Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Stewart County, Georgia

December 2018

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Attachments:

Stewart County Southern Wildfire Risk Assessment Summary Report (SWRA)

Executive Summary

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

This Community Wildfire Protection Plan includes an evaluation of the wildland fire susceptibility of wildland/urban interface "communities-at-risk", an analysis of fire service resources, a description of needed equipment and training, and an Action Plan to address the increasing threat of wildfire. The CWPP does not obligate the County financially in any way, but instead, lays a foundation for improved emergency response if and when grant funding is available to the County.

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

The plan will:

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

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

SIGNATURE PAGE

_____ _____

Joseph R. Williams **Date**
Chairman of the Stewart County Commission

_____ _____

Greg Stewart **Date**
Stewart County EMA Director

_____ _____

Doug Redding **Date**
Ranger III, Stewart County
Georgia Forestry Commission

I. WILDLAND/URBAN INTERFACE FIRE DISASTERS

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

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

The public does not have to fall victim to this type of disaster. Homes (and communities) can be designed, built and maintained to withstand a wildfire even in the absence of fire engines and firefighters on the scene. BUT, it takes planning and commitment at the community level BEFORE the wildfire disaster occurs.

CWPP CORE COMMITTEE

The development of this plan was a collaborative effort for the people of Stewart County. The individuals listed below (the "CWPP Core Committee") participated in the planning process.

CWPP Core Committee
Jimmy Babb, Stewart County EMA Director
Greg Stewart, Fire Chief, Stewart County Fire Department
Eric Storey, Fire Chief, Richland Fire Department
W. Alan Griggs, Richland Fire Department/Stewart County Fire Department

Georgia Forestry Commission Representatives
Doug Redding, Ranger III
Jim Harrell, CWPP Program Specialist (Initial plan 2010)
Beryl Budd, Wildfire Prevention Specialist (revised plan 2018)

Meeting Dates
Initial Core Committee Meeting: April 7, 2010
Follow-Up Meeting: August 31, 2010

The CWPP Core Committee contributed to the CWPP development by:

Initiation	Agreed on the need to develop a Community Wildfire Protection Plan
Risk Assessment	Assessed the wildfire hazard of "communities-at-risk"
Fuels Reduction	Identified and prioritized areas for fuel treatment projects
Structure Ignitability	Identified strategies for reducing the ignitability of structures within the wildland/urban interface
Emergency Response	Updated and improved strategies for coordinated wildland fire response
Education and Outreach	Outlined a public education initiative to increase citizen awareness of residential wildfire protection (Firewise)

OTHER STAKEHOLDERS

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

- Major stakeholders were invited to participate as members of the CWPP Core Committee.
- A news release was placed in the local paper (*Stewart-Webster Journal)* explaining the objectives of the Stewart County CWPP, the planning process and the procedure for obtaining a draft copy for review and/or comment.

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

II. OBJECTIVE OF THE CWPP

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

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

There are three generally accepted types of interface areas:

1. "Boundary" wildland/urban interface areas are characterized by development where groups of homes, subdivisions or other structures create a distinct and easily identified border with public or private wildlands, forests or parks.

2. "Intermix" wildland/urban interface areas are places where parcels of improved property and/or structures are scattered and interspersed within wildlands, forests or parks. Frequently, this is a subdivision that is not yet "built-out" with many undeveloped lots interspersed among occupied homes.

3. **"Island" wildland/urban interface** (also called "occluded interface") are typically very small pockets of wildland or natural areas surrounded by development or even situated within an incorporated area. A park or greenspace within a city is an example of an island interface area.

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

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

This Community Wildfire Protection Plan will be very important to County applications for hazard mitigation grants through the National Fire Plan, FEMA mitigation grants, and Homeland Security. Under the Healthy Forest Restoration Act (HFRA) of 2003, communities (counties) that seek grants from the federal government for hazardous fuels reduction work are required to prepare a Community Wildfire Protection Plan.

