GEORGIA FORESTRY COMMISSION

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

Dade County

AUGUST 2018

The following report is a collaborative effort between various entities. The representatives listed below comprise the core decision-making team responsible for this report and mutually agree on the plans contents.

Dade County Representatives:

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Signature _____

Name Tommy Lowery, Commissioner District One

Signature _____

Name Phillip Hartline, Commissioner District Two

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Name Robert Goff, Commissioner District Three

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Name Allen Bradford, Commissioner District Four

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Local Emergency Services Representatives:

Name Alex Case Director Dade County Emergency Services

Signature _____

Name Jerry Kyzer Fire Chief Trenton City Fire Dept.

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Name Tim Sharp Fire Chief West Brow Fire Dept.

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Name Tim Tamburello Fire Chief New Home Fire Dept.

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Name Rodney Ross Fire Chief New Salem Fire Dept.

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Name Mark Gibson Fire Chief Davis Fire Dept.

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1) OBJECTIVES AND GOALS

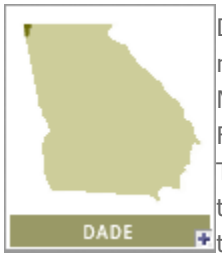
The mission of the following report is to set clear priorities for the implementation of wildfire mitigation in Dade County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will protect this county and its essential infrastructure. Prioritized activities to educate the public are included. 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.**

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. It is intended to become part of the master hazard mitigation plan for the County. 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.

2) COUNTY BACKGROUND-EXISTING SITUATION-INTERFACE INFORMATION

Dade County



Dade County, at the northwestern tip of Georgia, is the state's ninety-first county. The 174-square-mile county was created from western Walker County by the state legislature in 1837 and named for Major Francis Langhorne Dade, a Virginian who died in the Second Seminole War (1835-42) in Florida. Dade County shares Lookout Mountain with Alabama along its western border and with Tennessee along its northern border. Until 1939 the only vehicle access to Dade County was via those two states, resulting in an isolation reflected in its nickname, the State of Dade. After its purchase of the properties that became Cloudland Canyon State Park in 1939, Georgia built Highway 143 (which later became Highway 136) to connect U.S. 41 to the area, and the county was subsequently discovered by tourists. The park continues to draw numerous visitors.

Trenton, originally called Salem, is the county seat and was incorporated in February 1854. The current courthouse was built in 1926. Other communities in the county are Hooker, Morganville, New England, Rising Fawn, and Wildwood, none of which are incorporated.

Dade County Courthouse

Cherokee Indians, who made up the area's original population, were forcibly removed from their land in 1838, soon after the formation of the county. Chief Wauhatchie, their leader, had given the U.S. government permission to determine the northern boundary of Georgia in 1817. Twenty-one years later, despite his cooperation, he and his people were forcibly removed in the infamous Trail of Tears.

The county grew slowly after its formation in 1837. The first settlers were those who won land in the Georgia land lotteries and those who came to work in coke and coal mines set up by northeastern developers before the Civil War (1861-65). These mining operations had closed temporarily by the war's end because their major buyers, factories further south, were destroyed by Union forces. The mines reopened in the 1880s, using state-supplied prison labor for much of their workforce. Active mining continued until the late 1970s, when it began to taper off, and by the late 1980s coal mining in the county had ceased.

Coal Miners

Contrary to an often repeated myth, Dade County did not secede from either the Union or the state of Georgia in 1860. During the Civil War more than 40,000 soldiers traveled through the area on their way to Chickamauga, building themselves a road to carry their equipment and munitions. Dade sent its own Raccoon Roughs to fight for the South, and the Battle of Chattanooga resulted in some minor skirmishes in the county.

In 1964 Covenant College, a Presbyterian institution originally established in California in 1955, relocated to Lookout Mountain. Nearly 900 students enrolled in fall 2005 at the liberal arts school, which offers twenty undergraduate majors as well as a graduate program in education. Today the college is associated with the Presbyterian Church of America.

Manufacturing is the largest employment sector, followed by retail trade, health and social services, and construction work. The establishment of the Dade County Industrial Park contributed to a considerable increase in business development.

Among the many scenic attractions are Cloudland Canyon State Park; Lookout Mountain, the sites of battles fought during the Indian wars of 1788 and the Civil War; Rock City; and the Hooker and Tunacunhee Indian Mounds. In addition, the limestone geology of northwest Georgia has resulted in the formation of 164 caves in Dade County alone, making it a spelunker's paradise.

Notable residents have included the old-time country musician Norman Blake.

According to the 2000 U.S. census, the county population was 15,154 (97.5 percent white, 0.6 percent black, and 0.9 percent Hispanic), a 15 percent increase since 1990.

