



Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Calhoun County, Georgia

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



JANUARY 2018

Prepared by:

Jon Lee Wright, Chief Ranger, Calhoun County
Mark Wiles, Wildfire Prevention Specialist

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:

CWPP CORE COMMITTEE

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

CWPP Core Committee

Fire Chief Richard Martin
Chief Ranger Jon Lee Wright

Georgia Forestry Commission Representatives

Chief Ranger Jon Lee Wright
Wildfire Prevention Specialist Mark Wiles

Meeting Dates

Initial Core Committee Meeting: Friday, February 12, 2010
Follow-Up Meeting #1: May 27, 2010
Updated Report: January 2018



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Calhoun County Wildfire Pre-suppression Plan

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

I. OBJECTIVES

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

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

II. COMMUNITY COLLABORATION

The core team convened on Friday, February 12, 2010 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, federal and state agencies responsible for forest management. Below are the groups included in the task force:

It was decided to conduct community assessments on the basis of the individual fire districts in the county. The chiefs of the fire departments in the county assessed their districts and reconvened on May 27th, 2010. Plan was updated in January 2018 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 AND EXISTING SITUATION

The Georgia Forestry Commission (GFC) is the state agency responsible for providing leadership, service, and education in the protection and conservation of Georgia's forest resources. Commission professionals provide a wide variety of services including fire detection, issuing burn permits, wildfire suppression and prevention services, emergency and incident command system expertise, rural fire department assistance, forest management assistance to landowners and communities, the marketing and utilization of forest resources and nature services, and growing and selling quality tree seedlings for planting. Forestry is a \$28.7 billion a year industry in the State of Georgia creating 128,000 jobs statewide. Forest products contribute significantly to the local economy of Calhoun County. It is the Georgia Forestry Commission's goal to protect this precious resource.

Vision: Healthy sustainable forests providing clean air, clean water and abundant products for future generations.

Mission: To provide leadership, service and education in protection and conservation of Georgia's forest resources.

Personnel

The Georgia Forestry Commission office serving Calhoun County is located at: 18859 Hartford Street, Edison, Georgia, 39846.

Personnel assigned to this office include:

Jon Lee Wright, Chief Ranger
Willie C. Jackson, Ranger I
Frederick A. Robinson, Ranger I

Wildland firefighting equipment assigned to this GFC office:

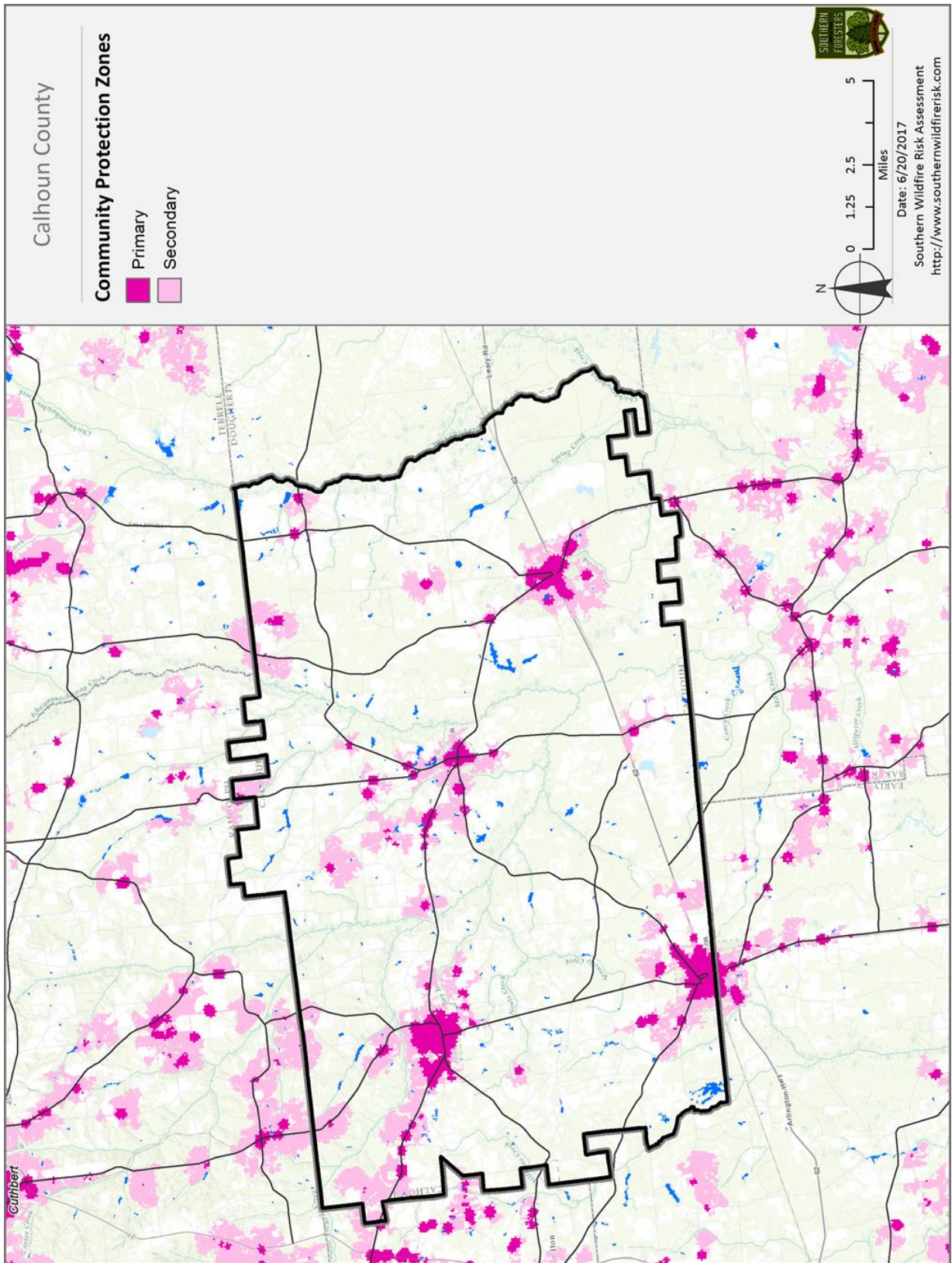
1 Freightliner Transports with JD550J Crawler Tractor
1 International Transport with JD550H Crawler Tractor
1 Type VII Ford F-250 Pickup Trucks