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

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

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

III.STEWART COUNTY HISTORY & WILDFIRE HISTORY

Stewart County, created by the state legislature in 1830, was named for Daniel Stewart, an Indian fighter, Revolutionary War (1775-83) veteran, and the great-grandfather of U.S. president Theodore Roosevelt. Rich in historic, natural, archaeological, architectural, and cultural resources, Stewart County is nevertheless poor in wealth. To reconcile this disparity, county leaders in 1965 began forging a new economy in tourism. This effort is emerging today as a major alternative to the traditional economies of peanuts, cotton, and pine trees. At the zenith of the county's prosperity in 1850, Stewart ranked as the tenth most populous in Georgia. By 2003 it was the state's ninth least populous county. According to the 2010 U.S. census, the population was 6,058, an increase from the 2000 population of 5,252.

Early History

Thousands of years ago Native Americans recognized the many strategic advantages of the land known today as Stewart County. The Mississippian Culture placed two major mound systems, known today as the Rood Mounds and Singer-Moye Mounds, here during the Mississippian middle period (A.D. 1100-1350). Located along the fall line, Stewart County's entire western border is composed of the Chattahoochee River and the Alabama state line. Only about twenty miles down river from Columbus (the northerly point of large-craft navigation), Stewart County traditionally provided a link between the Piedmont region of Georgia and the Gulf of Mexico.

Singer-Moye Mounds

The first Europeans in present-day Stewart County were the Spanish, who moved through the area about 1639. However, legal settlement began with the state's fifth land lottery, held in 1827, when Lee County became one of five new west Georgia counties. In 1828 the state sectioned off the western part of Lee to create Randolph County, which in turn was divided on December 23, 1830, to create Stewart. In 1853 the eastern part of Stewart became Kinchafoonee (later Webster) County, and in 1858 the newly established Quitman County absorbed a western piece of Stewart.

Stewart County Courthouse

The treaty that wrested west Georgia from Native Americans ended in conflict. By 1836 the remaining Creek Indians began ambushing homes and communities in desperation. The settlers called on Governor William Schley for protection. Schley sent state militia volunteers from Gwinnett County to establish three local forts—Ingersoll, Jones, and McCreary. On May 15, 1836, the river settlement of Roanoke was burned by a reported 300 Indians. On June 9 the Battle of Shepherd's Plantation marked an end to skirmishes in the county and, essentially, in the state.

A Brief Prosperity

The county population exploded from 1836 to 1850. Settlers poured in, mainly from other fall line counties, especially Jones, Washington, and Wilkes. Stewart soon became one of Georgia's top-three cotton producers (more than 7.6 million pounds in 1850). Lumpkin, in turn, served as the area's center of commerce and stagecoach routings.

Cotton Farm

By the 1850s, however, signs of decline began to manifest. Rail construction—connecting Savannah to west Georgia's cotton producers—passed north and south of the county but not through it. It would be 1885 before a rail finally entered Stewart, leading to the incorporation of Richland in 1889.

Additionally, the European-influenced farming practices of the time led to devastating soil erosion in Stewart County. Underlying soil structures in the area yielded multiple gullies in place of the once-fertile crop fields. As the soil washed away, so too did Stewart County's economic strength. Stewart County lost population in every decade of the twentieth century.

A New Hope

Just as they had overproduced cotton, farmers—including those in Stewart County—also overproduced peanuts, a crop that the government began promoting during World War I (1917-18). By the mid-twentieth century, professionally managed forests began to supplant even the peanut fields. By 1990 forests covered 87 percent of the acreage in the county. In light of this dramatic change from row crops to trees, some of Stewart County's citizens realized that a new industry needed to be developed. (Forestry allowed for more free time, as it was not as labor intensive as agriculture.) A group formed in

1965 to restore a derelict stagecoach hotel, and the restoration of the 1836 Bedingfield Inn, on Lumpkin's courthouse square, became the first small-town community preservation project in Georgia. The citizens hoped to attract tourists to the county, marking the beginning of heritage tourism in rural Georgia. The early success of the inn restoration caused the same group to establish a living history museum based on the collections of John Word West at Jonesboro. Westville, which opened near Lumpkin in 1970, is a simulated 1850s village, comprising actual historic buildings of Georgia. As of 2006 Westville served thousands of families and more than 20,000 schoolchildren each year. The museum temporarily closed in 2015 to move to nearby Columbus.

