

A Program of the Georgia Forestry Commission with support from the U.S. Forest Service

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

# **McDuffie County**

August 2019



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Georgia Forestry Commission 2088 Warrenton Hwy Thomson, GA 30824

The following report is a collaborative effort among various entities; the representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plan's contents:

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# Appended Documents:

McDuffie County Southern Wildfire Risk Assessment Summary Report

McDuffie County Wildfire Pre-Suppression Plan

NFPA Standard 1141

## I. OBJECTIVES

The mission of the following report is to set clear priorities for the implementation of wildfire mitigation in McDuffie 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

An initial meeting was held on May 11<sup>th</sup> 2009 attended by the following core planning team;

Will Fell GFC CWPP Specialist

Hal Sharpe GFC Chief Ranger McDuffie Warren Counties

Bruce Tanner Fire Chief McDuffie County Fire Department/EMA Director

Don Norton McDuffie County Manager

Rick Sewell Thomson Fire Chief

Stephen Sewell Asst Fire Chief McDuffie County

After an initial discussion of the processes and goals we hope to accomplish with this report, it was decided that we would assess general areas within the wildland urban interface in the two incorporated cities and the county. At the completion of this we would reconvene and discuss and evaluate the completed county wildfire risk assessment. It was further decided that we would provide for mitigation recommendations for McDuffie County. The chiefs of the various county fire departments completed the assessments and we reconvened on June 29<sup>th</sup> 2009 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**

McDuffie County is located on the geological fall line in east central Georgia along the Savannah River basin, thirty-five miles west of Augusta. The county, carved from Warren and Columbia counties in late 1870 by an act of the Georgia General Assembly, was named for George McDuffie, a native Georgian and distinguished lawyer, statesman, governor, and U.S. senator of South Carolina. Although relatively small (260 square miles) and postbellum in its formation, McDuffie County boasts a sizeable colonial and political heritage that predates the county's official inception by at least a century.

#### **Early History**

In 1767 royal governor James Wright granted to Quakers from Pennsylvania and North Carolina 12,000 acres of land along the present northern boundaries of McDuffie County. Three years later, the town of Wrightsborough was formally established and named in honor of the governor. Wright intended the settlement to be a buffer zone between the Creek and Cherokee Indians and the growing settlement of St. Paul Parish (present-day Augusta). It suffered accordingly. Indian hostilities, the American Revolution (1775-83), and the expansion of slavery all threatened the physical and economic safety of the neutral Quaker township. By 1800 most of its original families had relocated to the Midwest. Wrightsborough existed as a settlement into the twentieth century, if in name only, as its remaining inhabitants gradually assimilated into the religious, social, and civic norms of the predominantly Scots-Irish region.

#### **Economy and Natural Resources**

Traveling through Wrightsborough in the colonial period, Quaker naturalist William Bartram observed that the terrain was "chiefly a plain of high forests, savannas, and cane swamps," and its soil "a deep, rich, dark mould, on a deep stratum of redish brown tenacious clay." In fact, the area that became McDuffie County boasted natural resources and a wealthy agricultural heritage that defined its economic and political life until fairly recently. Gold, discovered along the Little River in the early nineteenth century, provided one of the area's first industries. It was cotton, however, that created the bulk of McDuffie County's wealth during that century. The county's geographic location placed it among the most productive cotton land in the state, and slave culture and cotton production flourished. By 1880, 64 percent of the county's 9,449 residents were African American.

While agrarian culture has changed radically since 1950, historical and natural resources continue to define twenty-first-century McDuffie County. Recreation and tourism are prominent factors in the contemporary economic and cultural life of the county, as are the kaolin and timber industries.

#### **People and Places**

The county's political tradition reflects its agrarian roots. Inheriting the passion, political philosophy, and agrarian advocacy of George McDuffie and nearby political heroes Robert Toombs and Alexander Stephens, U.S. senator Thomas E. Watson is remembered as McDuffie County's most prominent statesman. Born in 1856, the "Sage of Hickory Hill" or "Sage of McDuffie County" earned fame at the bar and became an eloquent national advocate for the embattled farmer and common man during the New South period. Other notable McDuffie County statesmen and jurists include Augustus Wright and Randall Evans Jr., a judge for Georgia's court of appeals.



Heritage tourism is fueled by the county's abundant historical sites, which include Hickory Hill (Watson's home in Thomson), the Wrightsboro Historic District, Wrightsboro Church, and the Rock House. Wrightsboro Church, dating to 1810, stands on the site of the old Quaker meetinghouse. Near the Wrightsboro community is the Rock House, a stone farmhouse built in 1785. The Rock House is thought to be the oldest dwelling in Georgia with its original architecture intact.

**McDuffie County Courthouse in Thomson** 

According to the 2000 U.S. census, McDuffie County's population is 21,231 (60.8 percent white, 37.5 percent black, and 1.3 percent Hispanic). There are two incorporated cities in the county, Thomson and Dearing. Thomson, with a population of 6,828, was incorporated in 1854 and established as the county seat in 1870. Dearing, with a population of 441, was named for William Dearing, a board member of the Georgia Railroad and Banking Company. The town was incorporated in 1910.