The leading cause of wildfires in Calhoun County is escaped debris burning, followed closely by machine use. The number of wildfires and acres burned by cause is listed below for Fiscal Year 2017, as is the average number of fires and acres burned for the past five years.

County = Calhoun	Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	1	↑	0.09	0.20	0.02
Children	Children	1	↑	0.04	0.20	0.01
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0		0.00	0.60	1.68
Debris: Construction Land Clearing	Debris: Construction Land Clearing	0		0.00	0.20	1.08
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	2	↑	3.10	1.40	3.24
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	0		0.00	0.20	0.00
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	0		0.00	0.20	2.00
Machine Use	Machine Use	1		5.64	1.40	4.35
Miscellaneous: Other	Miscellaneous: Other	0		0.00	0.40	0.21
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	1	↑	0.81	0.80	5.06
Railroad	Railroad	0		0.00	0.20	0.06
Undetermined	Undetermined	0		0.00	0.20	0.75
Totals for County: Calhoun Year: 2017		6		9.68	6.00	18.46



IV. COMMUNITY BASE MAP



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.

The wildland fire risk assessments conducted in 2010 by Calhoun County Fire Departments returned an average score of 104, placing Calhoun County in the “moderate” hazard range. The risk assessment instrument used to evaluate wildfire hazards to Calhoun County’s WUI was the Woodland Community Wildfire Hazard Assessment. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard score for Calhoun County:

- Dead end roads with inadequate turn arounds
- Narrow roads without drivable shoulders
- Narrow Driveways with overhanging trees
- Inadequate wooden bridges on private drives
- Minimal defensible space around structures
- Homes with wooden siding and roofs with heavy accumulations of vegetative debris
- Lack of pressurized water systems in areas
- Dry hydrant sources dried up during periods of drought
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations





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 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.

● 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.