Bedingfield Inn

Other historic and natural attractions followed the example of Westville. Providence Canyon was designated a state park in 1971. Providence is actually a series of erosion gullies on 1,003 acres of land but the multicolored 150-foot-deep "canyons" attracted tourist and media attention throughout the twentieth century.

Florence Marina State Park subsequently opened in 1986. The park provides a gateway to the Chattahoochee River and its many recreational possibilities. The Kirbo Educational Center at the park offers information on both the Native Americans of the area as well as the once-prosperous town of Florence, burned in the Creek wars of 1836. About 800 acres of the Eufaula National Wildlife Refuge are located along the Chattahoochee's eastern shores in Stewart County. The Hannahatchee Wildlife Management Area, in the northern part of the county, gives hunters a 5,600-acre site to enjoy.

Florence Marina State Park

The Towns

The incorporated cities of Lumpkin and Richland and the unincorporated communities of Omaha and Louvale all boast reasonably intact historic districts. The economic histories of these towns are written in their architecture. Lumpkin, the county seat, offers a stagecoach-trail driving tour of antebellum homes. Built in 1895 and rebuilt in 1923 by architect T. F. Lockwood after a fire, the county courthouse presides over the town square and business district. The Bedingfield Inn is the only remaining wooden structure on the square.

Richland, as old as Lumpkin, became the larger city with the coming of the railroad. Richland's relation to geography and rail is striking. The city sits atop the watershed between the Chattahoochee and Flint rivers. Rails, once connecting Americus to Montgomery, Alabama, and Columbus to Tallahassee, Florida, cross at Richland. Tourists can enjoy the many late Victorian and early-twentieth-century homes there.

Omaha, nestled in the northwest corner of the county near the juncture of the Chattahoochee River and Hannahatchee Creek, seems hidden from the current century. Founded in the 1890s, when the railroad arrived, Omaha is mentioned in James Joyce's 1922 novel, *Ulysses,* as the fictional scene of mob racial violence.

Another community within Stewart County is Louvale. Best known for its "Church Row," Louvale's Primitive Baptist, Methodist, and Baptist churches form a religious courtyard of sorts, with a community center among the churches. Louvale is long and narrow, stretching about six miles along U.S. Highway 27. Dozens of other communities have disappeared, or nearly so. One that still survives is Green Grove, an African American community formed in the wake of the Civil War (1861-65). A Baptist congregation, established in 1886, continues to meet today. From 1937 to 1958 Green Grove Missionary Baptist Church operated a school for the community until the county board of education built a new brick facility for black children in Lumpkin.

Prominent Citizens

Prominent Stewart County natives and residents have included Clement Evans, a Confederate general, Methodist minister, and historian; political leader and Confederate general Robert Toombs, who owned a plantation on the Chattahoochee River; Sidney Root, a businessman, Confederate military advisor, and aspiring architect; architect John Wellborn Root; and Lillian Gordy Carter, mother of U.S. president Jimmy Carter.

WILDFIRE HISTORY

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

The Georgia Forestry Commission office located at Route 1, Box 172, Lumpkin, Georgia, 31815, serves Stewart, Quitman and Webster Counties. Telephone: (229) 838-4576.