Fans of blues music make annual pilgrimages to the Blind Willie McTell Blues Festival, which honors the Thomson native "Blind Willie" McTell. Outdoor sports, including hunting and fishing, attract professional competition and revolve around nearby Clarks Hill Lake and its bordering wildlife management areas. Two local equestrian events, the Belle Meade Hunt and the Pine Top Horse Trials, bring to the county international exposure.

(Courtesy New Georgia Encyclopedia)

#### Wildfire History

McDuffie County, straddling the fall line just west of the rapidly developing Augusta Metropolitan area, is still largely rural in character outside of Thomson. The county as a whole remains 58% forested. The southern portion of the county, roughly south of Hwy 278, is part of the upper coastal plain and supports some agriculture along with timber and kaolin mining. The northern half of the county located in the fall line sand hills and piedmont region is still largely forested and is seeing residential development spreading out from the traditional population centers. This is particularly true along the reaches of Clarks Hill Lake with many miles of shoreline within the northeast quadrant of the county and on the sand hills east of Thomson as the Augusta metro area spills west.

The main population center and county seat, Thomson sits near the center of the county while the only other incorporated town, Dearing lies to the east. There are several other small communities scattered throughout the county. Like many counties in this area, McDuffie has become increasingly popular to residents from Augusta seeking rural refuge along Interstate 20 building homes among the wildlands, many unfamiliar with the inherent risks of wildfire.

McDuffie County is well protected by a countywide fire department with six stations distributed throughout the county. The Georgia Forestry Commission maintains a unit with wildland fire suppression capability located west of Thomson on Hwy 278 with good access to most of the county.

While there are modern pressurized water systems available in the two incorporated cities and much of the area adjacent to Thomson, there is still a significant area outside these regions lacking ready access to hydrants and dependable water sources.

Over the past 50 years, McDuffie County has averaged about 39 reported wildland fires per year with a pronounced peak during the months of February, March and April. These fires have burned an average of 179 acres annually. Of this annual acreage burned, 64% was lost during the above three months. Since the advent of the outdoor burning permit law about 30 years ago, the average numbers of fires and acreage burned have decreased. During the last 10 years, FY 2009-FY 2018, the county has averaged 31 wildfires and 73 acres burned on average annually.

The leading causes of these fires over the past 10 years, was debris burning causing 35% of the fires and 28% of the acres burned. More detailed records over the past ten years show that well over half of these debris fires originated from escapes from household or residential debris burning. Also of concern are incendiary (arson) caused fires accounting for almost 12% of the fires and 14% of the acreage burned during these years.

Georgia Forestry Commission Wildfire Records show that in the past six years, FY2014-FY2019, 5 homes have been lost or damaged by wildfire in McDuffie County resulting in estimated losses of \$32,900, along with 9 outbuildings valued at \$31,100. According to reports during this period 27 homes have been directly or indirectly threatened by these fires. Additionally 3 vehicles valued at \$4,000 and 7 pieces of other mechanized equipment suffered damages estimated at \$29,200. Crop damage was totaled for \$1000 in losses. This is a significant loss of non-timber property attributed to wildfires in McDuffie County.

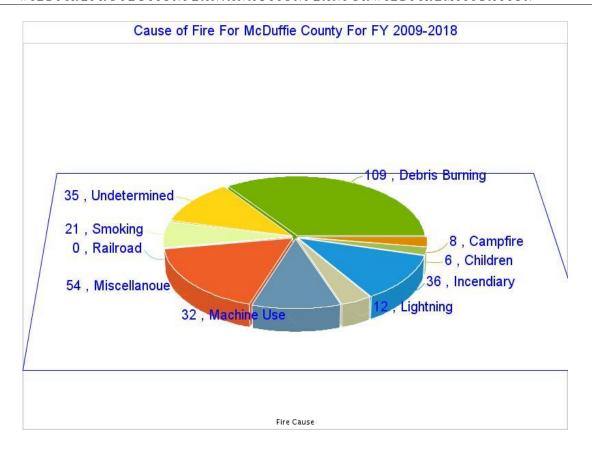
## Wildfire data during the last complete fiscal year, July 1, 2018 – June 30, 2019.

