



Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Echols County, Georgia

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



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PLAN CONTENTS

PREFACE

I. Objectives	5
II. Community Collaboration.....	5
III. Community & Wildfire History.....	6
IV. Community Base Maps	13
V. Community Wildfire Risk Assessment.....	16
VI. Southern Wildfire Risk Assessment & Risk Hazard Maps	19
VII. Prioritized Mitigation Recommendations	25
VIII. Action Plan.....	30
IX. Mitigation Assistance & Grant Information.....	33
X. Glossary.....	34
XI. Sources of Information.....	36

Appended Documents:

Echols County Southern Wildfire Risk Assessment Summary Report (SWRA)

Echols County Wildfire Pre-suppression Plan

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

Preface

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

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

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

This plan will:

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

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

I. OBJECTIVES

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

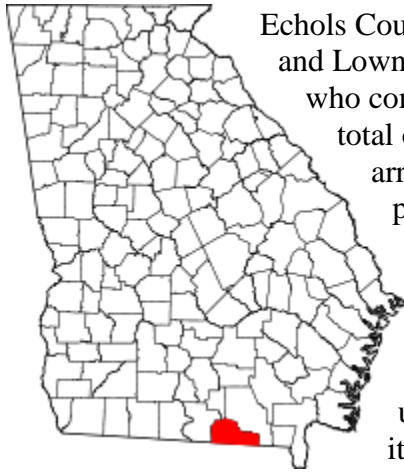
The core team convened on October 4th, 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

Echols County Board of Commissioners
Echols County Fire Department
Georgia Forestry Commission

It was decided to conduct community assessments on the basis individual fire districts in the county. The Chief of the Echols County Fire Department assessed the districts and the core team reconvened on April 24th, 2012 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 & WILDFIRE HISTORY



Echols County, on Georgia's border with Florida, was carved from Clinch and Lowndes counties in 1858 and named in honor of Robert M. Echols, who commanded troops in the Mexican War (1846-48) after serving a total of twenty years in the state legislature. Before white settlers arrived, the inhabitants of the area were Seminole Indians. Sparsely populated, Echols County contains no incorporated towns.

The county seat, Statenville, was first called "Troublesome" after nearby Troublesome Creek. The name was changed when the town was chartered in 1859. There are some stories that its new name was a misreading of "Statesville," which was subsequently used on some maps, but locals believe that the intent was to name it for James W. Staten, a local farmer and store owner. Two wooden courthouses were used from 1859 until 1897, when the second burned down. The business of government was then carried on in rented halls until 1899. The current courthouse was built in 1956. In 1958 the state legislature redrew the city's boundaries to include only the courthouse square; this action resulted in the city's having no residents, and in 1965 Statenville voters turned down the opportunity for a new city charter. Echols County is one of only three in Georgia whose county seat is unincorporated. In addition to Statenville, the county contains the unchartered communities of Fruitland, Haylow, Howell, Mayday, Needmore, Potter, and Tarver.

More than 90 percent of Echols County land is pine forest, most of it privately owned. Historically the economy has been based on agriculture and forestry.

The history of Echols County is dominated by the presence of the Langdale Forest Products Company, founded in 1894 by John Wesley Langdale. Langdale started the business by leasing acres of turpentine timber, and with his sons Billy, Harley, and Noah, he built it into one of the largest wood and wood by-product manufacturers in America. The company owns much of the land in Echols County, although it is based in Valdosta (Lowndes County).

In 1910 the Statenville Railway connected Statenville to Haylow, in the northern part of the county, but the railroad ceased operations in 1924. Despite the county's isolation, residents have joined together to form a unified school system. Between 1898 and 1945, there were seventy-seven schools scattered throughout the county, many of them open just six months a year. School-bus transportation was first provided in 1917, enabling some of the schools to consolidate their operations, and by 1928 the number of schools had been reduced to fourteen. In 1931 the Echols Consolidated School, a brick building in Statenville, was built, and by 1950 all white schoolchildren in the county attended it. Black schools began consolidating in 1941, and in 1948 the Herctoma School was built for African American children. The two schools were integrated in 1970, forming the Statenville Consolidated School. Situated on the campus of the former Echols Consolidated School, the school was added to the National Register of Historic Places in 1988.

According to the 2010 U.S. census, the population of Echols County is 4,034, an increase from the 2000 population of 3,754.

Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia

Wildfire History

Echols County located deep in south central Georgia, is over 91% forested, despite an agricultural presence scattered in the southwestern corner of the county. While there are large blocks of industrial woodlands in the eastern and central sections of the county, there are homes and communities scattered throughout the western third of the county. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county.

Echols County is protected by three organized volunteer fire departments located in Statenville, Chapel Station and in the Howell community. There is also a mutual aid agreement with the Fargo VFD located in Clinch County to cover the far eastern end of the county. The Georgia Forestry Commission maintains a county protection unit located just north of Statenville on US Hwy 129 to respond to wildfires throughout the county. The community of Statenville is serviced by a pressurized water system with hydrants available.

Over the past 55 years, Echols County has averaged 51 reported wildland fires per year, burning an average of 248 acres per year. Using more recent figures over the past 20 years, this number has dropped somewhat to an average of 17 fires per year burning on average 121 acres annually. While the number of fires during this later period remains rather level throughout the year, the acres burned show a significant increase during the summer months. There is a significant decrease in the acres burned during the remainder of the year, particularly during the fall months.

Over the past 10 years (FY2008 – FY2017), the leading causes of these fires, was debris burning and lightning causing 35% and 27% respectively of the fires and 12% and 59% respectively of the acres burned. Over the past 10 years records show that another major cause of these fires was incendiary (arson) causing 12% of the fires and 8% of the acres burned.

Georgia Forestry Commission Wildfire Records show that in the past nine years, seven homes damaged by wildfire in Echols County resulting in estimated loss of \$149,150 along with six outbuildings valued at \$12,200. Additionally three pieces of mechanized equipment valued at \$100,140 were lost. This is a significant loss of non timber property attributed to wildfires in Echols County.

Wildfire records from the last complete fiscal year 2018 (July 1, 2017 thru June 30, 2018)

County = Echols	Cause	Fires	Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	0	0.00	1.20	1.76
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0	0.00	0.20	0.14
Debris: Construction Land Clearing	Debris: Construction Land Clearing	0	0.00	0.20	0.02
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	3	33.10	4.60	21.93
Debris: Household Garbage	Debris: Household Garbage	0	0.00	0.40	0.16
Debris: Other	Debris: Other	0	0.00	0.20	0.12
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	3	7.10	1.60	3.78
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	1	7.00	0.40	2.20
Incendiary	Incendiary	0	0.00	1.40	11.97
Lightning	Lightning	1	0.50	4.60	111.84
Machine Use	Machine Use	2	3.07	0.80	0.64
Miscellaneous: Firearms/Ammunition	Miscellaneous: Firearms/Ammunition	0	0.00	0.20	0.40
Miscellaneous: Other	Miscellaneous: Other	0	0.00	0.80	25.66
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	0	0.00	0.20	0.02
Railroad	Railroad	0	0.00	0.20	1.82
Smoking	Smoking	1	1.00	0.20	0.20
Undetermined	Undetermined	0	0.00	1.60	14.44
Totals for County: Echols Year: 2018		11	51.77	18.80	197.10

On the following pages 9-12 are Echols County wildfire records for fiscal years 2008 thru 2017.