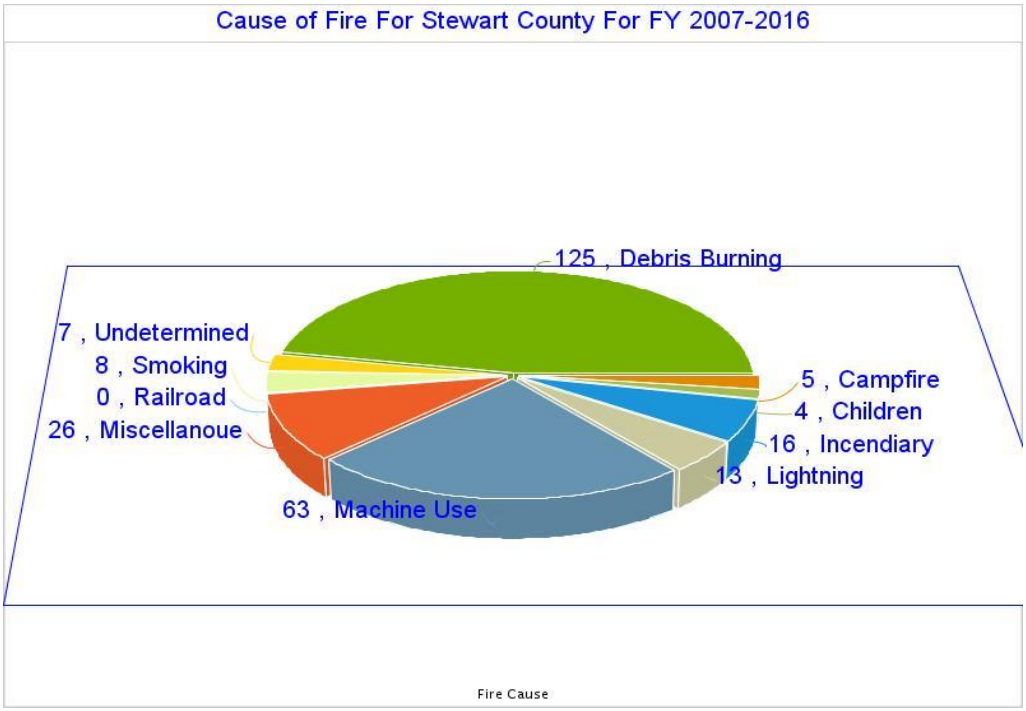
Personnel:
Doug Redding, Ranger III
Thomas More, Ranger I

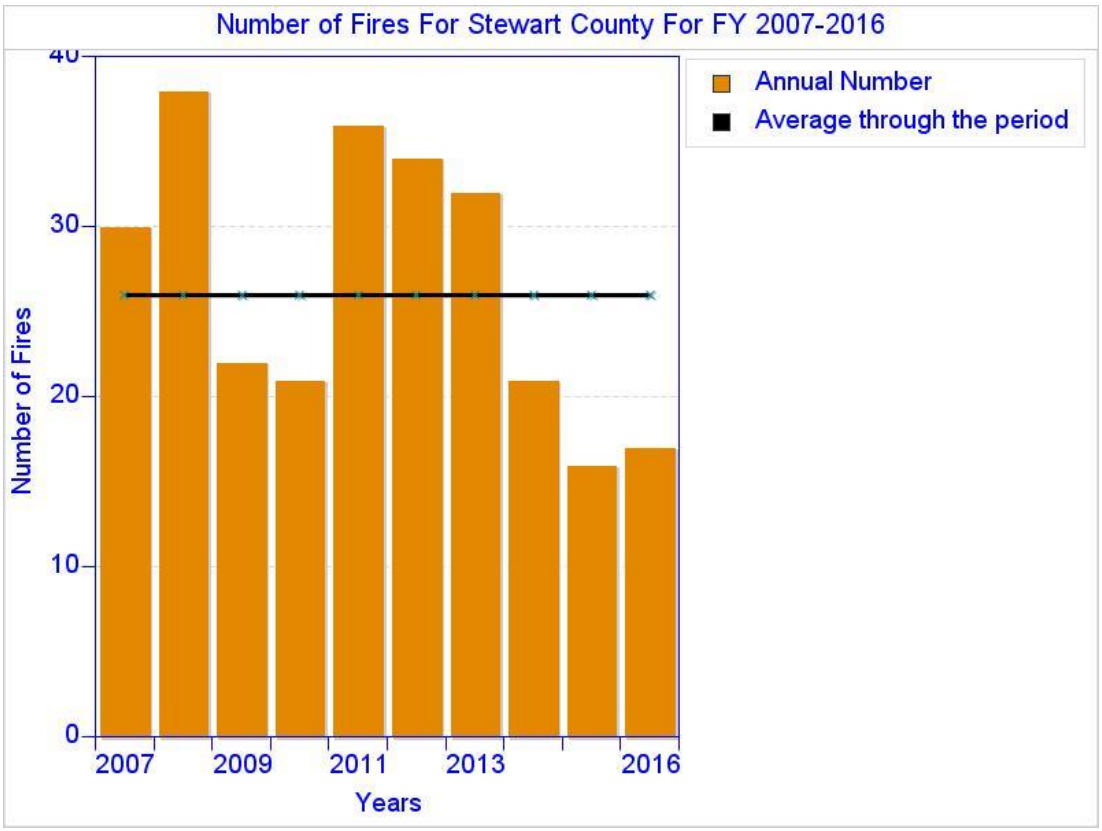
Wildland firefighting equipment assigned to this GFC office:
1 Truck/transport with JD 550J
1 Truck/transport with CAT D5K2 LGP
2 Type VI engine (pickup truck w/ 150 gallon tank)