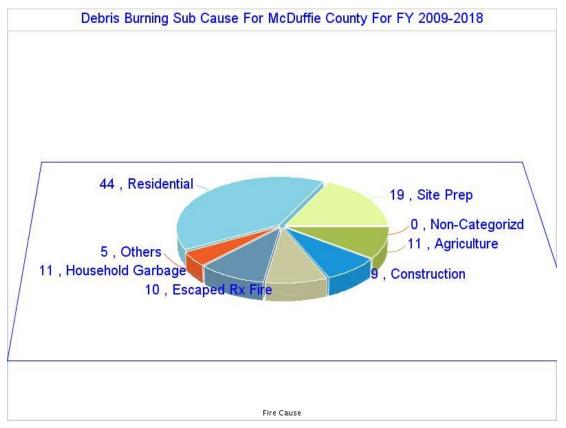
County = McDuffie	Cause	Fires	Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	0	0.00	1.00	6.90
<u>Children</u>	Children	0	0.00	0.40	0.30
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0	0.00	0.20	0.06
Debris: Construction Land Clearing	Debris: Construction Land Clearing	1	1.00	1.40	4.57
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	3	6.35	1.20	1.60
Debris: Household Garbage	Debris: Household Garbage	0	0.00	0.60	0.80
Debris: Other	Debris: Other	0	0.00	0.20	0.80
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	1	1.00	3.20	3.69
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	0	0.00	1.40	3.50
Incendiary	Incendiary	0	0.00	1.40	6.56
Lightning	Lightning	0	0.00	0.40	0.88
Machine Use	Machine Use	0	0.00	0.60	0.02
Miscellaneous: Other	Miscellaneous: Other	0	0.00	0.40	0.20
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	2	4.18	2.20	3.31
Miscellaneous: Spontaneous Heating/Combustion	Miscellaneous: Spontaneous Heating/Combustion	1	0.25	0.20	0.05
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	1	0.75	1.40	0.62
Miscellaneous: Woodstove Ashes	Miscellaneous: Woodstove Ashes	0	0.00	0.60	0.49
Smoking	Smoking	0	0.00	0.40	0.08
<u>Undetermined</u>	Undetermined	1	1.00	4.20	5.52
Totals for County: McDuffie Year: 2019		10	14.53	21.40	39.95

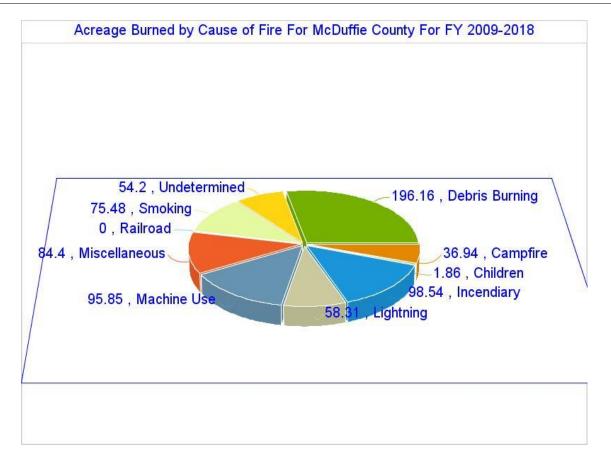
<b>Acreage Burned /Number of Fires</b>
For McDuffie County
For FY 2009-2018

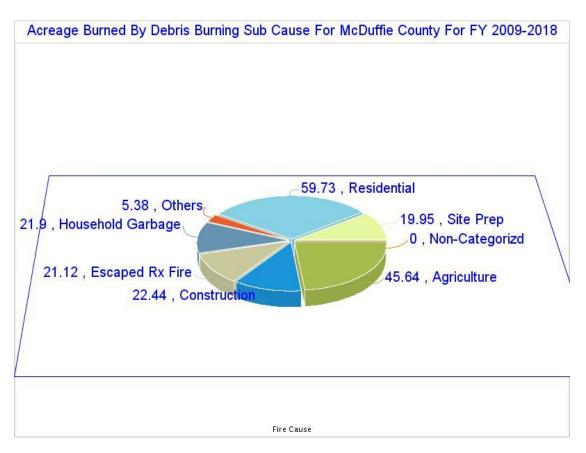
Year	Acreage Burned	Number of Fires	Average Size	Statewide Average Size
2009	72.07	23	5.66	3.90
2010	69.86	28	7.01	3.93
2011	85.42	46	7.61	17.56
2012	112.54	41	6.74	5.08
2013	50.43	46	14.37	4.53
2014	153.58	34	11.94	5.02
2015	38.10	27	7.03	4.42
2016	52.26	20	3.90	6.29
2017	40.09	37	4.15	11.60
2018	54.79	13	8.61	5.25

Acreage Burned /Number of Fires by Fire Cause For McDuffie County For FY 2009-2018					
Fire Cause	Acreage Burned	Number of Fires			
Campfire	36.94	8			
Children	1.86	6			
Debris Burning	196.16	109			
Incendiary	98.54	36			
Lightning	58.31	12			
MachineUse	95.85	32			
Miscellaneous	84.40	54			
Railroad	0.00	0			
Smoking	75.48	21			
Undetermined	54.20	35			
Total	701.74	313			