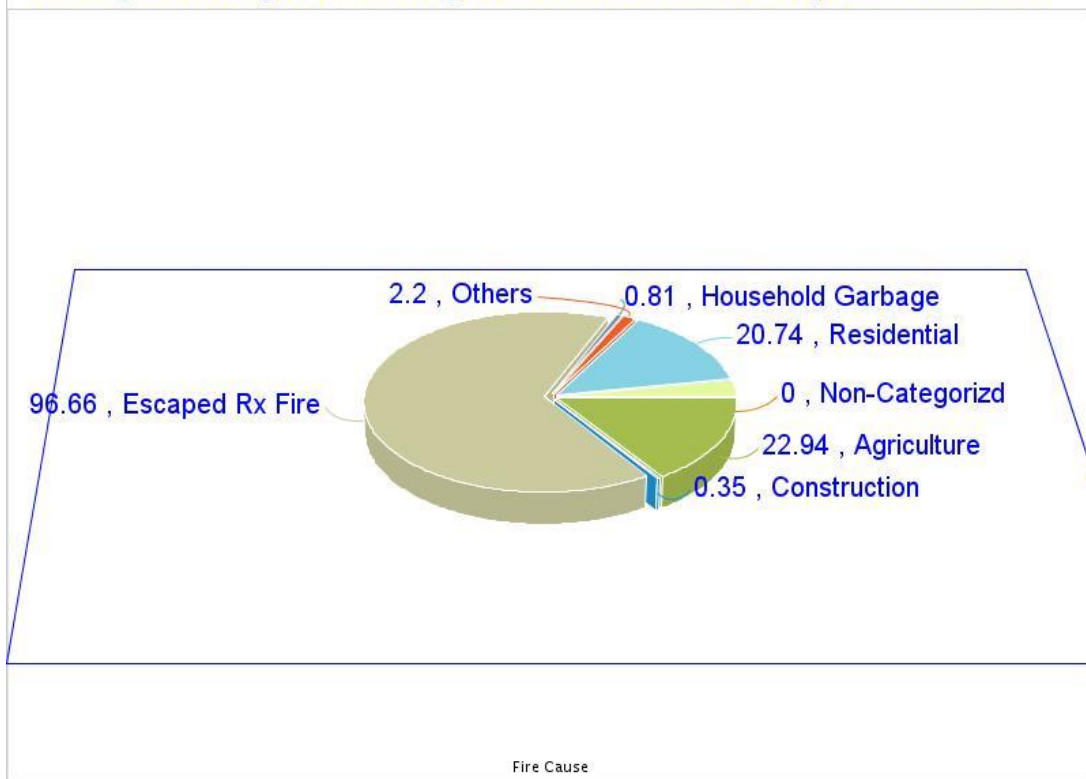
Acres Burned /Number of Fires For Echols County For FY 2008-2017				
Year	Acres Burned	Number of Fires	Average Size	Statewide Average Size
2008	75.69	20	3.78	4.56
2009	26.63	23	1.16	3.90
2010	7.23	10	.72	3.93
2011	118.92	23	5.17	17.56
2012	23.16	11	2.11	5.08
2013	22.68	5	4.54	4.53
2014	28.57	7	4.08	5.02
2015	162.45	20	8.12	4.42
2016	112.41	27	4.16	6.29
2017	630.30	29	21.73	11.60

Acres Burned /Number of Fires by Fire Cause For Echols County For FY 2008-2017		
Fire Cause	Acres Burned	Number of Fires
Campfire	8.78	6
Children	0.00	0
Debris Burning	148.00	60
Incendiary	96.34	21
Lightning	710.40	46
Machine Use	4.92	17
Miscellaneous	154.80	13
Railroad	0.00	0
Smoking	0.00	0
Undetermined	72.20	8
Total	1,195.44	171

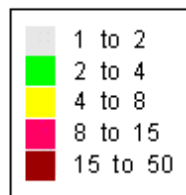
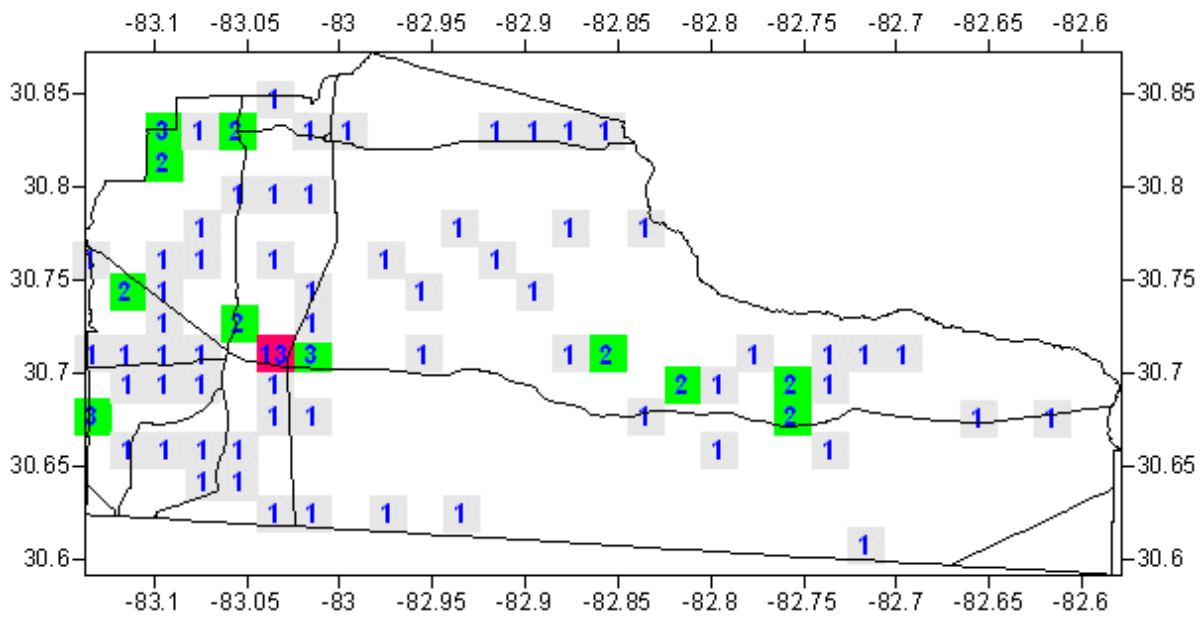
Number of Fires by Cause for Echols County for FY 2008 to 2017

Year	Campfire	Children	Debris Burning	Incendiary	Lightning	Machine Use	Misc.	Railroad	Smoking
2008	0	0	6	2	7	3	2	0	0
2009	0	0	10	7	1	4	1	0	0
2010	0	0	3	2	1	3	1	0	0
2011	0	0	6	2	9	2	1	3	0
2012	0	0	3	0	6	1	1	0	0
2013	0	0	1	1	0	2	1	0	0
2014	2	0	3	0	1	0	0	1	0
2015	1	0	1	1	10	1	6	0	0
2016	1	0	16	0	7	0	3	0	0
2017	2	0	11	6	4	1	5	0	0

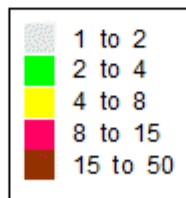
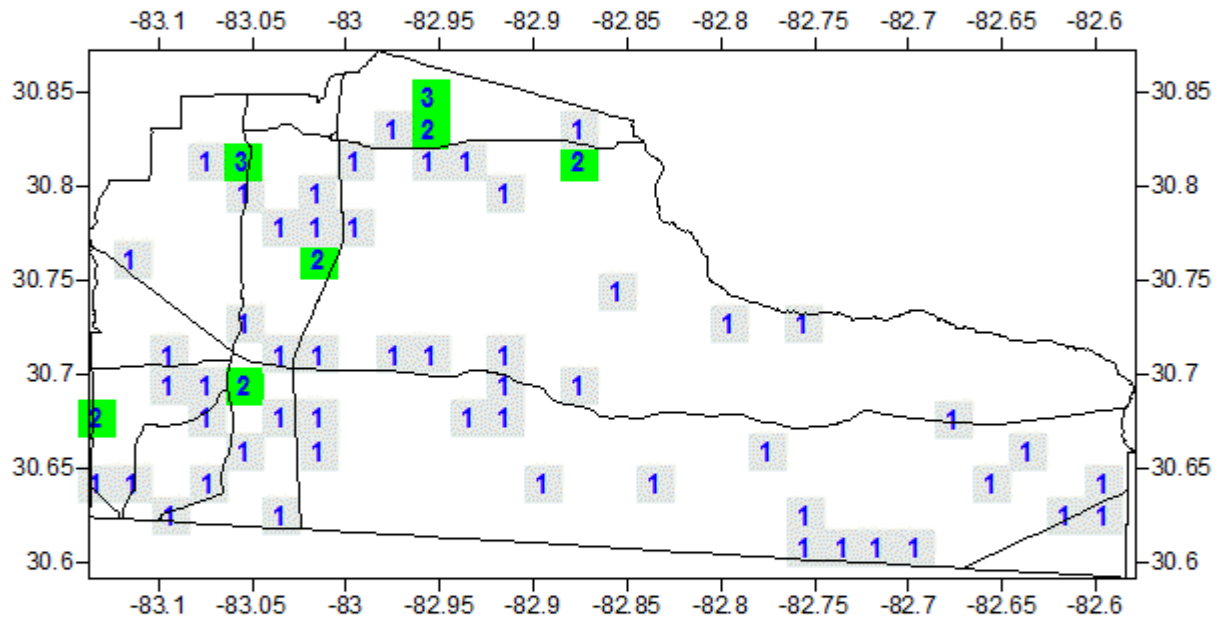
Acreage Burned By Debris Burning Sub Cause For Echols County For FY 2008-2017