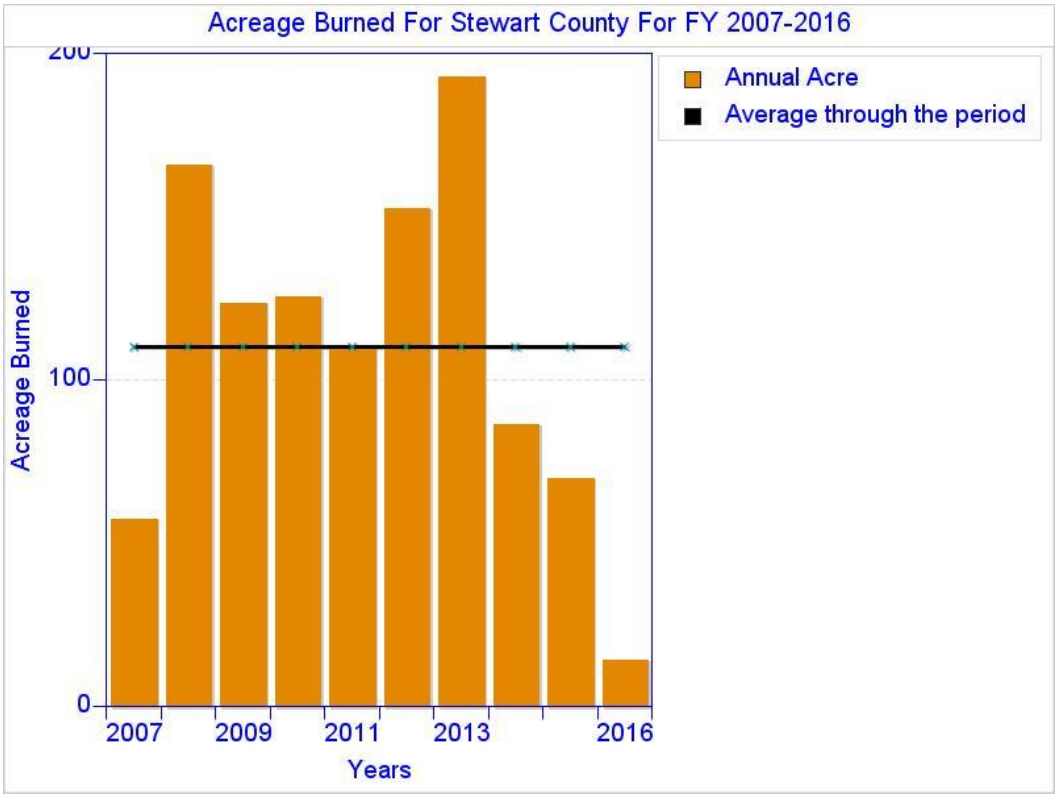
On a year-to-year basis, the major cause of wildfires in Stewart County is careless debris burning followed by machine use (example: harvesting combine). Incendiary or Arson related fires are the third leading cause.

County = Stewart	Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	0		0.00	0.60	0.69
Children	Children	1		1.60	0.60	0.36
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0		0.00	0.60	0.28
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	1		0.01	3.60	32.69
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	0		0.00	1.00	0.80
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	6		33.86	4.20	17.28
Incendiary	Incendiary	1		228.00	0.80	52.89
Lightning	Lightning	1		1.30	0.40	1.04
Machine Use	Machine Use	3		10.76	3.60	14.15
Miscellaneous: Cutting/Welding/Grinding	Miscellaneous: Cutting/Welding/Grinding	0		0.00	0.20	0.01
Miscellaneous: Firearms/Ammunition	Miscellaneous: Firearms/Ammunition	1		5.90	0.40	1.22
Miscellaneous: Other	Miscellaneous: Other	1		0.30	0.20	0.06
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	0		0.00	0.80	2.24
Miscellaneous: Spontaneous Heating/Combustion	Miscellaneous: Spontaneous Heating/Combustion	2		0.55	0.40	0.11
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	0		0.00	0.80	0.34
Miscellaneous: Woodstove Ashes	Miscellaneous: Woodstove Ashes	0		0.00	0.20	0.52
Smoking	Smoking	1		3.15	1.00	3.21
Undetermined	Undetermined	2		31.01	1.80	8.38
Totals for County: Stewart Year: 2017		20		316.44	21.20	136.27