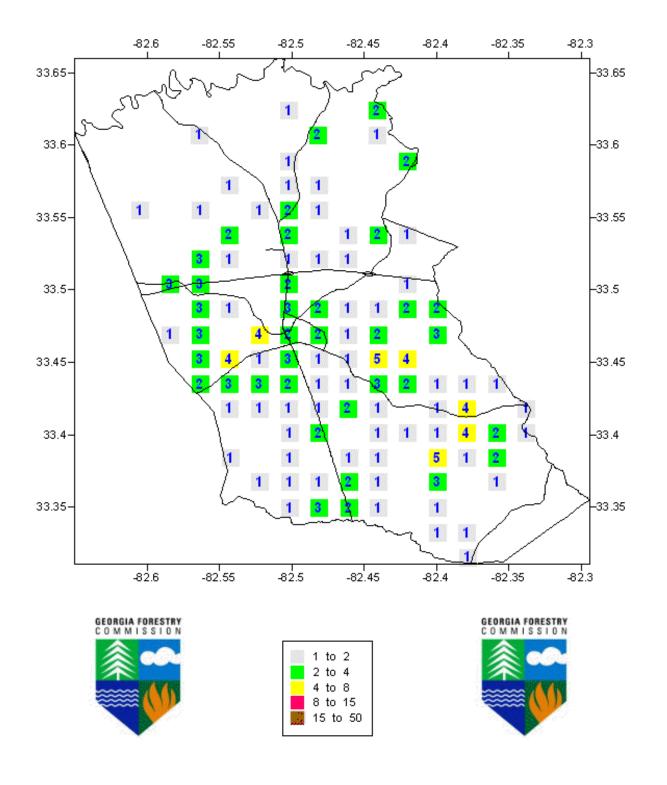




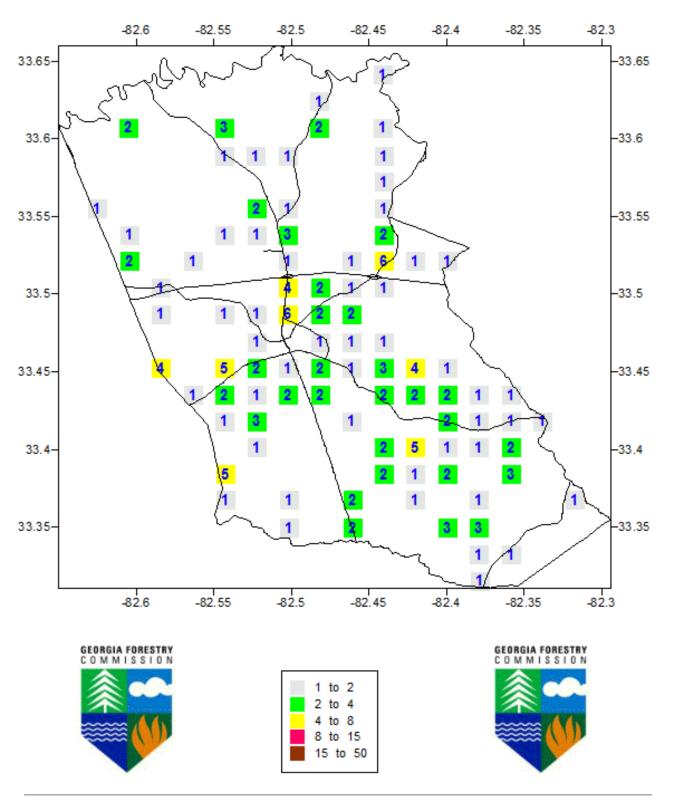




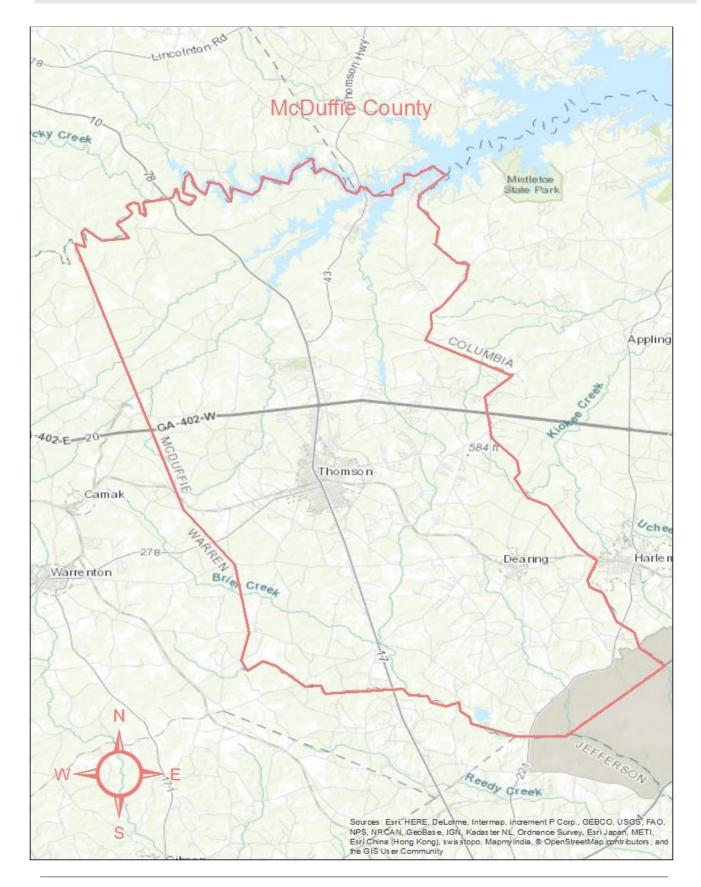
# Fire Occurrence Map for McDuffie County for Fiscal Year 2007-2011