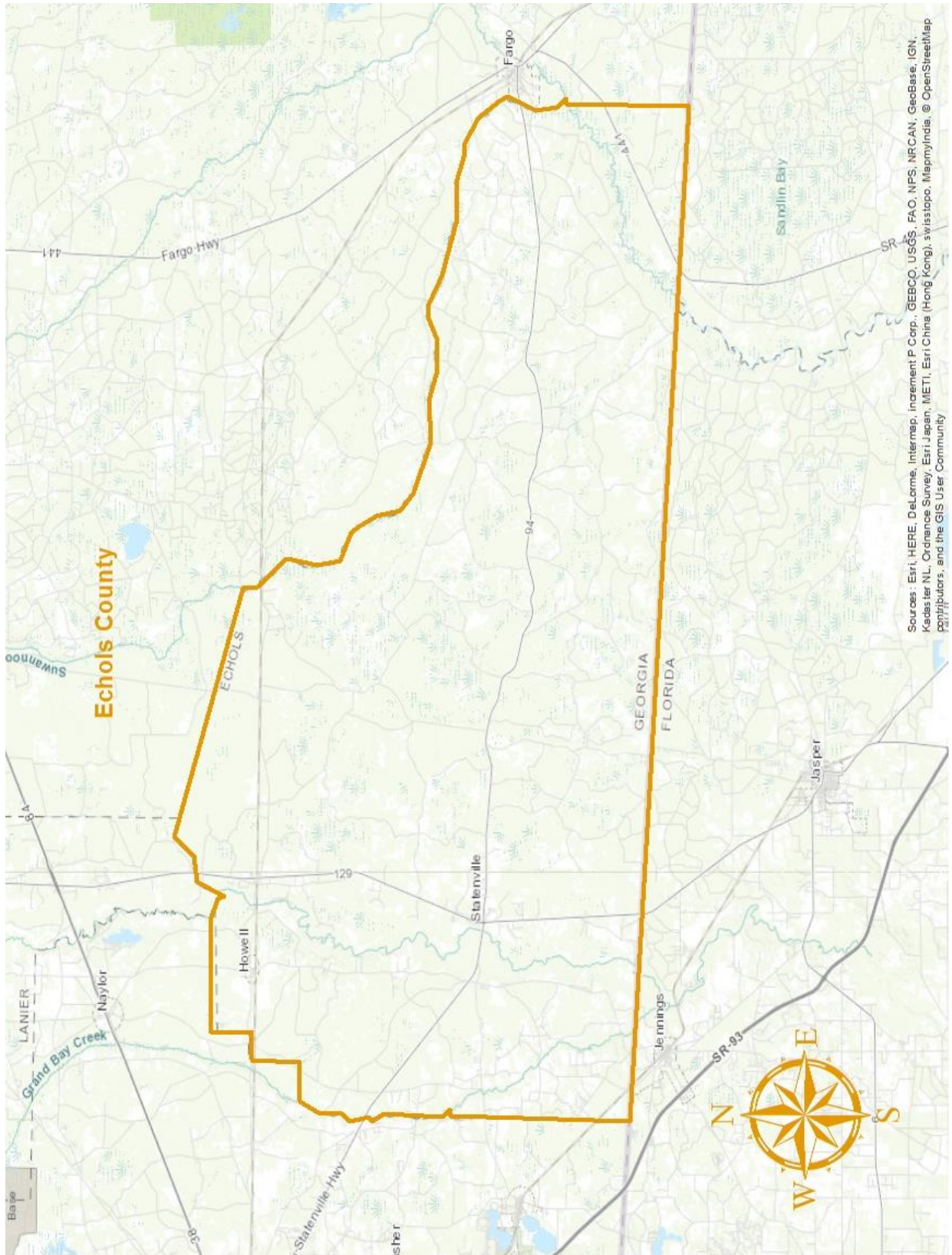
Fire Occurrence Map for Echols County for Fiscal Year 2007-2011