The above material is courtesy of the New Georgia Encyclopedia

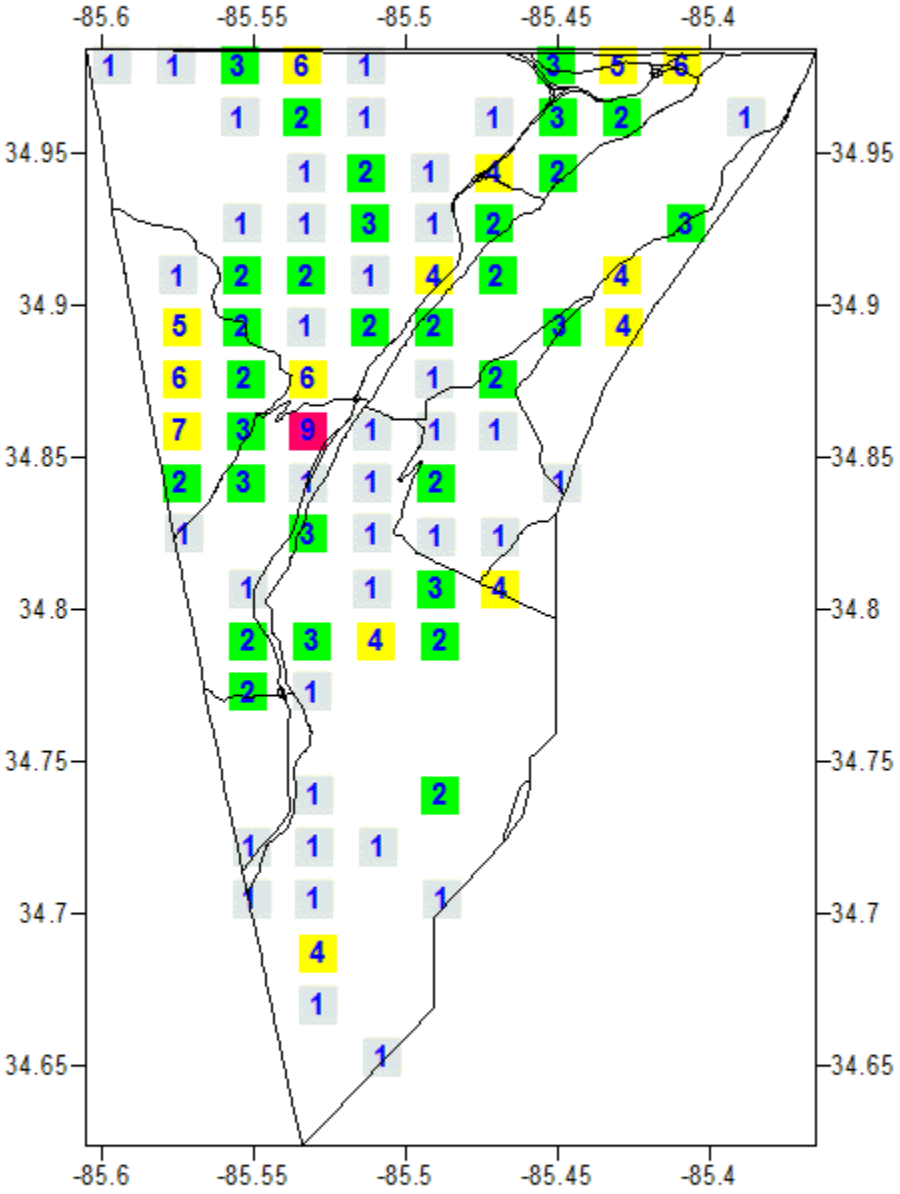
Existing Situation

Fire activity in Dade County has been consistent with historical trends in past years. The County has always had a problem with large incendiary fires especially in remote areas along the state lines with Tennessee and Alabama. The higher statewide average size during FY 2017 was influenced by the large fires that occurred in Northern Georgia, of which a large percentage of the acreage burned that year was in Dade County. The following table outlines fire activity for fiscal years 2013 through 2017. As can be seen the average size is consistently larger than the statewide average. This can largely be attributed to a few large fires each year in remote areas that require hand suppression. It is followed by an occurrence map for 2012 - 2016. There is also a map in the appendix that outlines historical fire occurrence areas for fires responded to by the Georgia Forestry Commission during the period 1997 – 2018.

Fiscal Year	Number of Fires in Dade County	Number of Fires Statewide Average	Acres burned in Dade County	Average Size	Statewide Average Size
2017	74	38	5,802.95	78.42	11.60
2016	33	15	147.67	4.47	4.13
2015	42	20	319.34	7.60	4.50
2014	68	21	1,774.53	26.10	5.02
2013	26	26	412.63	15.87	4.75

A Fire Prevention and Education Team was utilized back in the summer 2015 to publicize the importance of fire prevention, and to encourage the citizens to practice safe measures when dealing with outdoor fires. The team shared the fire prevention messages through many outlets, such as newspaper releases, radio and television interviews. The team also hosted exhibits at local fairs and festivals to spread the message. The team returned in the summer and fall of 2016 in the height of the drought conditions to continue the campaign. Team members included personnel from the Georgia Forestry Commission, US Forest Service and the US Fish and Wildlife Service

Fire Occurrence Map for Dade County for Fiscal Year 2012-2016



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1 to 2
2 to 4
4 to 8
8 to 15
15 to 50

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The table below outlines fire activity during fiscal year 2018, which was the most complete fiscal year.

County = Dade	Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	0		0.00	3.40	505.84
Children	Children	0		0.00	0.60	0.68
Debris: Construction Land Clearing	Debris: Construction Land Clearing	0		0.00	1.60	11.75
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	1		9.00	1.60	124.00
Debris: Household Garbage	Debris: Household Garbage	2		1.10	9.40	573.58
Debris: Other	Debris: Other	0		0.00	0.40	0.02
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	3		0.91	9.60	34.72
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	0		0.00	0.40	2.96
Incendiary	Incendiary	3		94.70	4.20	257.87
Lightning	Lightning	0		0.00	0.40	5.03
Machine Use	Machine Use	4	↑	1.11	2.60	7.75
Miscellaneous: Cutting/Welding/Grinding	Miscellaneous: Cutting/Welding/Grinding	0		0.00	0.60	2.48
Miscellaneous: Other	Miscellaneous: Other	0		0.00	0.20	0.20
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	0		0.00	1.00	7.12
Miscellaneous: Spontaneous Heating/Combustion	Miscellaneous: Spontaneous Heating/Combustion	0		0.00	0.20	0.00
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	1		2.00	1.00	0.70
Miscellaneous: Woodstove Ashes	Miscellaneous: Woodstove Ashes	0		0.00	1.00	0.31
Railroad	Railroad	0		0.00	0.60	8.80
Smoking	Smoking	0		0.00	0.40	0.14
Undetermined	Undetermined	4		49.55	7.80	96.61
Totals for County: Dade Year: 2018		18		158.37	47.00	1,640.57

Causes of wildland fire range across almost all categories. As was mentioned, Incendiary fires have been one of the leading causes for many years in Dade County, and have led to the highest acreage loss over the past year. Terrain influenced spread combined with suppression difficulty on rugged terrain contributes to large fires during prime burning periods. In fiscal year 2018 there were eighteen (18) fires which burned 158.37 acres. This low number of fires is a result in the large amounts of rainfall which fell in 2018. Debris escapes from residential burning (4) and incendiary fires (3) are the leading causes. Other causes include a structure fire which migrated to the wildland area and machine use. In the past there have been some significant fires in remote areas caused by railroads.

The Wildland-Urban Interface

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

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

1. "Boundary" wildland-urban interface is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.

2. "Intermix" wildland-urban interface areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.

3. "Island" wildland-urban interface, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands. (courtesy *Fire Ecology and Wildfire Mitigation in Florida* 2004)

Dade County has grown more slowly than other counties due to its isolation and recent downward economic activity. However, there has been some development of gated communities on Lookout Mountain. Also there has been some growth attributed to the influence of the Chattanooga metropolitan area. The County contains both boundary and intermix interface areas.

Wildland Urban Interface Hazards

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

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

- Illicit Activities
  Marijuana plantations or drug production labs may be found in wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered, as well as booby traps.

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

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

- Septic tanks and fields
  Below-ground structures may not be readily apparent and may not support the weight of engines or other apparatus.

Today's discussion is from the Wildland / Urban Interface Category.

Liquefied Propane Gas (LPG) Tank Hazards

Liquefied Propane Gas (LPG) tanks are commonly found in the wildland-urban interface and present hazards to firefighters in that environment. LPG tanks may be found in a number of other environments such as motor homes, travel trailers, grills, camp stoves, lanterns, etc. Directly attacking LPG tank fires is a structural fire task involving hazardous materials and should only be attempted by trained personnel using full structural personal protective equipment and equipped with a volume of water adequate to safely attack the fire.

- Boiling Liquid Expanding Vapor Explosions (BLEVE)

  - The most recognized hazard with LPG tanks is BLEVE (Boiling Liquid Expanding Vapor Explosions) or sudden complete failure of the tank. Some training courses have directed responders to approach the tank from the sides, believing that the force of the explosion will occur on the ends of the tank. However, this is not a guarantee that you will be safe from projectiles or missiles from the explosion, as they may travel in ALL directions up to 2,500 feet away. Leave the area immediately if you smell propane, hear a rising sound from venting safety devices or see discoloration or deformation of the tank. If you leave the area, get at least 2,500 feet away and do not go down wind or down slope of the leaking propane. BLEVEs are a major hazard to emergency responders!

- Fuel Reduction Around Tanks

  - Wildland firefighters may take action to prevent direct flame impingement on LPG tanks by removing wildland fuels in the area. However, be aware that lines from the tank to structures may be above or below ground, and may be cut by tools or equipment. Propane gas is heavier than air, and may move along the ground at some distance, and may ignited when in reaches open flame or another ignition source. Use extreme caution when doing fuels reduction around tanks, and flag any lines you encounter.

- Other Wildland Fire Considerations

  - Do not position engines or other apparatus near LPG tanks or downwind / down slope from tanks.
  - Do not deploy fire shelters near LPG tanks or downwind / down slope from tanks.

