscape of less-flammable plants within 30 feet of the structure.

## **RECOMMENDATION:** Initiate a community public education program for Baker County residents

- Focus on homeowner education by placing "Firewise Communities" and wildfire prevention displays at festivals in Baker County.
- Make Firewise Communities and wildfire prevention brochures available to the public at central locations such as: Farm Services Agency, Chamber of Commerce and the County Courthouse.

#### Reduction of Hazardous Wildland Fuel

Because about 56 percent of Baker County is forested, the accumulation of brush and other (mostly ground) vegetation can create conditions over extensive areas that could fuel a disastrous wildfire. Treatment of forested areas with prescribed fire can significantly reduce this hazard while improving pulpwood and sawtimber production and enhancing wildlife habitat. Prescribed burning, however, must be conducted by experienced personnel when weather conditions are conducive to a safe burn and when an authorization has been obtained from the local office of the Georgia Forestry Commission. Other ways to reduce wildland fuel (vegetation) include:

- Mechanical treatment
- Chemical treatment (herbicides)
- Livestock grazing

The above alternatives to prescribed burning are more intensive and hence, more costly and generally suitable only for smaller acreages.

The goal for structural protection should be a "Firewise" landscape. A Firewise landscape is characterized by trees, shrubs and grasses that are carefully managed within 100 feet of structures - an area called the Home Ignition Zone (HIZ). Most critical is the space within 30 feet of a structure which is usually referred to as the area of Defensible Space. The Defensible Space should include a landscape of less flammable plants, coarse bark or lava rock as mulch adjacent the structure, tree limbs trimmed away from the structure and any decks skirted so leaves and other debris cannot accumulate underneath. The idea is to create a landscape that will prevent flames or fire brands (aerial borne embers) from igniting the structure.

Poor visibility from smoke on the highway (from prescribed burning or wildfires) could be a significant public safety issue in Baker County along the GA Highway 91 corridor. This is a major north-south transportation route bordered by extensive areas of forest.

#### **RECOMMENDATION:**

#### Promote prescribed burning in Baker County.

- Help landowners understand how to prescribe burn legally and safely.
- Educate the general public on the benefits of prescribed burning.
- Work with the Georgia State Patrol and local law enforcement to ensure motorists are alerted to smoke hazards on local roadways.

#### **NEW DEVELOPMENT IN THE COUNTY**

#### Site Plan Review

New home starts in Baker County will most likely increase over the next 20 years. The 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. The International Code Family created the International Wildland Urban Interface Code in 2012. This Code was adopted by Georgia legislation in 2013 and is available for use by Georgia Counties.

When new multi-unit subdivisions are built in rural areas (WUI), 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.

#### **RECOMMENDATION:**

Strengthen the site plan review process for multi-unit residential development in rural areas subject to wildfires.

- Evaluate (assess) the wildfire hazard of proposed new development in rural areas as part of the site plan review process. Resource: GFC "Hazard and Wildfire Risk Assessment Scoresheet"
- Consider the "adoption by reference" of 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.
- Adopt the International Wildland Urban Interface Code (IWUIC), or parts of the code that may be needed in high risk areas.

# **BAKER COUNTY ACTION PLAN**

Community	Project	Agency	Funding Needs	Priority	Recommendation
Patmos	Brush Truck	County	\$90,000	High	Brush Truck with equipment & tools to improve off-road fire response in rural areas
Countywide	Six Water Storage Tanks	County	\$30,000	High	6,000 gallon water storage tanks equipped with couplings to connect to hoses
Countywide	(2) Repeaters	County	\$75,000	High	Two satellite communication repeaters to be located in Patmos (N) and Anna (S)
Countywide	Firefighter PPE & Tools	County	\$10,000 PPE \$2,500 Tools	High	Personal protective equipment , hand tools & fire shelters
Countywide	Firefighter Training	County/GFC	\$7,500	High	Standards for Survival & Wildland Fire Behavior (Courses: S-130 & S-190)
Sheffield Road Drennon Circle Patmos-Milford Hawkinstown	Mitigate Wildfire Hazard	GFC/County	\$20,000	High	Reduce wildland fuel and improve emergency access for 4 "Communities-at- Risk"
Countywide	Homeowner Education	GFC/County	-0-	Medium	Provide Firewise educational materials and interpretative display at local festivals
Countywide	Grant Writing	County	\$25,000	Medium	Grant writer to prepare application packages for federal grant funds

#### ASSESSMENT OF ACCOMPLISHMENTS

To accurately assess progress and effectiveness of the action plan:

- An annual wildfire risk assessment (of "communities-at-risk") should be conducted to reassess wildfire hazards and prioritize needed actions.
- Mitigation efforts that are recurring (such as mowing, burning or clearing of defensible space)
   should be incorporated into a renewal of the original CWPP Action Plan.
- Mitigation efforts that could not be funded in the requested year should be incorporated into the annual renewal of the original CWPP Action Plan.
- Continuing education and outreach programs should be conducted and assessed for
  effectiveness. Workshops can be evaluated based upon attendance and post surveys that are
  distributed by mail following the workshops.
- The CWPP Core Committee will continue a year-to-year focus on the wildland/urban interface
  fire challenges in the County. The Committee will annually update the Baker County Community
  Wildfire Protection Plan, summarizing mitigation projects initiated and completed, progress on
  ongoing actions, funds received, funds expended and in-kind services utilized.
   Recommendations will be incorporated into the CWPP Action Plan.



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.

## X. GRANT FUNDING AND MITIGATION ASSISTANCE

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 all-risk structures through creating defensible space, structural protection through the application of ignition resistant construction and limited hazardous fuel reduction to protect life and property.
- 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.

<u>The International Association of Fire Chiefs (IAFC)</u> and <u>American International Group, Inc. (AIG)</u> 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.

# **XI. 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 fire 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 edition)

## **XII. SOURCES OF INFORMATION**

Publications/Brochures/Websites:

- FIREWISE materials can be ordered at www.firewise.org
- Georgia Forestry Commission <u>www.georgiafirewise.org</u>
- 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: <a href="https://www.interfacesouth.org">www.interfacesouth.org</a>
- 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 <a href="https://www.firegrantsupport.com">www.firegrantsupport.com</a>
- 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 <u>www.SouthernWildfireRisk.com</u>
- Fire Adapted Communities www.fireadapted.org
- Ready, Set, Go <u>www.wildlandfirersg.org</u>
- National Wildfire Preparedness Day www.wildfireprepday.org

#### Attachments:

Baker County Southern Wildfire Risk Assessment Summary Report (SouthWRAP)

Hazard Assessment Scoresheet: Sheffield Rd., Drennon Circle (Newton Community), Patmos-Milford Community, Hawkinstown



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The Georgia Forestry Commission provides leadership, service, and education in the protection and conservation of Georgia's forest resources.

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