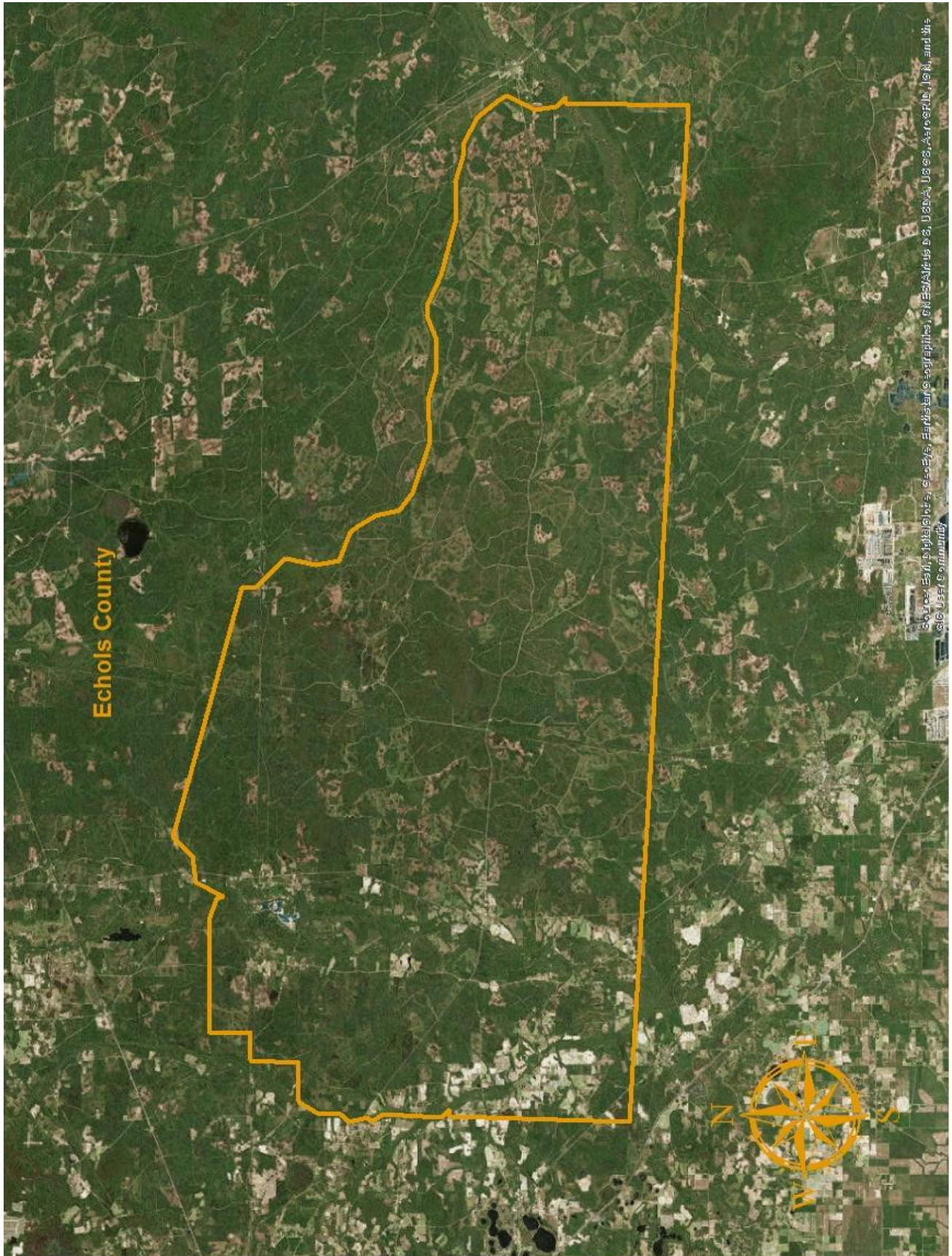


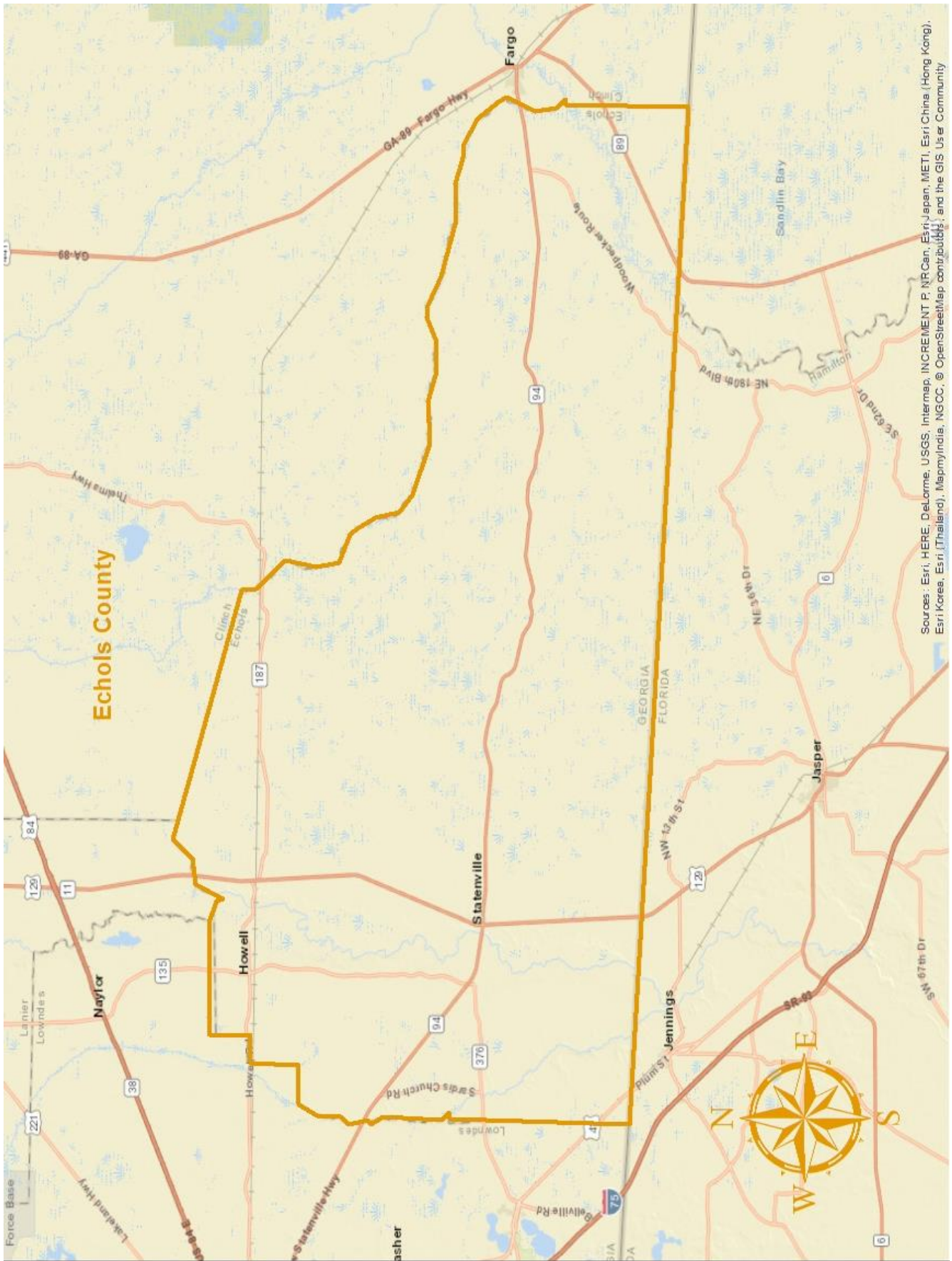
Fire Occurrence Map for Echols County for Fiscal Year 2012-2016



IV. COMMUNITY BASE MAPS







Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, OpenStreetMap contributors, and the GIS User Community

V. COMMUNITY WILDFIRE RISK ASSESSMENT

The Wildland-Urban Interface

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

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

- 1. “Boundary” wildland-urban interface** is characterized by areas of development where homes, especially new subdivisions, press against public and private wildlands, such as private or commercial forest land or public forests or parks. This is the classic type of wildland-urban interface, with a clearly defined boundary between the suburban fringe and the rural countryside.
- 2. “Intermix” wildland-urban interface** areas are places where improved property and/or structures are scattered and interspersed in wildland areas. These may be isolated rural homes or an area that is just beginning to go through the transition from rural to urban land use.
- 3. “Island” wildland-urban interface**, also called occluded interface, are areas of wildland within predominately urban or suburban areas. As cities or subdivisions grow, islands of undeveloped land may remain, creating remnant forests. Sometimes these remnants exist as parks, or as land that cannot be developed due to site limitations, such as wetlands.
(courtesy *Fire Ecology and Wildfire Mitigation in Florida* 2004)

Wildland Urban Interface Hazards

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

Hazardous Materials

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

Illicit Activities

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

Propane Tanks

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

Utility Lines

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

Septic Tanks and Fields

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

New Construction Materials

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

Pets and Livestock

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

Evacuation Occurring

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

Limited Access

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



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

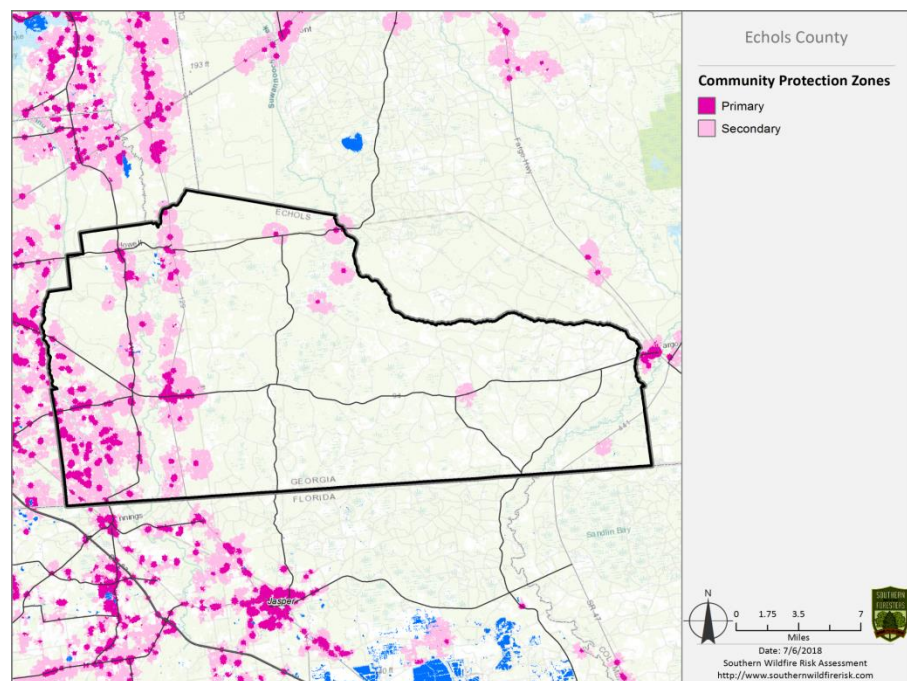
The wildland fire risk assessments conducted in 2012 by the Echols County Fire Departments returned a number of communities in the moderate to high range. The risk assessment instrument used to evaluate wildfire hazards to Echols County's WUI was the Hazard and Wildfire Risk Assessment Checklist. The instrument takes into consideration accessibility, vegetation (based on fuel models), roofing assembly, building construction, and availability of fire protection resources, placement of gas and electric utilities, and additional rating factors. The following factors contributed to the wildfire hazard scores for Echols County:

- Unpaved roads and private driveways
- Narrow roads without drivable shoulders and inadequate overhead clearance
- Poor drainage in winter and sugar sand in summer on many roads
- Dead end roads without "turnarounds"
- Isolated homes and buildings
- Lack of uniform address signs
- Minimal defensible space around structures
- Homes with wooden siding
- Mobile homes without fire resistant underpinning
- Lack of pressurized or non-pressurized water systems available
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