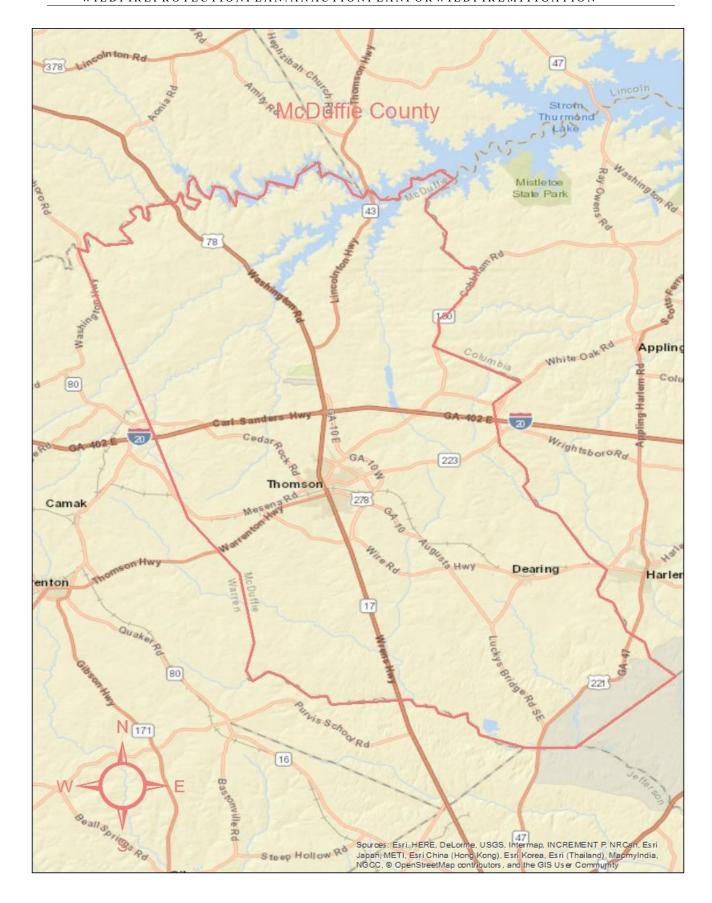
# Fire Occurrence Map for McDuffie County for Fiscal Year 2012-2016



# IV. COMMUNITY BASEMAPS







## 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.



Wildland Urban Interface (WUI) is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. As it was felt there was considerable variation in risk from the cities of Thomson and Dearing to the rural areas of McDuffie County, it was decided by the CORE assessment team to assess the cities separately from the rural areas of the county.

The wildland fire risk assessments were conducted in 2009 by the McDuffie County, Thomson and Dearing Fire Departments and returned an average score of 73, placing McDuffie County overall in the "Moderate" hazard range. See the assessed factors and the summary of the assessments following.

The risk assessment instrument used to evaluate wildfire hazards to McDuffie County's WUI was the Hazard and Wildfire Risk Assessment Scoresheet. The instrument takes into consideration accessibility, vegetation (based on fuel models), topography, 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 score for McDuffie County:

Cities of Thomson and Dearing (Low to Moderate Risk)

- Long, narrow roads
- Lack of defensible space in wildland interface areas.
- Lack of defensible space in some areas
- High occurrence of wildfires in several locations.
- Closeness of adjacent structures risk of fire spread from structure to structure

#### Rural Unincorporated McDuffie County (High Risk)

- Distance from staffed fire stations.
- Long narrow driveways inaccessible to equipment.
- Minimal defensible space around structures
- Homes with wooden siding and roofs with heavy accumulations of vegetative debris.
- No pressurized or non-pressurized water systems available off major roads
- Above ground utilities
- Large, adjacent areas of forest or wildlands
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations
- Dead end roads with inadequate turn arounds.