- Cooling Tanks

  - In light fuels such as grasses, where any heat exposure to the tank will be very limited, rapid application of cooling water on the outside of the tank above the liquid level can reduce the likelihood of container failure by lowering the external temperature of the shell of the exposed tank. Water should not be directed at the valve safety devices, due to the potential of "icing" the valve closed.
  - In heavy fuels where long duration heat exposure to the LPG tank is likely, evacuate all personnel and equipment 2,500 feet away and not down slope or down wind. NFPA says that direct flame impingement protection requires water flow of at least 500 gpm from an unmanned monitor nozzle. This is a situation for properly trained, equipped and supported structural firefighters.

References:

Propane Safety Web Site

Natl. Institute for Occupational Safety & Health's Web Site

National Propane Gas Association's Web Site

National Fire Protection Association's Web Site

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- New construction materials

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

- Pets and livestock

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

- Evacuation occurring

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

- Limited access

  Narrow one-lane roads with no turn-around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized-up and an evacuation plan for all emergency personnel should be developed.

3) Risk Summary

This document was updated in August 2018 by Mark Wiles, CWPP Specialist with the Georgia Forestry Commission. The original assessment information is still valid, due to the slow economic growth in the area
Following a meeting between the Georgia Forestry Commission and Personnel of the West Brow Fire Department on April 8, 2010 assessments of communities at risk from wildland fire was undertaken. This assessment process was based on information provided by the Georgia Forestry Commission from the Southern Fire Risk Assessment supplemented by local knowledge of high risk areas. Communities were assessed using the Georgia Forestry Commissions Form 140 for Woodland Community Wildfire Hazard Assessment. This form determines risk based on four criteria subdivision design, site hazard, building construction, and additional factors. Communities are assigned a risk category based on a numerical score. Communities are designated as being at extreme, high, moderate, or low risk. Assessments were declared complete on March 23, 2011. Nine (9) woodland communities were assessed. Three (3) areas were classified as extreme and six (6) were moderate. Results from this assessment process are summarized in a spreadsheet entitled 'Risk Summary Dade County' which is included in the appendix. This document contains summary information from the assessment forms. The electronic form of this document can be amended should additional assessments be conducted in the county. The map numbers listed on the spreadsheet correspond to the numbers on Wildland Fire Susceptibility map and show the locations of the assessment areas.

All of the communities rated as having an extreme degree of risk are located on Lookout Mountain in the southern part of the county. Several communities are located on terrain that is very mountainous. Fires that occur on this type of terrain are particularly difficult to suppress due to slope and vegetation type. There are also areas influenced by western and southern aspects which lead to more rapid drying of available fuel. Fires can also be influenced by steep sided drainages which can lead to "chimney" influenced spread. Many of the assessment areas in the northeast part of the county rated as being at moderate risk are also located in areas influenced by extreme slope, south and west aspects, steep sided drainages and extensive unbroken wildland fuel. It should be noted that under extreme fire danger many of the areas that were assessed could be at a higher degree of risk than was indicated by the assessment process. There are still ample opportunities for assessment in the county particularly in the northwestern part of the county in the Davis and New Home fire jurisdictions.

Developments generally have covenants that restrict residents from altering vegetation on their property. Existence of covenant restrictions in assessment areas is not known at the time of this writing and should be investigated. This can lead to higher degrees of structural ignitability and less defensible space. Many structures are occupied part time which can lead to less maintenance. This can also contribute to higher danger regarding structural ignitability.

4) Prioritized Mitigation Recommendations

The following recommendations were developed during follow-up meetings with County and State fire response agencies. A priority order was determined based on which mitigation projects would best reduce the hazard of wildland fire to communities and infrastructure. The following priorities were considered.

- Community Hazard and Structural Ignitability Reduction
- Wildland Fuel reduction or modification
- Improvements to capabilities of Wildland response agencies
- Public Education regarding risk of wildland fire

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Hazard	Mitigation	Method
Lack of defensible space	Improve defensible space around structures in communities at risk	All departments should examine structures in communities at risk in their response areas. Improvements to defensible space as referenced in Firewise guidelines should be conveyed to residents through media or direct contact.
Access problems for initial attack	Improve access problems	All County response agencies and the Georgia Forestry Commission should closely examine access in all communities identified to be at risk. When problems are identified corrective measures should be made.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Hazard	Mitigation	Method
Structural Ignitability	Reduce structural ignitability	Citizens in communities at risk should be educated regarding methods to reduce structural ignitability as referenced in Firewise guidelines. This can be accomplished through media or direct contact.
Local Codes and Ordinances	Improve and amend to codes and ordinances pertaining to infrastructure and community protection from wildland fire.	Examine all existing codes and ordinances for problems regarding direct conflicts to wildland safety or lack of needed codes or enforcement.

Proposed Wildland Fuel Reduction or modification Priorities

Hazard	Mitigation	Method
Fuel Hazards near Communities at risk	Prescribed Burning and permanent firebreaks	Determine Communities at risk where Prescribed burning would be appropriate to use. Seek cooperation from adjacent landowners. Find funding to cover cost of burning. Prioritize burn compartments and execute. Should burning be inappropriate or not accepted by residents, permanent or semi-permanent firebreaks could be installed and maintained.
Fuel Hazard in public or shared spaces	Fuel Modification or reduction	Determine where hazards exist. Determine appropriate method for modification or reduction. Chipping, raking and piling, County pick-up, Organized Community Clean-up days could be beneficial. Organized burning could be conducted on these days supported by local fire department personnel.

Proposed Improvements to capabilities of Wildland Response Agencies Priorities

Problem or need	Improvement or solution	Details
Lack of qualification or training	Provide training opportunities	Examine training records of all wildland responders to insure training and qualifications match expected duties. Insure that all wildland responders have Basic Wildland Certification. Locate and secure funding for enhanced training from state and federal agencies.
Equipment needs	Improve or acquire Wildland fire equipment	Determine specific equipment needs to bring all wildland response equipment to NWCG Standards. Provide appropriate PPE to all County wildland responders. Provide wildland hand tools to County departments. Investigate needs for improvements to all wildland water handing and supply (dry hydrants, brush trucks, hose, etc.)

Proposed Public Education Priorities

Educational Priority	Responsible party	Method
Increase public awareness concerning Firewise principles and fire prevention through direct contact	State, County,and municipal governments	Conduct Firewise meetings by each fire response jurisdiction assisted by Georgia Forestry Commission Conduct a door to door campaign in particularly hazardous communities
Increase public awareness concerning Firewise principles and fire prevention through use of media	County, State, and municipal governments	Use PSA's in local newspapers and local radio stations. Utilize Firewise displays in local post offices and banks. Seek use of local EMC newsletter for Firewise message. Create poster sized notices for use in common public places (stores, post offices, etc. adjacent to high hazard areas advising residents about the hazard and how to protect themselves and their property. Distribute public notices concerning Firewise at local sporting events and other public gatherings.
Increase public awareness concerning Firewise principles and fire prevention through formal certification and recognition	Federal, State, County, and municipal governments	Supported by the Georgia Forestry Commission Dade County Emergency services should set a goal of achieving Firewise status for at least one extreme or high risk category community before the end of calendar year 2019. The goal of adding at least one community annually should extend beyond this initial goal.

5) Action Plan

Dade County has had a consistent history of incendiary fires in most years. All fires that are attributed to this cause should be investigated by the appropriate agency having jurisdiction. Close Cooperation between state and county investigators should be standard practice. During periods of increased arson activity in specific areas, stepped up campaigns utilizing multiple investigators has been effective.