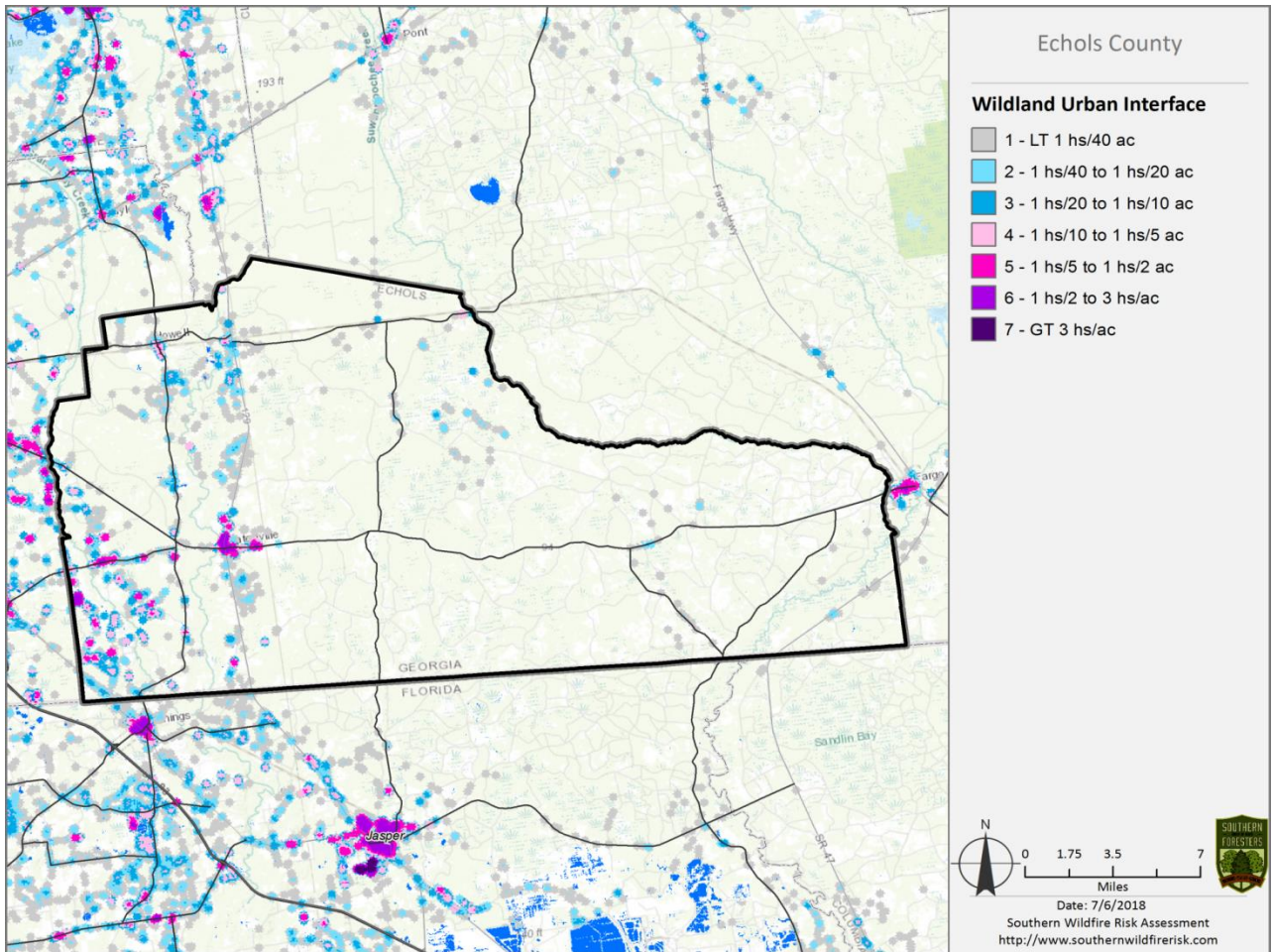
VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

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

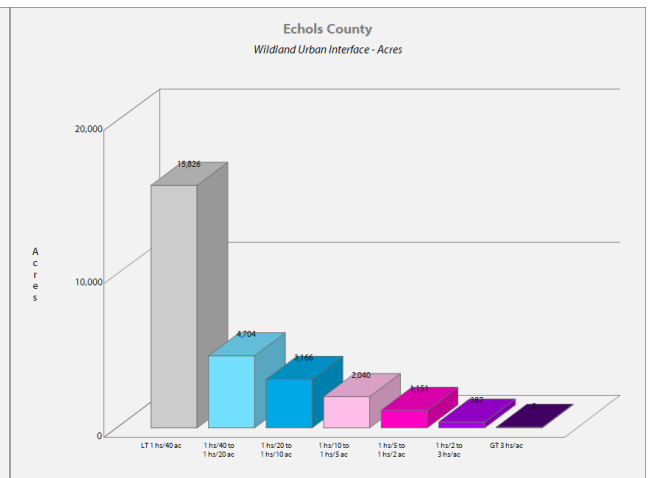
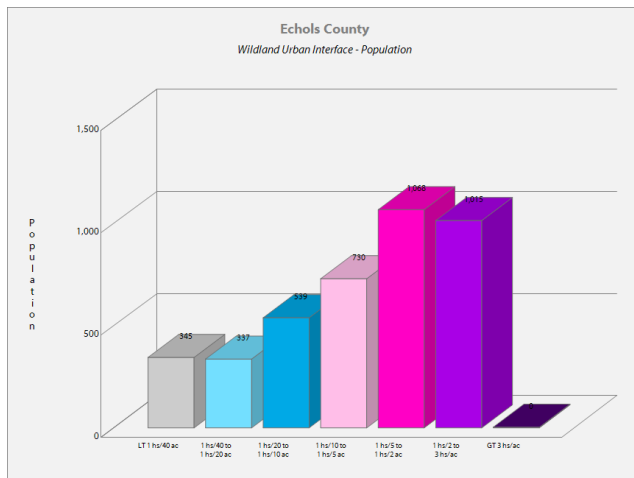
- Identify areas that are most prone to wildfire.
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning.
- Provide the information necessary to justify resource, budget and funding requests.
- Allow agencies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



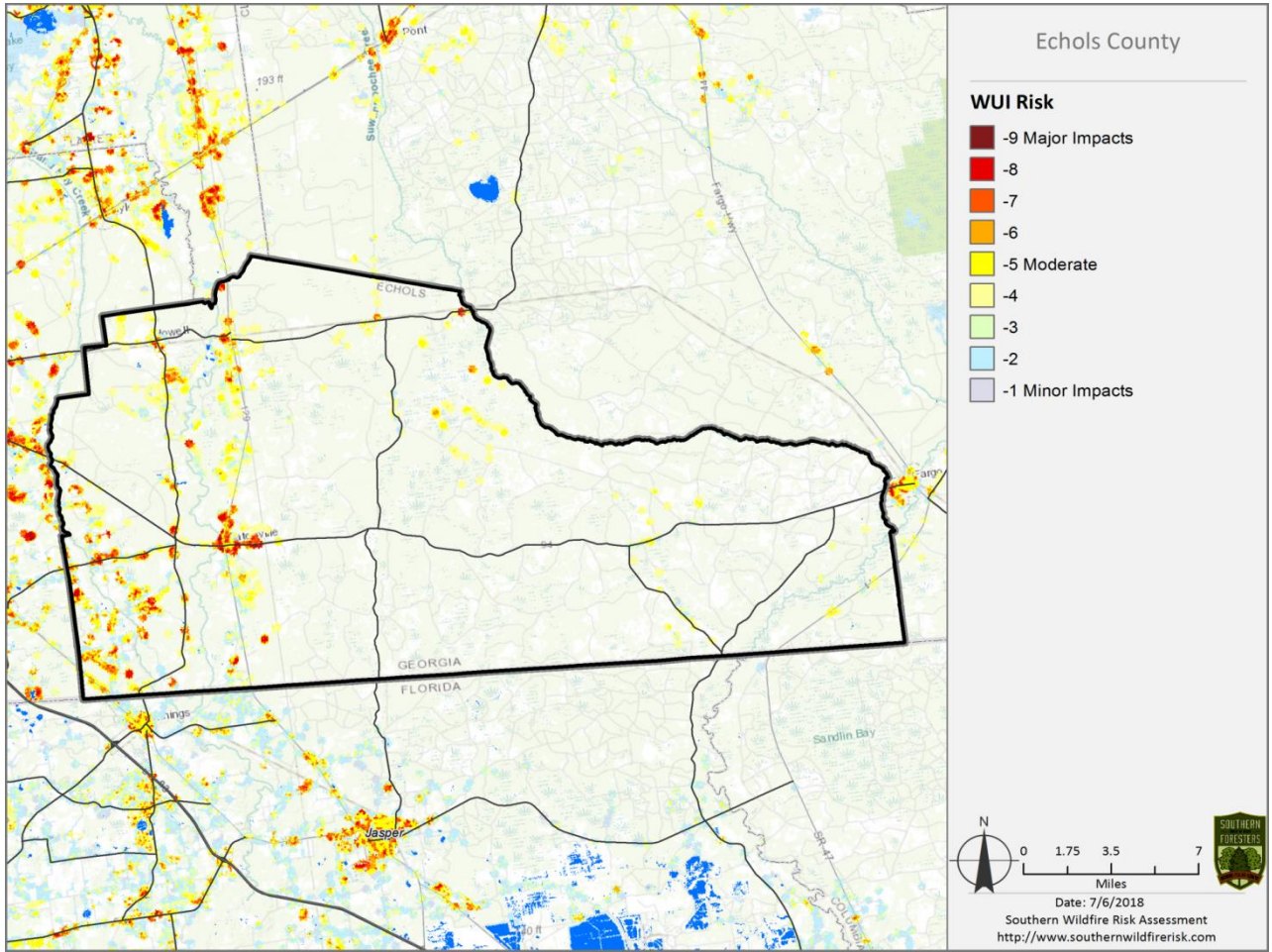
Community Protection Zones map from the Echols County SWRA