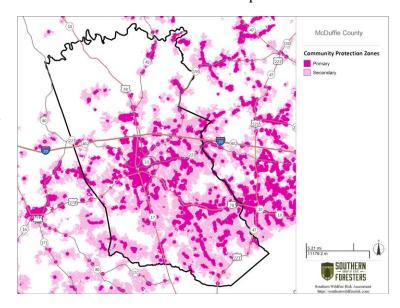
#### Hazard and Wildfire Assessment summary;

Area	Community Access	Surrounding Vegetation	Building Construction	Fire Protection	Utilities	Additional Factors	Score	Hazard Assessment
McDuffie	13	30	25	14	6	25	113	High
Thomson	11	15	5	2	4	11	48	Low
Dearing	18	15	5	7	4	11	60	Moderate

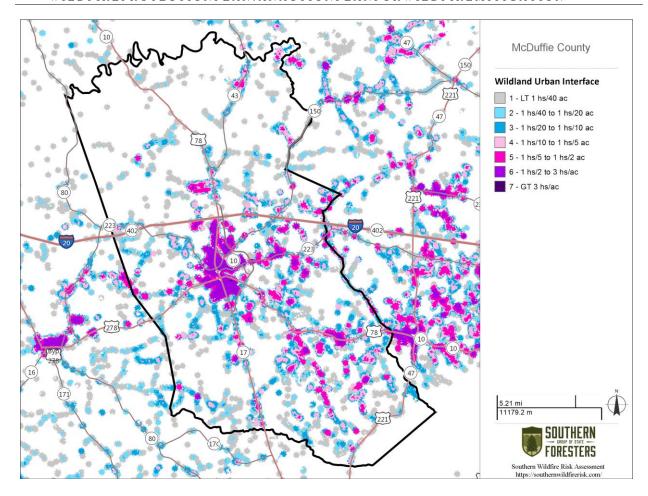
# VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

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 McDuffie 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 programs.

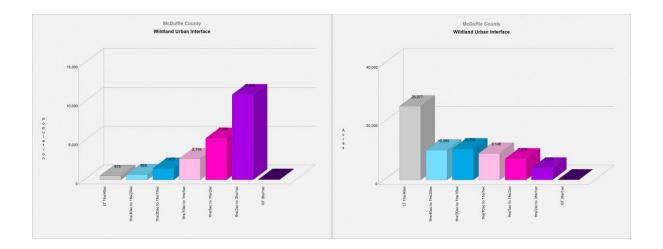


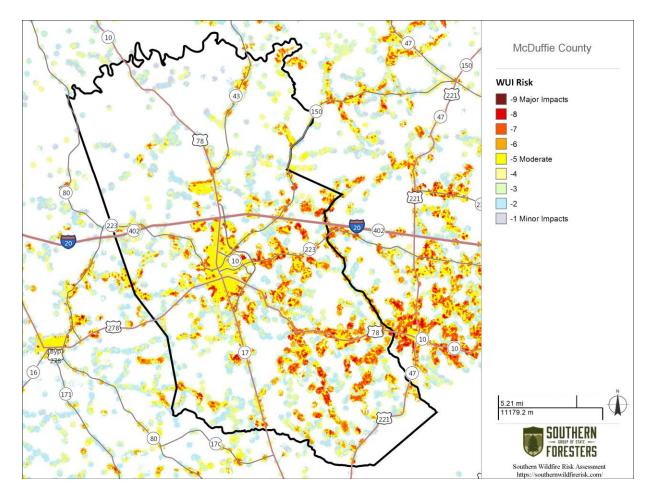
Community Protection Zones map from the McDuffie County SWRA



Above: Wildland Urban Interface (WUI) map

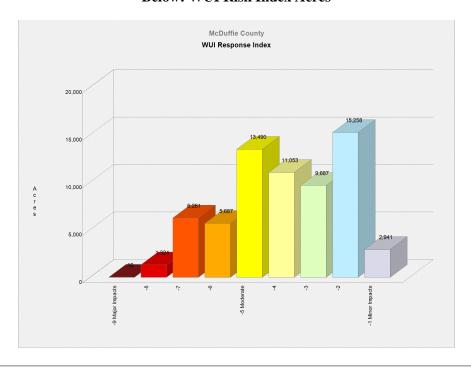
Below: WUI Acres (left) WUI Population (right)

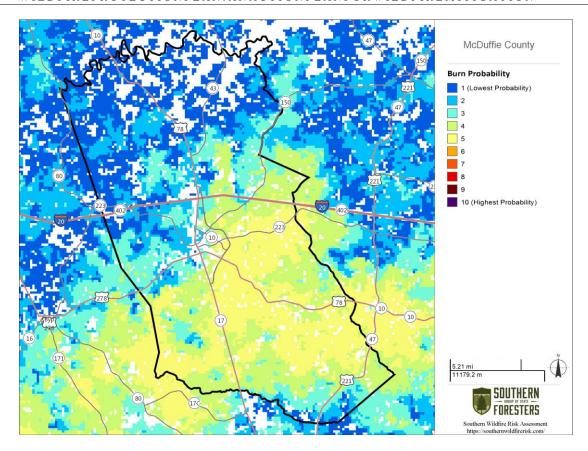




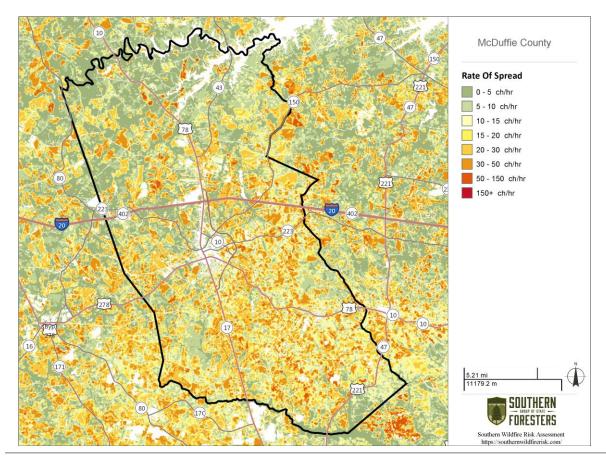
Above: Wildland Urban Interface (WUI) Risk map