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Steps to implement Community Hazard and Structural Ignitability Priorities

Hazard	Specific Action and Responsible Party
Lack of Defensible Space	Using the risk summaries referenced in section 3, each department should conduct inspections of communities at risk in their jurisdiction or area of response for lack of defensible space. Findings will be conveyed to residents and treatment methods will be recommended in accordance with Firewise principles. This would probably be best accomplished by approaching homeowners associations or organizations. Ultimately, the message should reach individual homeowners in each community. Should local organizations not exist, the builder or developer could be contacted. Such contacts would also influence future projects or developments
Access problems	Using individual Communities at Risk maps for each station, the Georgia Forestry Commission and Dade County Fire officials should visit all identified communities at risk for the purpose of locating and resolving access difficulties. This inspection should extend into the wildland adjacent to the communities at risk looking for hindrances to suppression tactics
Structural Ignitability	Dade County Fire officials should examine structures for structural ignitability concerns at the time when the communities at risk are inspected for lack of defensible space. Using Firewise guidelines for reducing structural ignitability, (a checklist could be formulated and used) structures should be assessed and findings conveyed to residents. This could be through use of media or by direct contact with residents or homeowners associations.
Codes and Ordinances	Dade County and municipal Fire Marshalls should closely examine all codes and ordinances for gaps and oversights which could cause problems in the wildland fire arena. Examples include proximity of propane tanks to structures, accumulations of debris, lack of proper identification pertaining address or street names, set back distances from wildland fuels, road widths in new developments.

In regard to priority, the above steps should first extend to the higher numbers in the extreme category from the risk summary as these communities are at a higher degree of risk.

5) Action Plan

Steps to implement Fuel Reduction or Modification Priorities

Hazard	Specific Action and Responsible Party
Hazardous Wildland Fuel Accumulations	The Georgia Forestry Commission will prioritize prescribed burning projects adjacent to Communities at risk where burning is determined to be appropriate. Due to the nature of smaller sizes holdings and steeper terrain, burn projects may have to be small scale and carefully managed.
Fuel Continuity between Wildland and Woodland Communities	In areas where the need exists and fuel reduction by burning is determined to be inappropriate, permanent or semi-permanent fuel breaks could be established. These breaks should be maintained annually prior to the arrival of prime burning times. Their locations should be mapped and made known to local and state response personnel. Residents of the Communities adjacent to these breaks should be advised of their purpose and their cooperation in protecting them should be gained. These breaks could be installed by the Georgia Forestry Commission.
Hazardous Fuel Accumulations in communities and hindrances to suppression	Using the risk summary in section 3, Fire departments could conduct community clean up days in communities at risk in their respective jurisdictions aimed at reducing hazardous fuels and hindrances to suppression in shared community space. Residents would be provided with guidance and access to disposal alternatives for materials removed.

Steps to implement improvements to wildland response capability

Improvement needed	Responsible Party and specific action
Improve training and qualification of Dade County Wildland firefighters	The Georgia Forestry Commission Chief Ranger, Assistant District Manager of the Georgia Forestry Commission Coosa West District, and Dade County Fire Chief should examine all training records for personnel under their supervision. All personnel assigned or anticipated to be assigned wildland response responsibilities should be certified Georgia Basic Wildland Firefighter or higher in qualification. Additional training and qualification should be sought for personnel identified in the Dade County Fire plan who are assigned specific Incident Command System (ICS) functions. Sources for available funds for training should be sought at local, state, and federal levels.
Improve or acquire wildland firefighting equipment	All stations for Dade County Fire Departments should inventory their present equipment relating to their wildland capability. Funding sources should be investigated from available grants or other sources. Needs for job specific wildland responses should be examined by the Chief Ranger and Fire Chief.

5) Action Plan

Steps to educate or inform the Public regarding wildland fire prevention and responsibilities

Opportunity	Responsible Party and Specific Action
Improve Public Education through direct contact	Prior to the onset of fire season(s) rangers of the Georgia Forestry Commission and Dade County Fire personnel should conduct Firewise meetings in conjunction with normally scheduled fire department meetings. People living in or near extreme and high risk communities should be invited to these meetings by use of door to door campaigns or by public notice. Notices regarding these meetings could be placed in local post offices or stores near communities at risk. A Firewise display should be acquired and utilized at this meeting. This display would be retained by the Dade unit of the Georgia Forestry Commission and used for all Firewise meetings in those Counties. Local news media should be invited to these meetings. Goals for potential Firewise certified communities in Dade County could be considered after these meetings are completed.
Improve Public Education through use of media	Prior to the onset of fire season(s) or during periods of particularly high fire danger use of the media should be stepped up by personnel of the Georgia Forestry Commission. This should include use of all available media in the County. PSA's should be run weekly during periods of high to extreme fire danger. Signs or poster boards could be developed for display in public spaces near communities at risk advising residents that they live in areas that are susceptible to wildland fire and directing them to sources of information regarding wildland fire and their role in improving their own personal safety. Signs directing residents to the Firewise website could be effective. Firewise materials could be provided to the County building permit office.
Improve Public Education through formal certification	Before the end of calendar year 2019 the Georgia Forestry Commission and Dade County Fire should obtain Firewise certification for the **Lookout Highlands Community.** Should this goal not be realistic, another community from the risk summary should be selected for certification.

5) Action Plan

Timetables for Actions

Steps to implement Community Hazard and Structural Ignitability Priorities

- Steps to examine communities at risk for defensible space and structural ignitability should take place during the winter of 2018-19.
- Pre-planning to examine access and suppression problems should take place at any time during the current burning season.
- Codes and Ordinances should be examined as soon as possible in order for the legal workings of changes to take place.

Steps to implement Fuel Reduction or Modification Priorities

- Any identified prescribed burn projects should take place in late winter 2018-19. Any other priority burn projects or installation of pre suppression fuel breaks should take place during this same window.
- Steps to reduce fuels in communities at risk should coincide with steps to improve defensible space and reduce structural ignitability. Timing of these actions would be dependent upon Fire station availability during the late winter of 2018 - 19.

Steps to implement improvements to wildland response capability

- Cooperation between state and local wildland suppression forces regarding improvements to training and equipment should begin immediately.

Steps to educate or inform the Public regarding wildland fire prevention and responsibilities

- Direct contact with residents in Communities at risk should take place as soon as possible during early calendar year 2019
- The use of media should coincide with the above action.
- Certification of Firewise communities should follow the timetable associated with the action plan

5) Action Plan

Assessment of Actions

Reduction of Community hazard and structural ignitability

- Direct measurement of the number of communities assessed would be the appropriate measure of success
- Any meetings that result in cooperation between wildland departments should be logged along with minutes of those meetings. Goals should be set and reviewed after each meeting.
- Any changes to or additions to codes and ordinances would be an obvious measure of success.

Steps to implement Fuel Reduction or Modification Priorities

- Acres burned would be the appropriate measure for fuel reduction. A direct measure of linear feet of firebreaks would be an appropriate measure for pre suppression breaks.
- Fuel reduction in communities at risk would be measured by the number of communities affected and number of projects completed.

Steps to implement improvements to wildland response capability

- A direct measure of the number of capabilities or qualifications gained would be the appropriate measure of success.
- Any equipment acquired or any equipment brought up to national standards would be the appropriate measure of success.