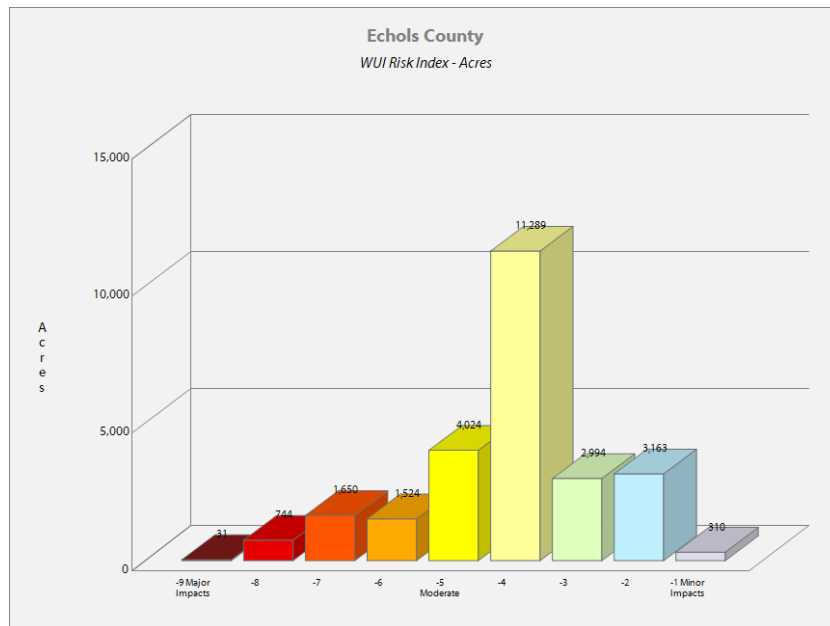
Above: Wildland Urban Interface (WUI) map Below: WUI Population (left) WUI Acres (right)