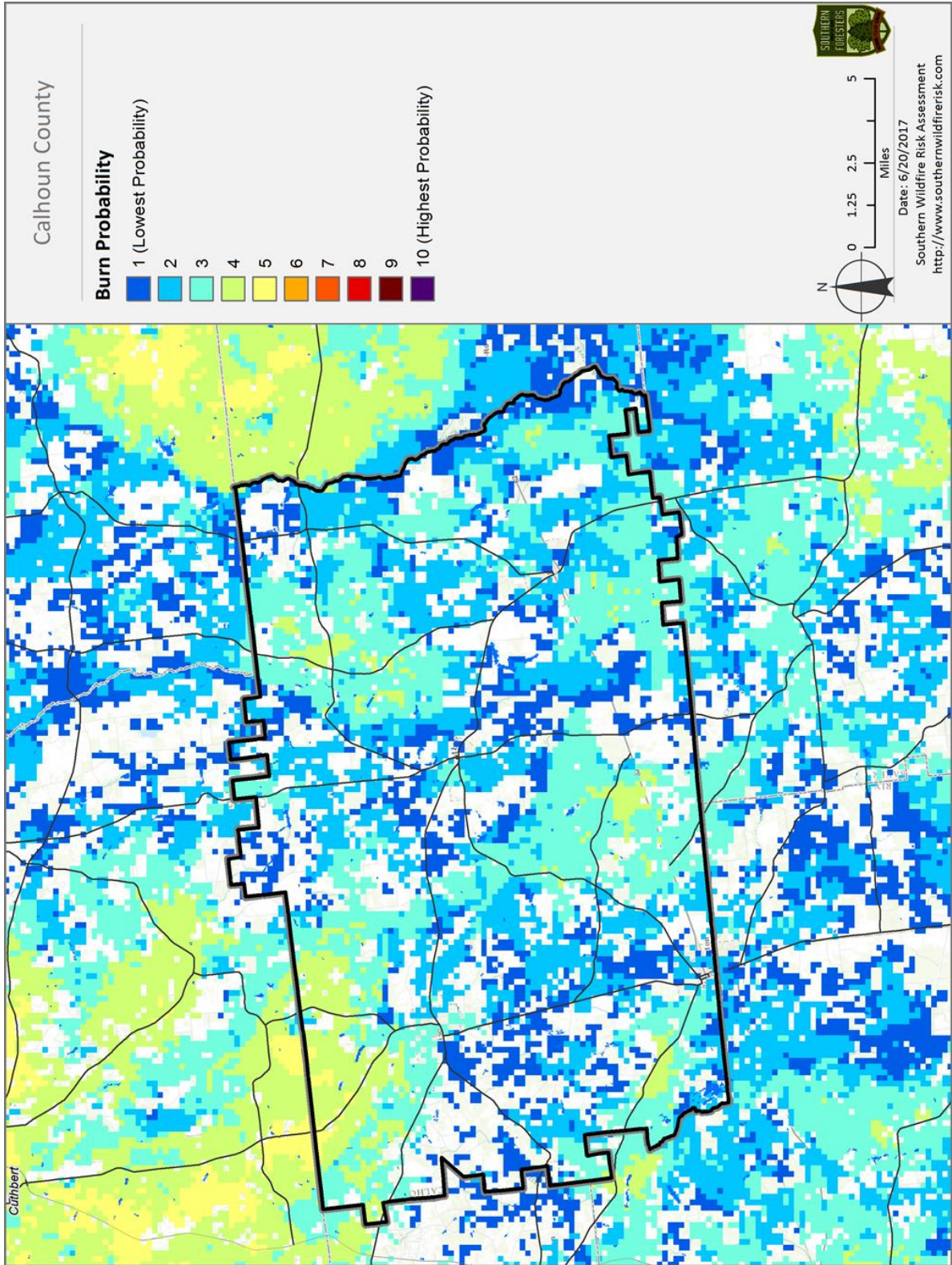
● Evacuation occurring

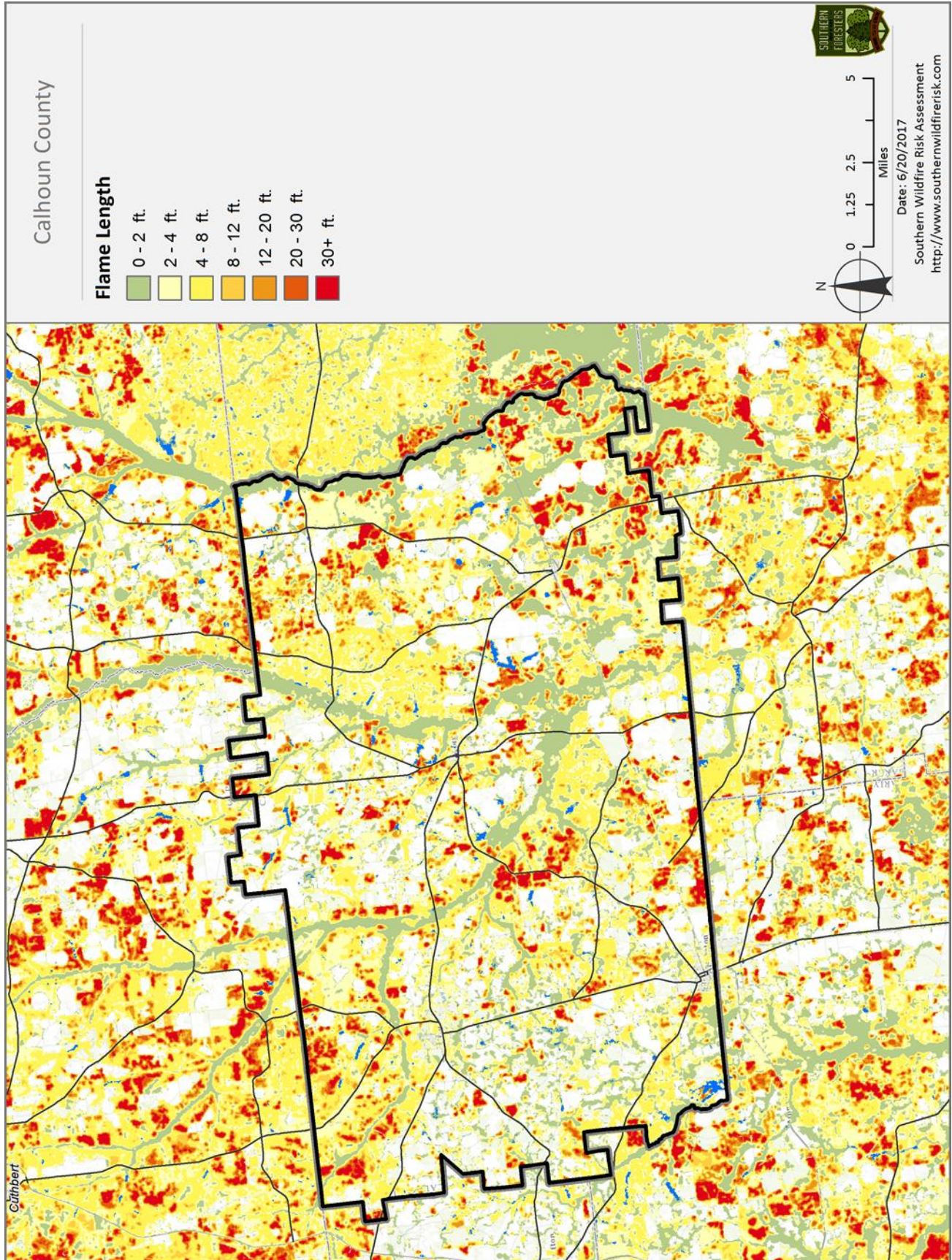
- Firefighters may be taking structural protection actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property, and firefighters may need to disengage from fighting fire to contact law enforcement officers 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.

VI. COMMUNITY HAZARDS MAPS





VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As Georgia continues to see increased growth from other areas seeking less crowded and warmer climates, new development will occur more frequently on forest and wildland areas. Elbert 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.

The following recommendations were developed by the Calhoun 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-foot of defensible space**	Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.
2. Applicable Structures	Reduce structural ignitability**	Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.
3. Community Clean-up Day	Cutting, mowing, pruning**	Cut, prune, and mow vegetation in shared community spaces.
4. Driveway Access	Right of Way Clearance	See that adequate clearance is maintained to allow emergency vehicle access.
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds.
6. Codes and Ordinances	Examine existing codes and ordinances.	Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns Review Subdivision and development ordinances for public safety concerns. Continue Enforcement of uniform addressing ordinance.
7. Burn Permits	Education and Enforcement	Greater Burn Permit enforcement and education from the Georgia Forestry Commission.

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. Coordinate land management activities, particularly fuel reduction, with state and federal managers on public lands adjacent to WUI areas.
2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Locate additional dry hydrants as needed. Locate and pre-clear helicopter dip sites
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland Nomex PPE Gear.
3. Water Sources	Water Handling	Investigate need for additional tenders and overhead storage tanks at stations
4. Road Names	Road Signage	Improved Road Signage at Crossroads. "Dead End" or "No Outlet" Tags on Road Signs
5. Personnel	Training	Obtain Wildland Fire Suppression training for Fire Personnel.
**Actions to be taken by homeowners and community stakeholders		

Proposed Education and Outreach Priorities

1. Conduct “How to Have a Firewise Home” Workshop for Calhoun 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

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

4. Informational Packets

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

- Be Firewise Around Your Home
- Firewise Guide to Landscape and Construction
- Firewise Communities USA Bookmarks