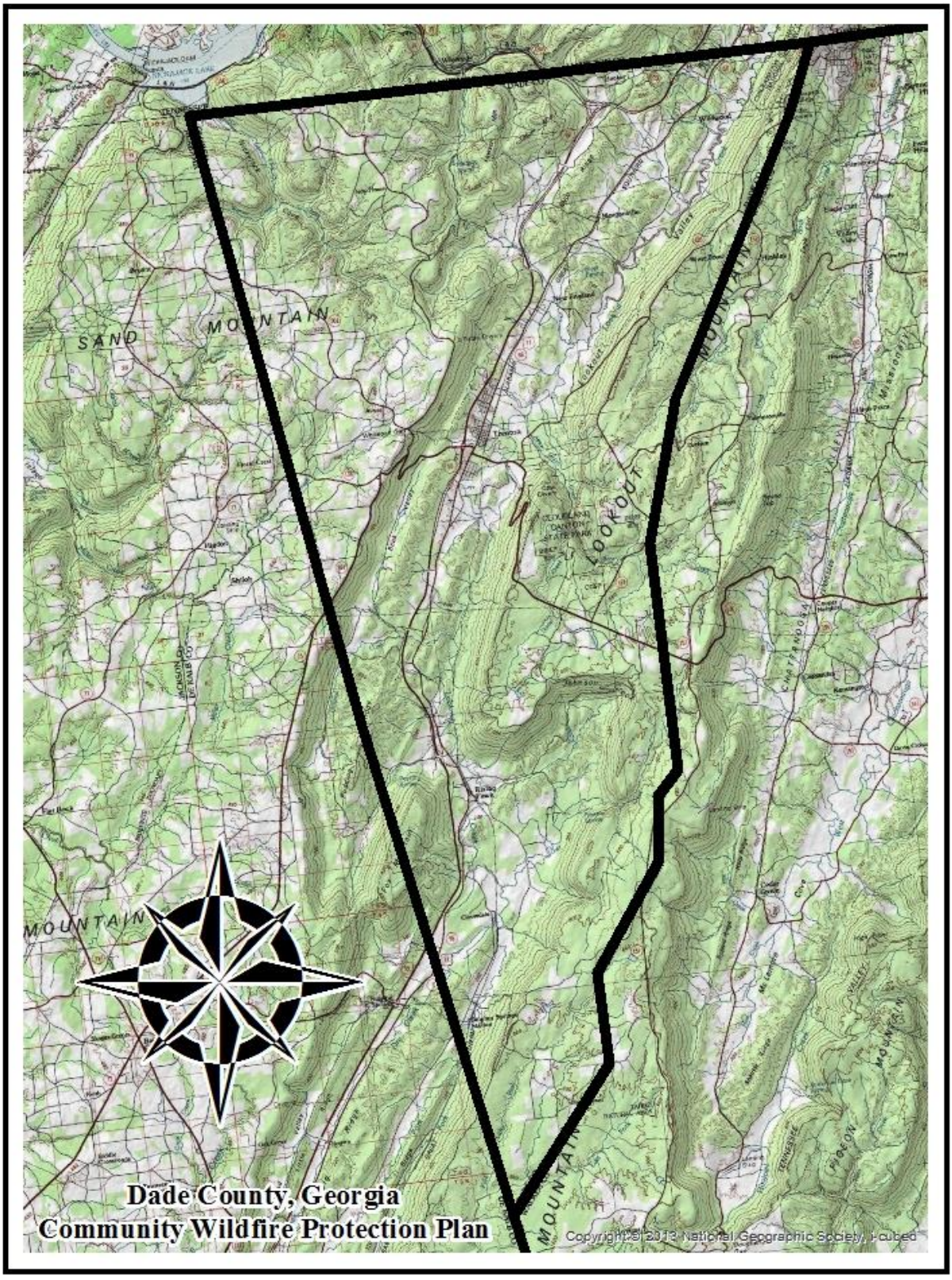
Steps to educate or inform the Public regarding wildland fire prevention and responsibilities

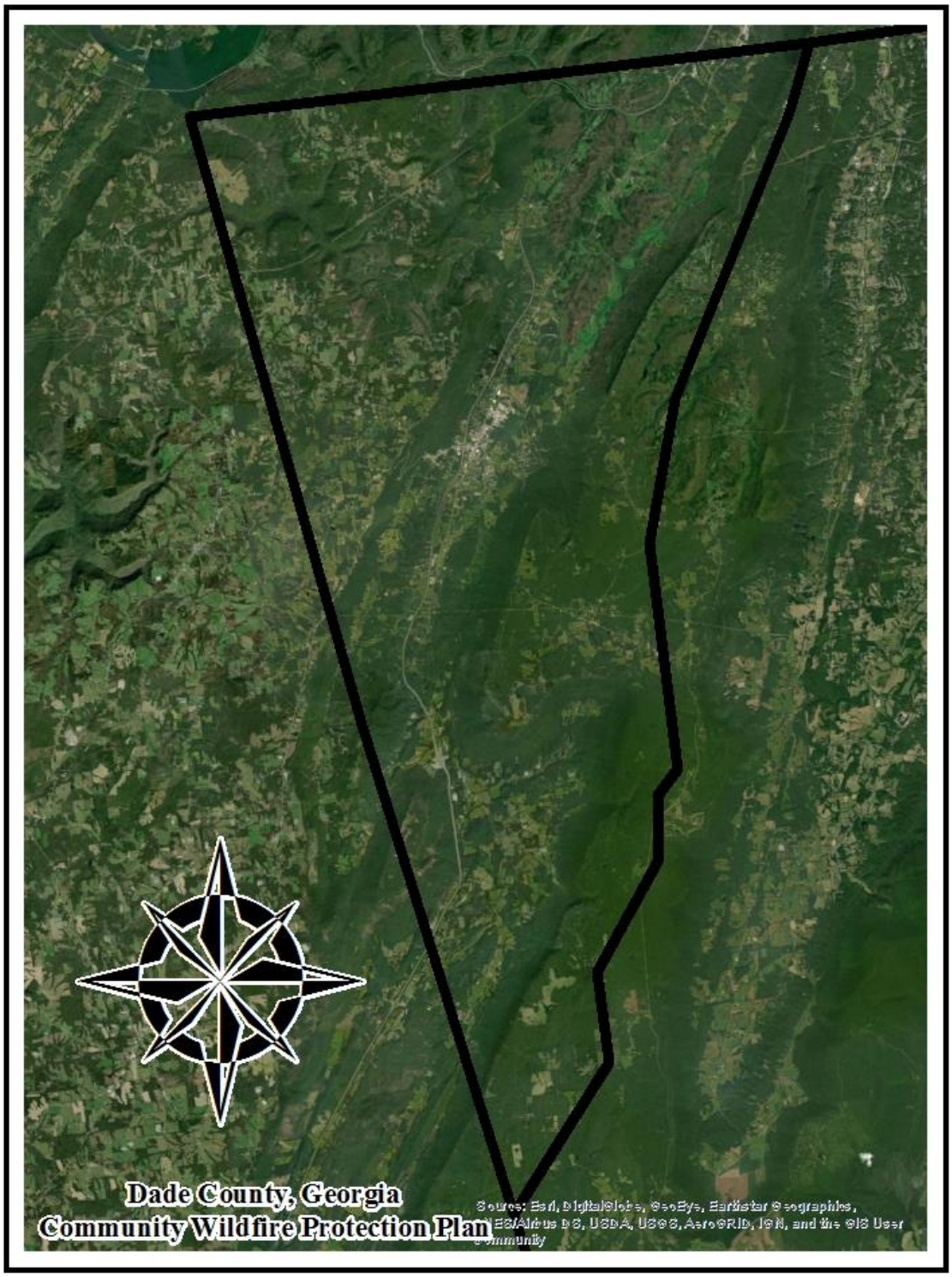
- Direct measurement of the number of persons contacted, literature distributed, public notices posted, and news articles published, radio programs aired, etc. would be the best measure of success. The number of communities that achieve Firewise status would be an obvious measure of success.