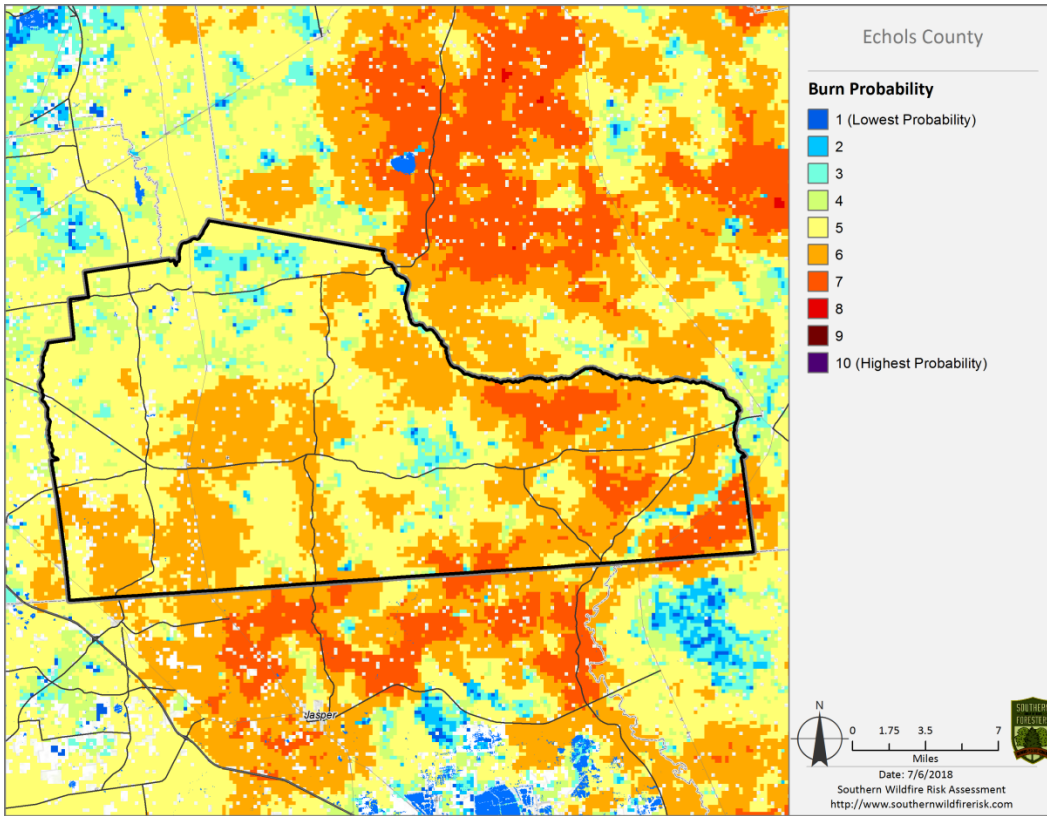


WILDFIRE PROTECTION PLAN: AN ACTION PLAN FOR WILDFIRE MITIGATION

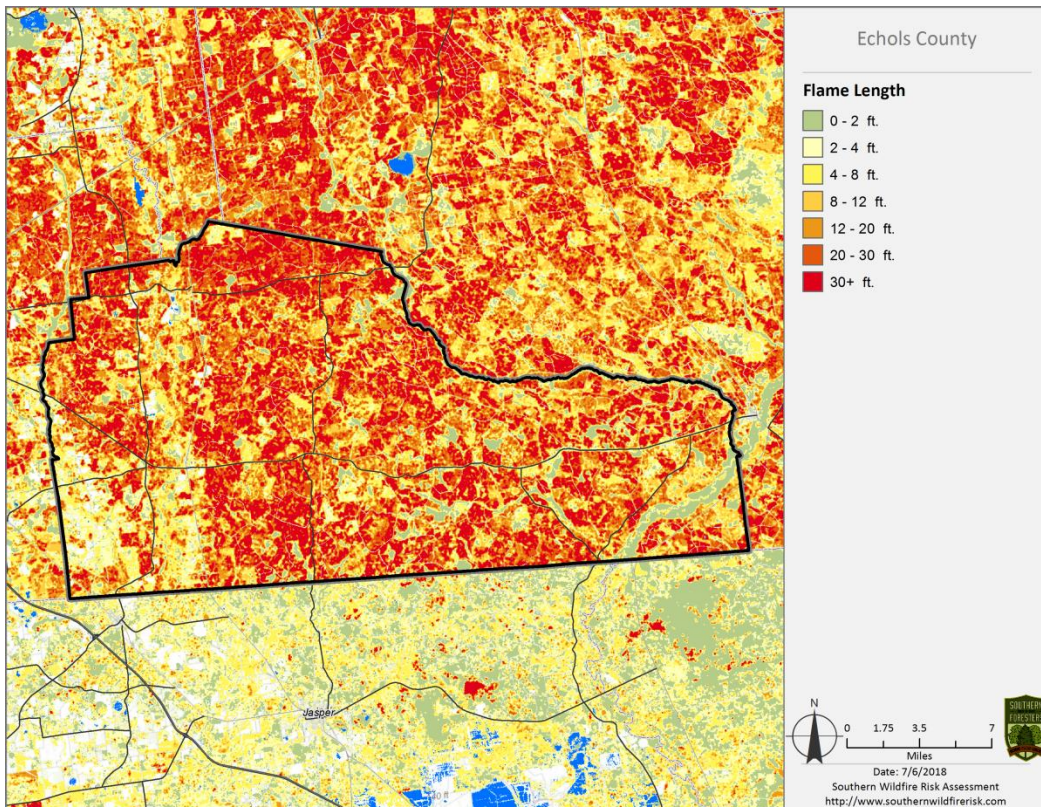


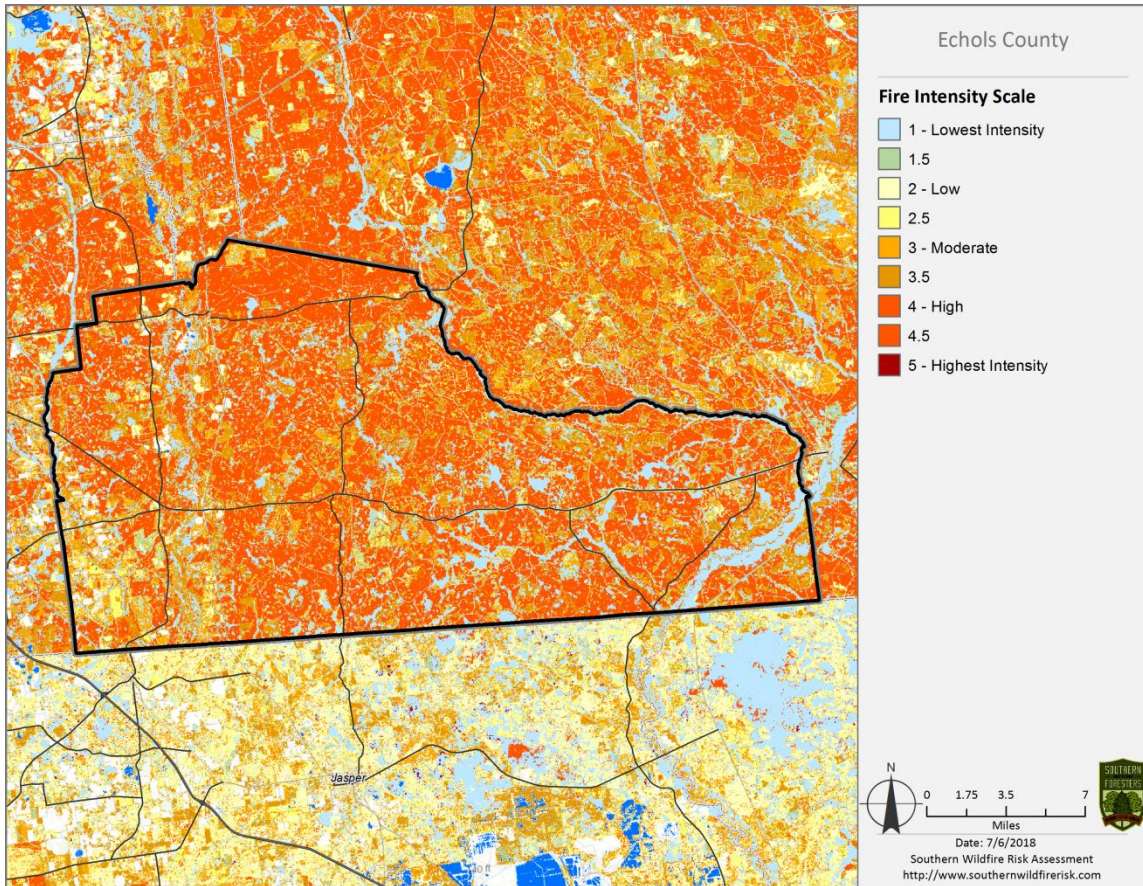
Above: Wildland Urban Interface (WUI) Risk map Below: WUI Risk Index Acres



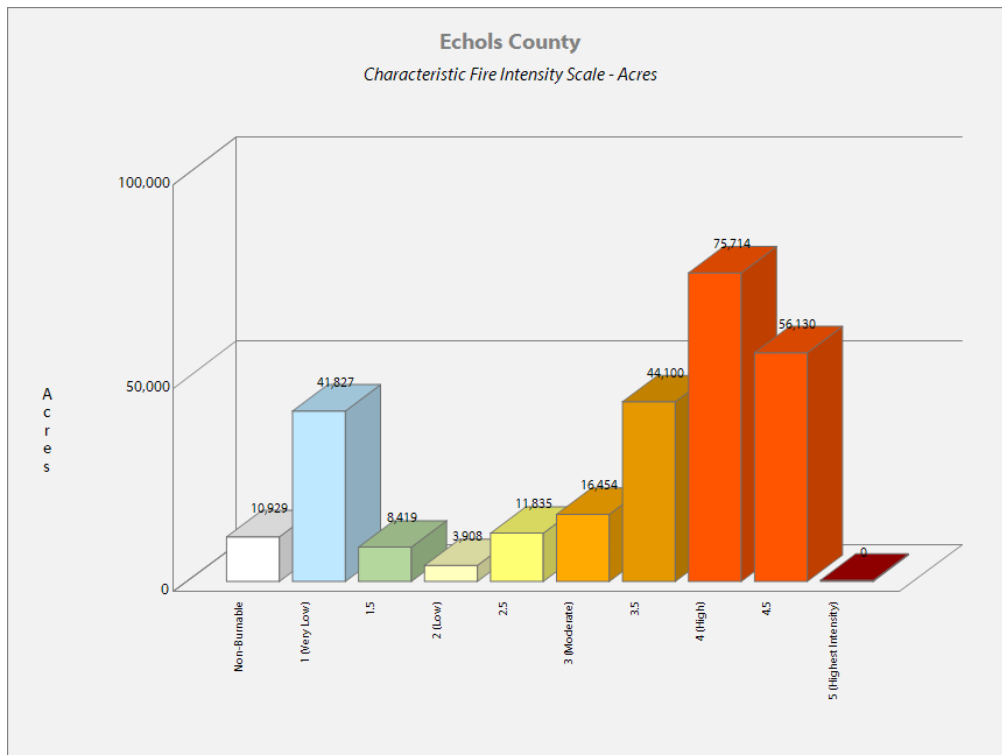


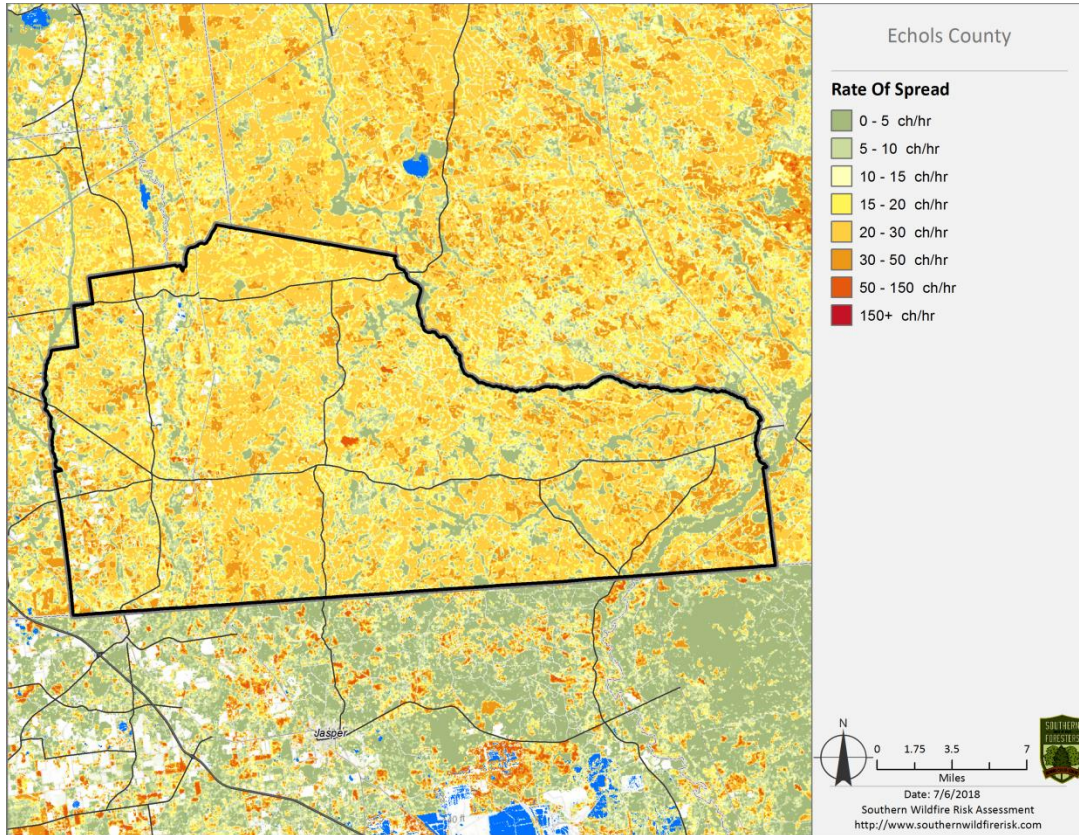
Above: Burn Probability map Below: Flame Length map