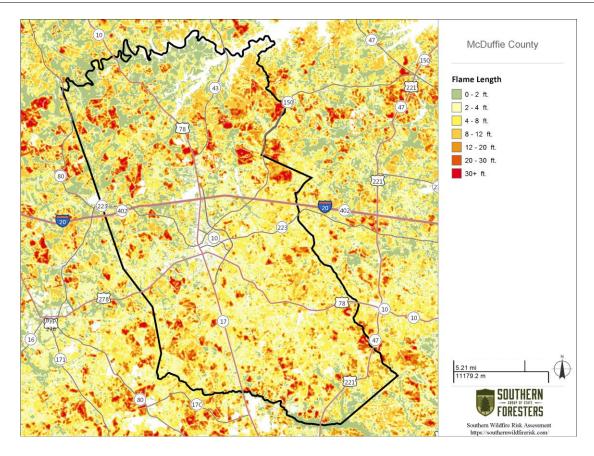
### **Below: WUI Risk Index Acres**



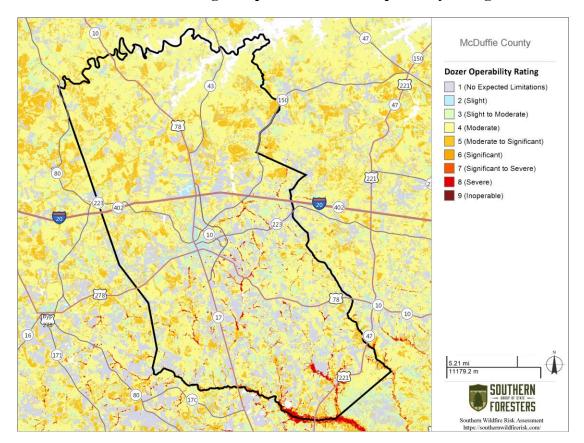


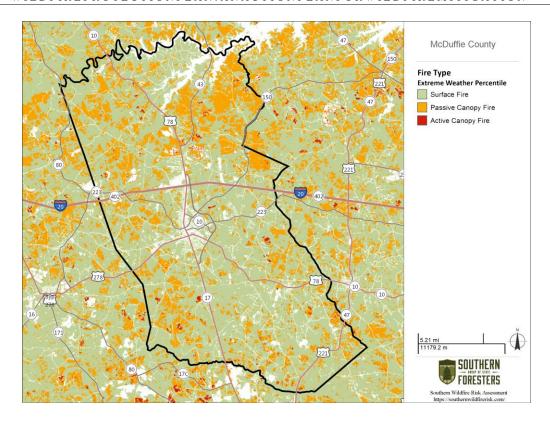
Above: Burn Probability map Below: Rate of Spread map





Above: Flame Length map Below: Dozer Operability Rating





**Above: Fire Type map** 

### Description

There are two primary fire types – surface fire and canopy fire. Canopy fire can be further subdivided into passive canopy fire and active canopy fire. A short description of each of these is provided below.

#### **Surface Fire**

A fire that spreads through surface fuel without consuming any overlying canopy fuel. Surface fuels include grass, timber litter, shrub/brush, slash and other dead or live vegetation within about 6 feet of the ground.

#### **Passive Canopy Fire**

A type of crown fire in which the crowns of individual trees or small groups of trees burn, but solid flaming in the canopy cannot be maintained except for short periods.

#### **Active Canopy Fire**

A crown fire in which the entire fuel complex (canopy) is involved in flame, but the crowning phase remains dependent on heat released from surface fuel for continued spread.













# VII. PRIORITIZED MITIGATION RECOMMENDATIONS

#### **Executive Summary**

As 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. 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.

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.

In 2012 the International Code Council developed the International Wildland Urban Interface Code. The code is endorsed by the National Fire Protection Association (NFPA) and in 2014 the code was adopted by the Georgia Legislature to be used by counties to help lower fire risk in the higher risk areas in the WUI.