6) Wildfire Pre-Suppression Plans

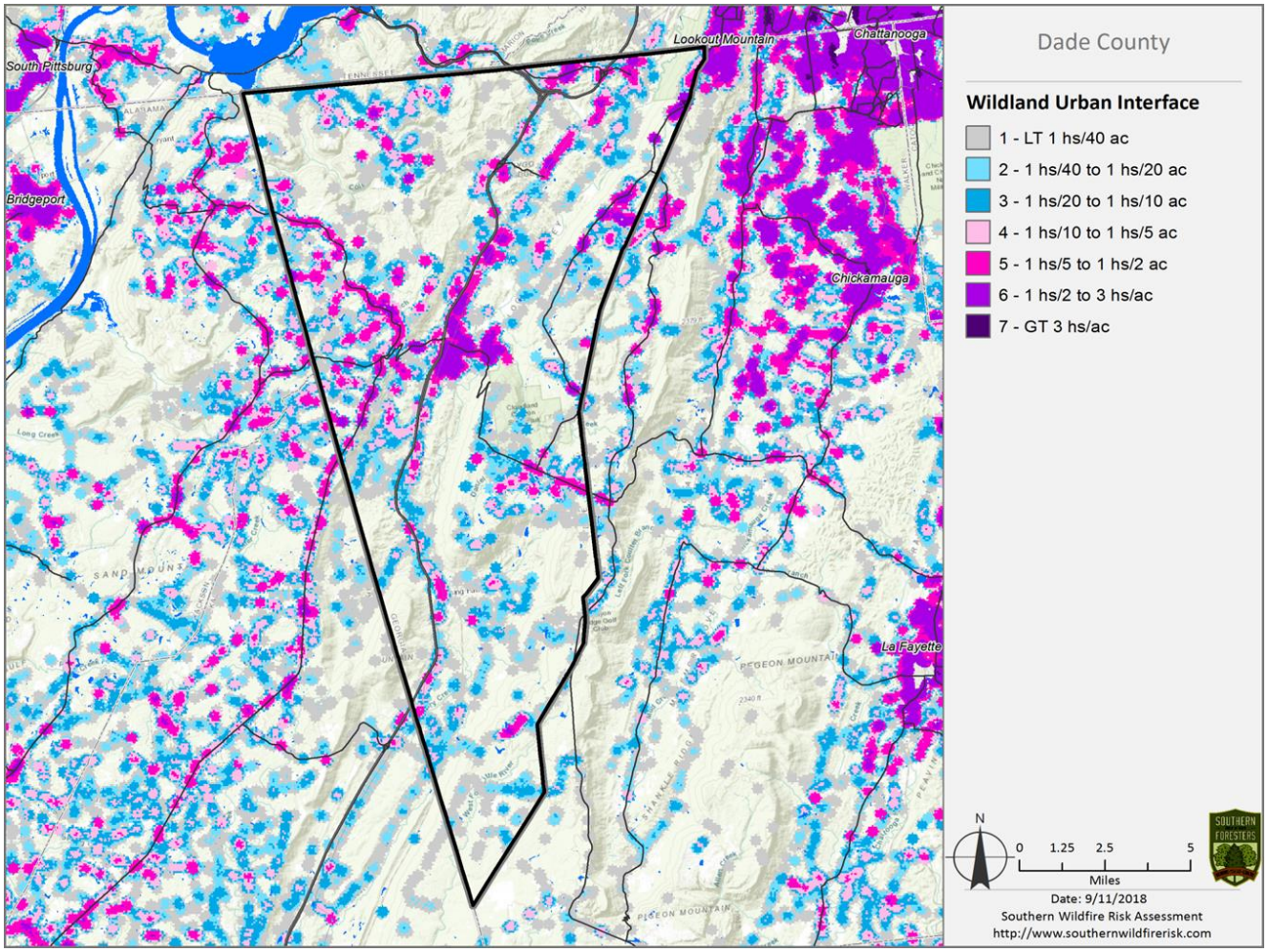
The 2018 update of the Georgia Forestry Commission Dade County Fire Plan is included in the appendix of this plan.

7) County Base and Hazards Maps




Dade County, Georgia
Community Wildfire Protection Plan
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Wildland Urban Interface

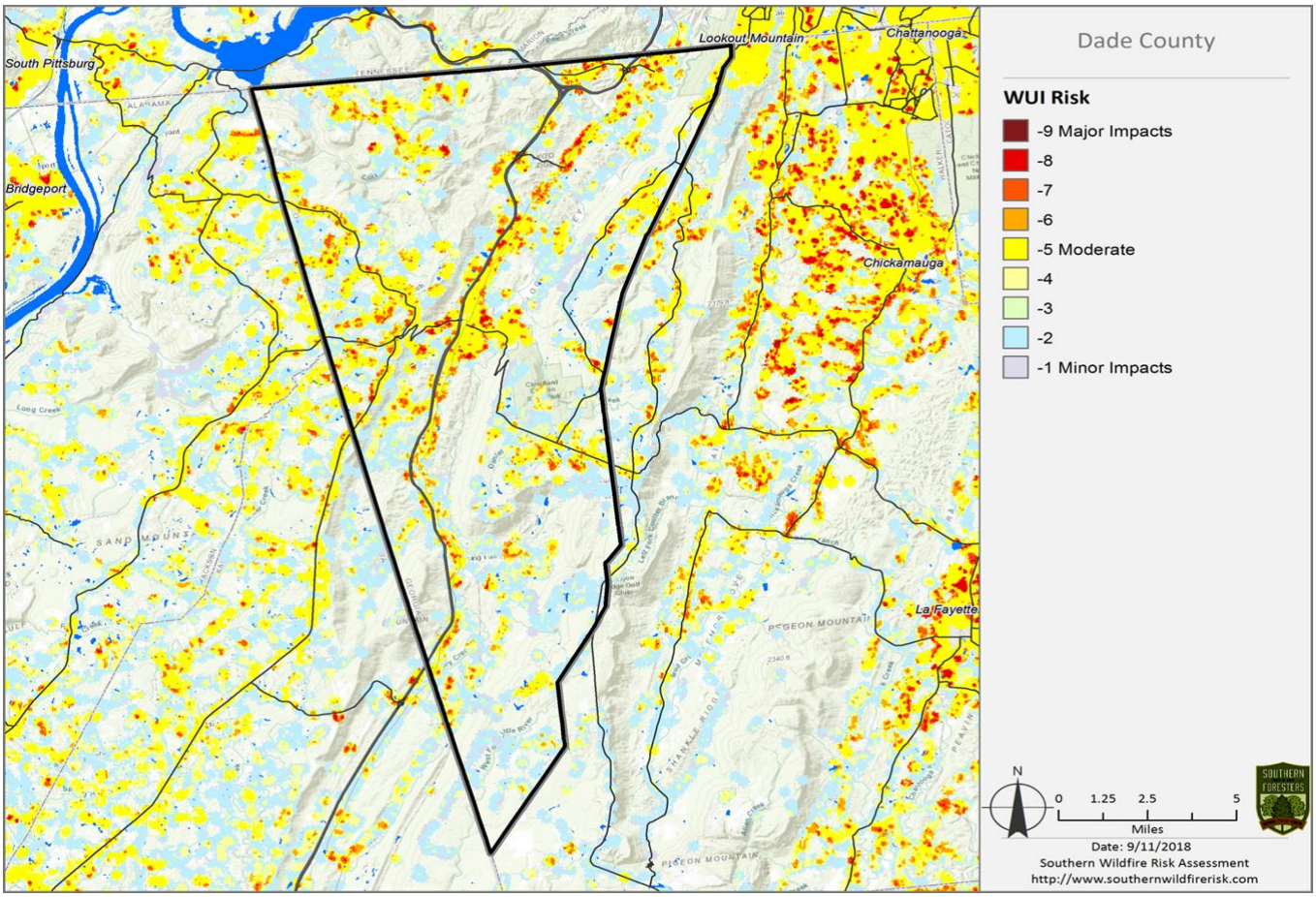


WUI is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases the risk from wildfire.