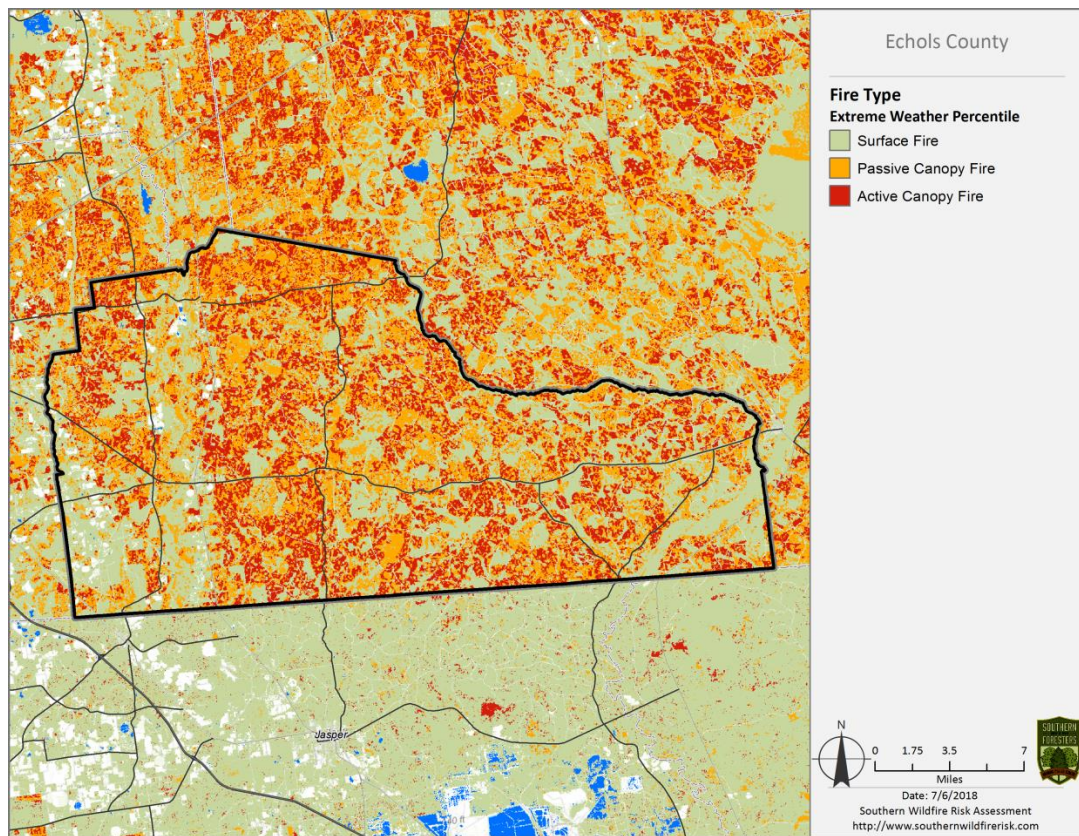


Above: Fire intensity Scale map Below: Fire Intensity Scale Acres





Above: Rate of Spread map Below: Fire Type map



VII. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As Southern 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. Echols County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

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

In 2012 the International Code Council developed the International Wildland Urban Interface Code (IWUIC). This code is endorsed by the NFPA and was designed to be used to help reduce structure loss in the WUI. In 2014 the Georgia Legislature adopted the IWUIC for use by Georgia counties. The code or parts of the code can be used by counties as needed to help reduce risk through regulation of building codes and zoning ordinances.

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 Echols County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county 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 Hazards	Utility services	Work with GA Power and EMC's to encourage new underground service to rural homes. Adopt standards for safety zone around propane distribution tanks.
4. Driveway Access	Right of Way Clearance	Maintain vertical and horizontal clearance for emergency equipment. See that adequate lengths of culverts are installed to allow emergency vehicle access.
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul-de- sacs or turn arounds.
6. Codes and Ordinances	Examine existing codes and ordinances. Utilize International Wildland Urban Interface Code (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 Review the need for subdivision and development ordinances for public safety concerns. Enforce uniform addressing ordinance.
7. Law Enforcement	Traffic control	Work with local law enforcement to better control non-essential traffic during fire emergencies.

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. Seek grant for mowing or prescribed burning in WUI areas.
2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Need improved drafting equipment, floating and turbo draft pumps. Investigate possibility of placing compatible fittings on irrigation wells. Update GFC Fire plan to include identified helicopter dip sites.
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear.
3. Water Handling	Tanker Capacity	Investigate need for additional tankers and overhead refill tanks at rural 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. Ready Set Go training
**Actions to be taken by homeowners and community stakeholders		

Proposed Education and Outreach Priorities

<p>1. Conduct “How to Have a Firewise Home” Workshop for Echols County Residents</p>
<p>Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Target local schools, community groups and local senior centers.</p> <p>Distribute materials promoting firewise practices and planning through local community and governmental meetings.</p>
<p>2. Conduct “Firewise” Workshop for Community Leaders</p>
<p>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.</p>
<p>3. Spring Clean-up Event (National Wildfire Preparedness Day – 1st Saturday in May annually)</p>
<p>Conduct clean-up event every spring involving the Georgia Forestry Commission, Echols County Fire Department 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:</p> <ul style="list-style-type: none"> • 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 <p>Celebrate the work with a community cookout, with Community officials, GFC and Echols County Fire Department discussing and commending the work accomplished.</p>
<p>4. Informational Packets</p>
<p>Develop and distribute informational packets to be distributed by realtors, tax office and insurance agents. Included in the packets are the following:</p> <ul style="list-style-type: none"> • Be Firewise Around Your Home • Firewise Guide to Landscape and Construction • Firewise Communities USA materials • Ready Set Go materials • Fire Adapted Community information

5. Wildfire Protection Display

Create and exhibit a display for the general public at Carrot Festival and Fourth of July. Display can be independent or combined with the Georgia Forestry Commission display.

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

6. Media

Invite the local news media to community “Firewise” functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Echols County. Utilize radio and social media to reach new audiences.



Prescribed burning is a best management practice to reduce hazardous fuel buildup. The Georgia Forestry Commission can assist by 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, mulchers, and mastication equipment, such as pictured here, are sometimes used to reduce hazardous understory fuels near developed areas. This is most effective in areas where prescribed fire may not be a practical management practice. The Georgia Forestry Commission or 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	
Echols County WUI Fire Council	Create this informal team or council comprised of residents, GFC officials, Echols County Fire Department officials, a representative from the county government along with EMA Director for Echols 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 and Homeowner Associations 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 PSA's for area stations and cable access channels 3 Personal Contacts, Social media 4 Key messages and prevention tips 5 Visuals such as signs, brochures and posters

Spring Clean-up Day (National Wildfire Preparedness Day - 1 st Saturday in May annually)	
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. State Farm Insurance offers a grant for National Wildfire Preparedness Day.
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, Echols County Fire Department and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local 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 county government.
4. Spring Cleanup Day National Wildfire Preparedness Day	Varies	Community Business Donations. State Farm Insurance grants.
5. Fuel Reduction Activities	\$35/acre	FEMA & USFS Grants

Assessment Strategy

To accurately assess progress and effectiveness for the action plan, the Echols 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 Echols 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 Echols 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

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 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 completed registered plan (addendum to the State Plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP funding if the county is declared under a wildfire disaster.

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

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

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

X. GLOSSARY

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

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

CWPP – The Community Wildfire Protection Plan.

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

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

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

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

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

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

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

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

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

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

Home Ignition Zone (Structure Ignition Zone) - *Treatment area for wildfire protection. The “zone” includes the structure(s) and their immediate surroundings from 0-200 ft.*

Mitigation – *An action that moderates the severity of a fire hazard or risk.*

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

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

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

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

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

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

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

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

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

XI. SOURCES OF INFORMATION

Publications/Brochures/Websites:

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

Appended Documents:

Echols County Southern Wildfire Risk Assessment Summary Report (SWRA)

Echols County Wildfire assessment scoresheets

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

GEORGIA FORESTRY
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