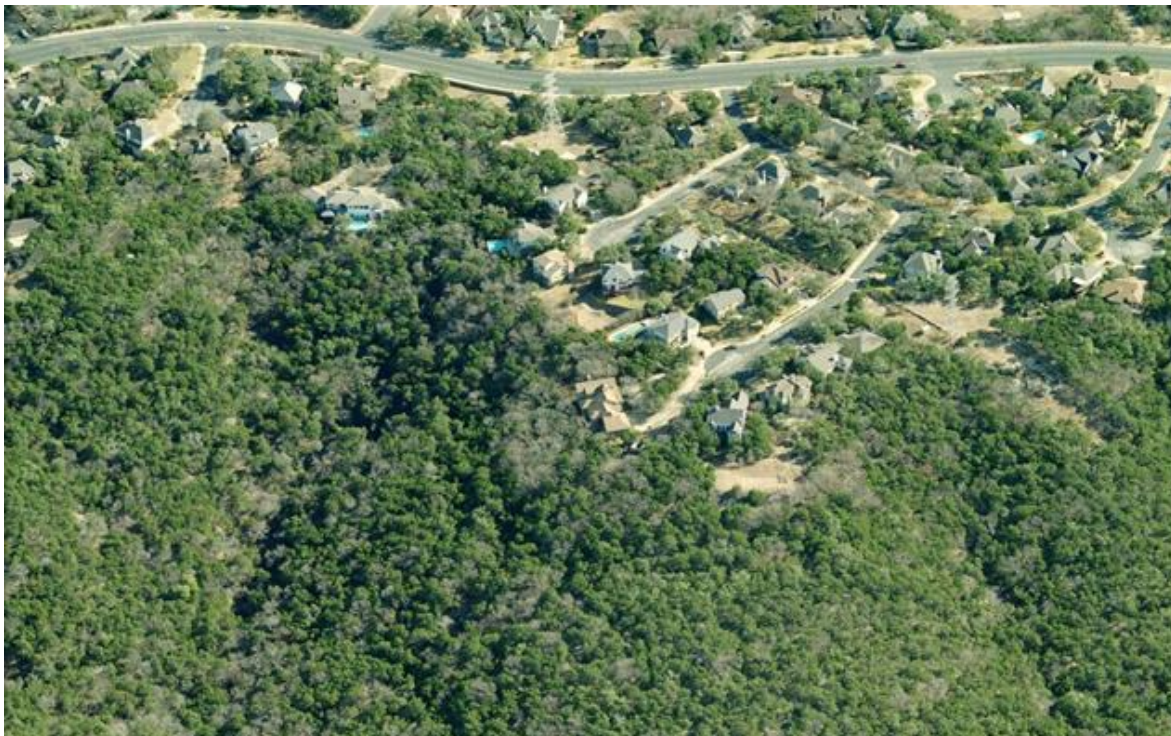
5. Wildfire Protection Display

Create and exhibit a display for the general public at Calhoun County Festivals and other local events. Display can be independent or combined with the Georgia Forestry Commission display.

Hold Open House at individual Fire Stations during Fire Prevention Month to promote Community Firewise Safety and develop community support and understanding of local fire departments and current issues.

6. Press

Invite the local news media and to community “Firewise” functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Calhoun County. Utilize community access channel on CATV systems and city and county websites to distribute “Firewise” info to residents.



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	
Elbert County WUI Fire Council	Create this informal team or council comprised of residents, GFC and USACE officials, Calhoun County Fire department officials, representatives from the city and county government and the EMA Director for Calhoun 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	<ol style="list-style-type: none"> 1 Defensible Space and Firewise Landscaping 2 Debris Burning Safety 3 Firewise information for homeowners 4 Prescribed burning benefits
Communications objectives	<ol style="list-style-type: none"> 1 Create public awareness for fire danger and defensible space issues 2 Identify most significant human cause fire issues 3 Enlist public support to help prevent these causes 4 Encourage people to employ fire prevention and defensible spaces in their communities.
Target Audiences	<ol style="list-style-type: none"> 1 Homeowners 2 Forest Landowners and users 3 Civic Groups 4 School Groups
Methods	<ol style="list-style-type: none"> 1 News Releases 2 Radio and TV PSAs 3 Personal Contacts 4 Key messages and prevention tips 5 Visuals such as signs, brochures and posters

Spring Clean-up Day	
Event Coordinator	Coordinate day's events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.
Publicity Coordinator	Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.
Work Supervisor	Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, Calhoun 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)
1. Create a minimum of 30 feet of defensible space around structures	Varies	Residents will supply labor and fund required work on their own properties.
2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material.	Varies	Residents will supply labor and fund required work on their own properties.
3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.	No Cost	To be adopted by city and county government.
4. Spring Cleanup Day	Varies	Community Business Donations.
5. Fuel Reduction Activities	\$35 / acre	FEMA & USFS Grants

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



Assessment Strategy

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

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



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GaTrees.org**

The Georgia Forestry Commission provides leadership, service, and education in the protection and conservation of Georgia's forest resources. An Equal Opportunity Employer and Service Provider