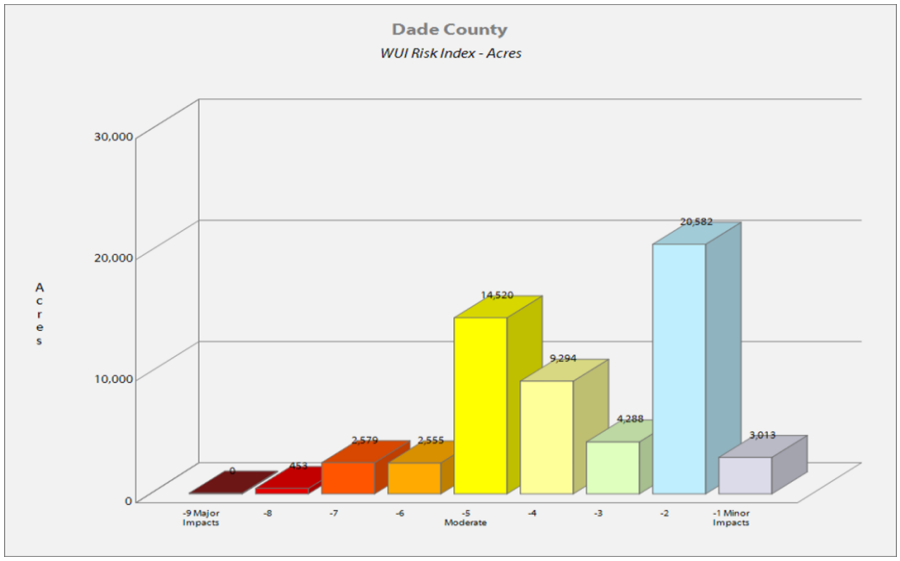
For the **Dade County** project area, it is estimated that **16,525** people or **100 percent** of the total project area population (16,573) live within the WUI.

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

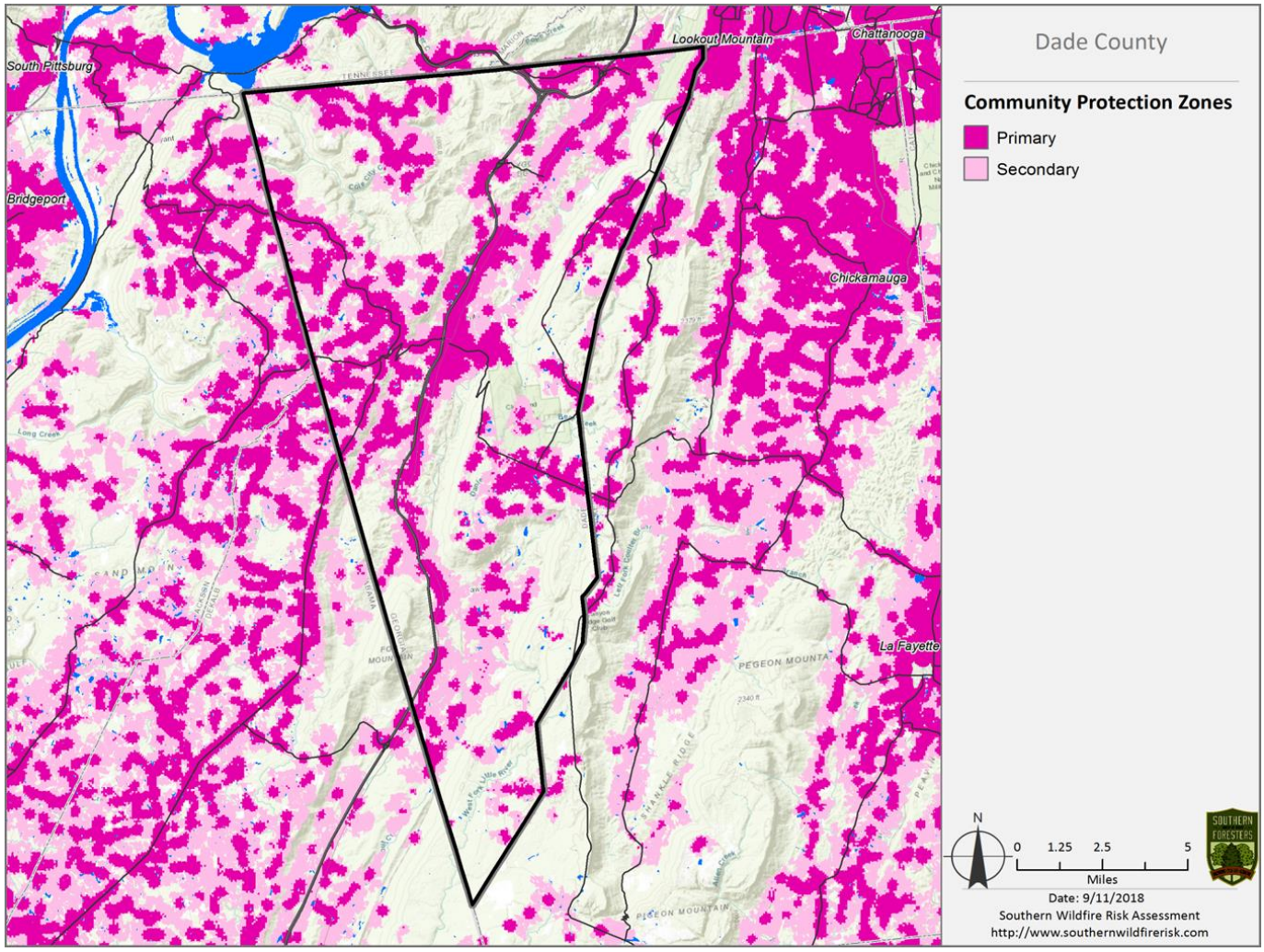
WUI Risk Index



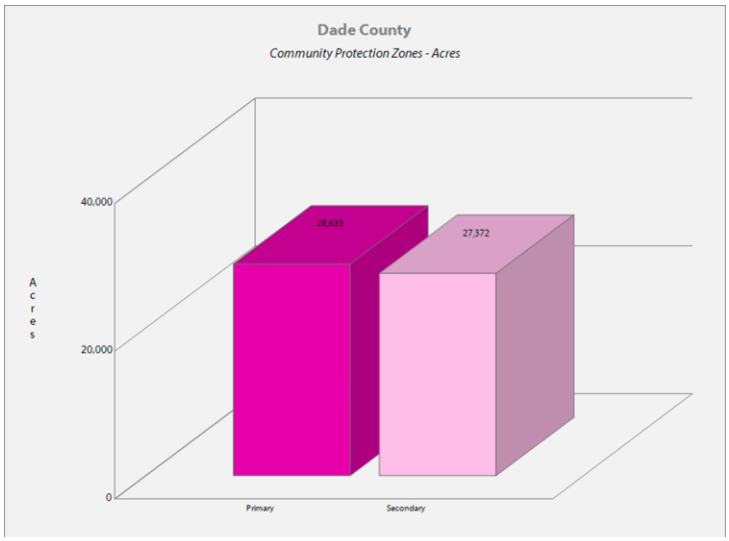
The Wildland Urban Interface (WUI) Risk Index layer is a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the Wildland Urban Interface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