The following recommendations were developed by the McDuffie 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**	Educate homeowners to 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. App	plicable Structures	Reduce structural ignitability**	Educate owners to clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, replace pine straw and mulch around plantings with less flammable landscaping materials.		
Nat Pre	mmunity Clean-up Day tional Wildfire eparedness Day is held the Saturday in May annually.	Cutting, mowing, pruning**	Work with Homeowners Associations to encourage to cut, prune, and mow vegetation in shared community spaces where needed.		
4. Roa	ad Signage	At Replacement	New road signage with minimum 4 inch reflective lettering on non-flammable poles. Dead end (no outlet or turnaround) should be prominently tagged.		
5. Roa	ad Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs.		
6. Coo	des and Ordinances	Examine existing codes and ordinances.  Utilize the International Wildland Urban Interface Code to help develop codes and policies. IWUIC	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  As zoning, planning and subdivision ordinances are updated include fire department and emergency services input in the design of these.		

Proposed Community Wildland Fuel Reduction Priorities					
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			
2. Corps of Engineers Lands	Assess need for fuel treatments	Work with Corp land management to assess the need for fuel reduction activities adjacent to residential areas on the lake.			
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.			
<b>Proposed Improved Comm</b>	unity Wildland Fire Res	ponse Priorities			
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Determine need for additional dry hydrants.			
2. Water Supply	County Water System	Add additional water lines and pressurized hydrants to existing system in areas of development.			
3. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear. Larger capacity hose. Investigate need for "brush" trucks and tankers.			
4. Personnel	Training	Obtain Wildland Fire Suppression training for Fire Personnel. Ready Set Go training.			
**Actions to be taken by homeowners and community stakeholders					

#### **Proposed Education and Outreach Priorities**

#### 1. Conduct "How to Have a Firewise Home" Workshop for McDuffie 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.

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 (National Wildfire Preparedness Day – 1st Saturday in May)

Conduct clean-up event every spring involving the Georgia Forestry Commission, McDuffie County Fire Departments and community residents. 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 McDuffie County Fire Departments discussing and commending the work accomplished.

#### 4. Informational Packets

Develop and distribute informational packets to be distributed by permitting authorities, code enforcement, realtors, libraries, tax assessor office and insurance agents. Included in the packets are the following:

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

#### 5. Wildfire Protection/Firewise Display

Create and exhibit a display for the general public at the various fire stations rotating around during fire prevention month. Display can be independent or combined with the Georgia Forestry Commission display.

#### 6. Media

Invite the Thomson and Augusta news media to community "Firewise" functions for news coverage and regularly submit press releases documenting wildfire risk improvements in McDuffie County. Utilize TV, radio, cable, and social media to reach a diverse audience.

#### 7. County Festivals

Create a Firewise information booth at the various festivals such as the Willie McTell Blues Festival.



The Georgia Forestry Commission can assist with developing a prescribed burning plan, installation of firebreaks, and can provide equipment standby and burning assistance when personnel are available. Private forestry contractors can also provide this service.

Forestry mowers and brush cutters, such as pictured on right, can be very effective in reducing understory fuels in areas where prescribed fire is not practical. This practice can lower risk near homes in the wildland urban interface. Private contractors can provide this service.



# 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				
McDuffie County Wildland Urban Interface Fire Council	Create this informal team or council comprised of residents, GFC officials, McDuffie County, Thomson and Dearing Fire Department officials, a representative from the cities and county governments and the EMA Director for McDuffie County. 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	1 Defensible Space and Firewise Landscaping			
	2 Debris Burning Safety			
	3 Firewise information for homeowners			
	4 Prescribed burning benefits			
Communications objectives	<ol> <li>Create public awareness for fire danger and defensible space issues</li> <li>Identify most significant human cause fire issues</li> <li>Enlist public support to help prevent these causes</li> <li>Encourage people to employ fire prevention and defensible spaces in their communities.</li> </ol>			
	spaces in their communities.			
Target Audiences	<ul><li>1 Homeowners</li><li>2 Forest Landowners and users</li><li>3 Civic Groups</li><li>4 School Groups</li></ul>			
Methods	<ol> <li>News Releases, TV, Radio, Cable, Social Media</li> <li>Personal Contacts</li> <li>Key messages and prevention tips</li> <li>Visuals such as signs, brochures and posters</li> </ol>			

Spring Clean-up Day (National Wildfire Preparedness Day – 1 <sup>st</sup> Saturday in May)				
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 newsletters, 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, McDuffie 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, and using firewise landscaping around homes	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 as needed.
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 McDuffie 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, 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 McDuffie County WUIFC 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 McDuffie County WUIFC meeting. Needed actions will be discussed and delegated.

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 <u>www.firewise.org</u>
- 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: www.interfacesouth.org
- Information on codes and standards for emergency services including wildfire can be found at <a href="https://www.nfpa.org">www.nfpa.org</a>
- 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 <a href="http://www.federalgrantswire.com/national-fire-plan--rural-fire-assistance.html">http://www.federalgrantswire.com/national-fire-plan--rural-fire-assistance.html</a>
- 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:**

McDuffie County Southern Wildfire Risk Assessment Summary Report (SWRA)

McDuffie County Wildfire assessment scoresheets

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



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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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