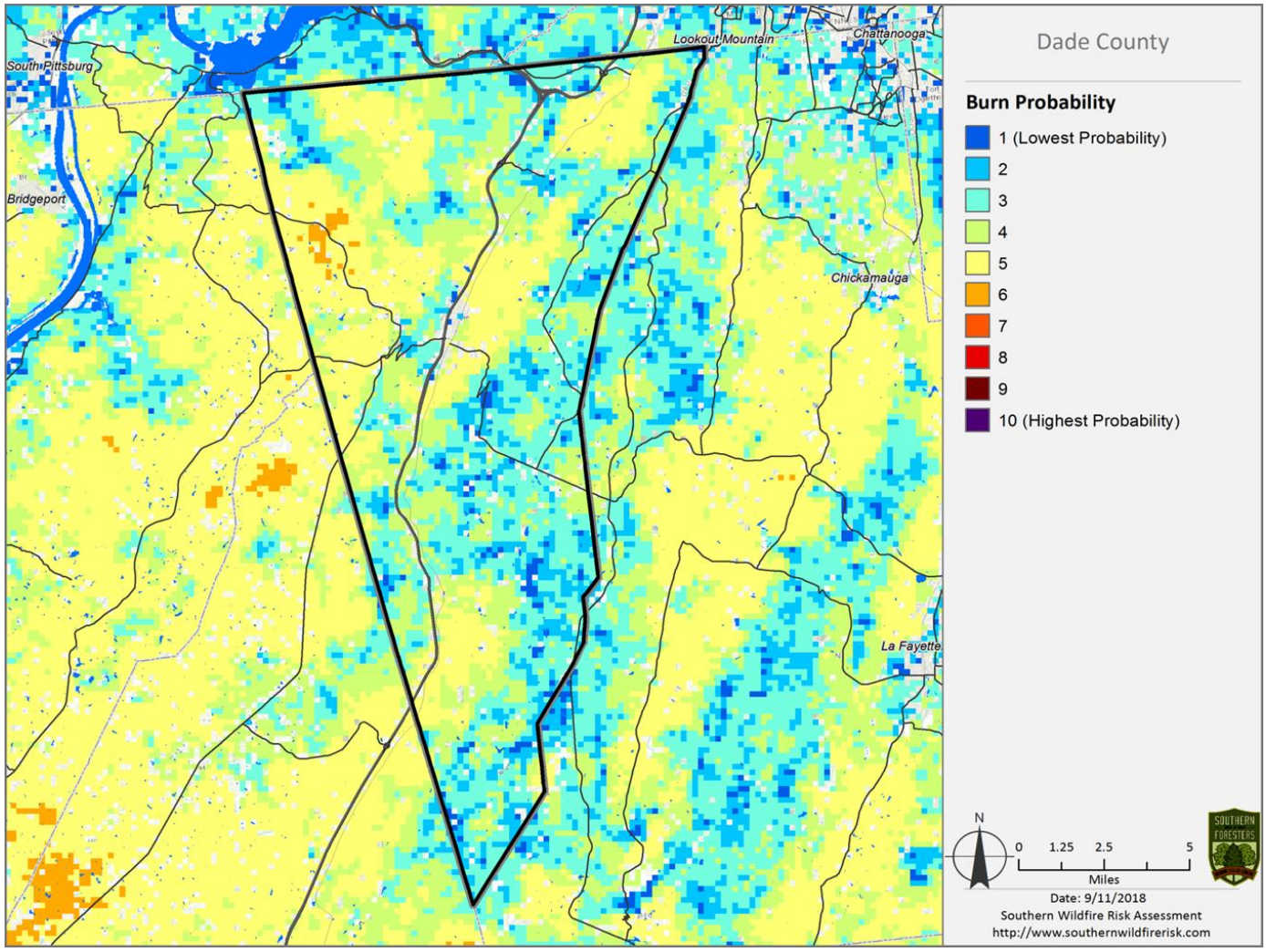
Community Protection Zones



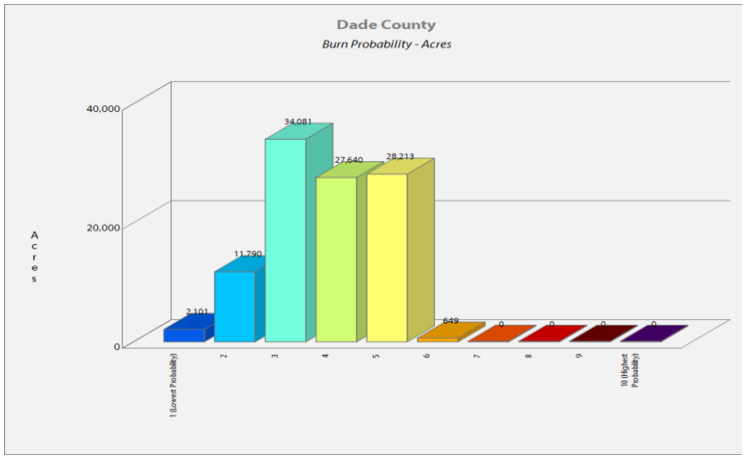
Community Protection Zones (CPZ) represent those areas considered highest priority for mitigation planning activities. CPZs are based on an analysis of the Where People Live housing density data and surrounding fire behavior potential. Rate of Spread data is used to determine the areas of concern around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



Burn Probability



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



GRANT FUNDING AND MITIGATION ASSISTANCE

- Georgia Firewise Community Hazard Mitigation Grant: Georgia Forestry Commission grant designed to assist Firewise communities in the mitigation of fire hazards within their community. The grant is designed to provide financial assistance in helping the community to carry out the recommendations of their Firewise Action Plan.

- Community Protection Grant: U.S.F.S. 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.

- 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.

    3. With a complete a 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.

- FEMA – Assistance to Firefighters Grant Program

    1. Assistance to Firefighters Grants (AFG). The purpose of AFG's is to award one-year grants directly to fire departments and emergency medical services (EMS) organizations of a state to enhance their abilities with respect to fire and related hazards.

    2. Fire Prevention and Safety Grants. The purpose of these grants is to assist state, regional, national or local organizations to address fire prevention and safety. Emphasis of the program is on prevention of fire-related injuries to children.

    3. Staffing for Adequate Fire and Emergency Response (SAFER). The purpose of SAFER is to award grants directly to volunteer; combination and career fire departments to help the departments increase their cadre of firefighters (enhance their ability for 24-hour response).

- 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.

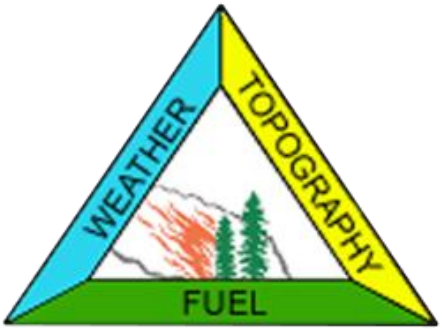
- Individual Homeowners:

1. The elimination of hazardous conditions around a structure must ultimately be the responsibility of the community and the homeowner. They will bear the cost and reap the benefit from properly implemented mitigation efforts.

2. GEMA: Pre-Disaster Mitigation Grant Program

8) Appendix

- Risk Summary table
- Road map index
- Dade County Tactical Fire Plan.



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