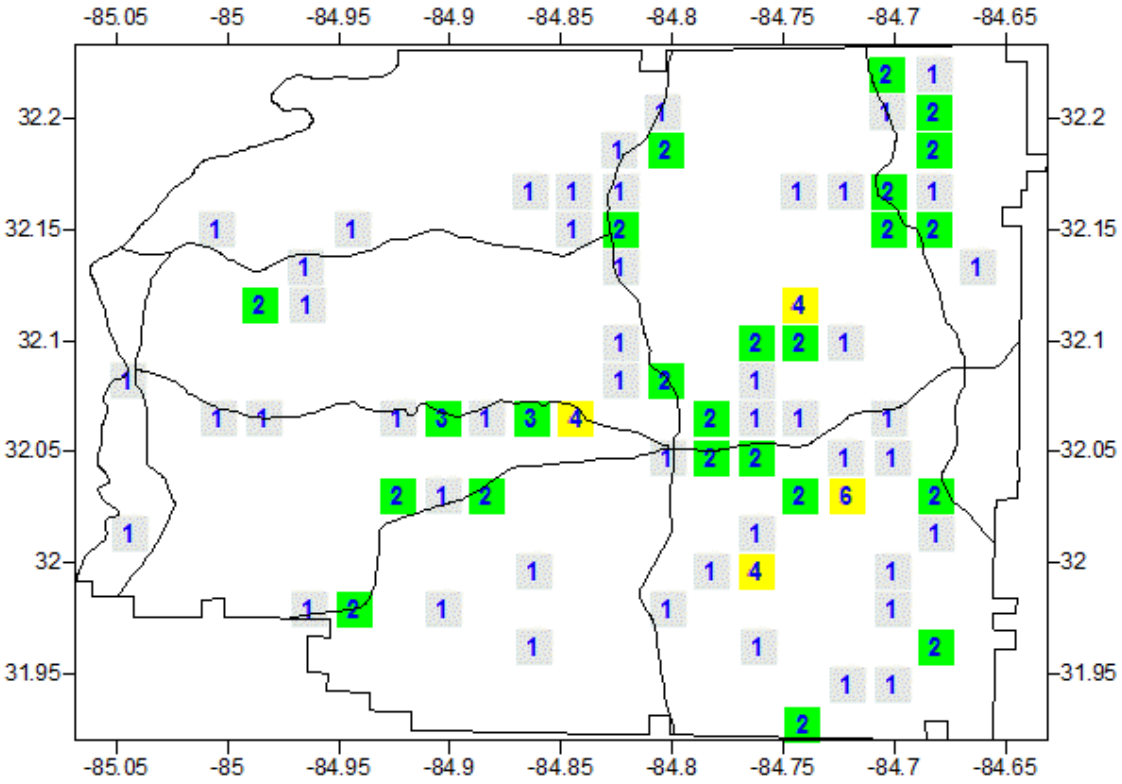
Acreage Burned /Number of Fires For Stewart County For FY 2007-2016				
Year	**Acreage Burned**	**Number of Fires**	**Average Size**	**Statewide Average Size**
2007	57.81	30	1.93	18.64
2008	166.24	38	4.37	4.56
2009	123.80	22	5.62	3.90
2010	126.01	21	6.00	3.93
2011	110.37	36	3.07	17.56
2012	152.96	34	4.50	5.08
2013	193.18	32	6.04	4.53
2014	86.81	21	4.13	5.02
2015	70.25	16	4.39	4.42
2016	14.65	17	.86	6.29

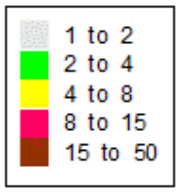



Number of Fires For Stewart County For FY 2007-2016
Annual Number
Average through the period
Number of Fires
0
10
20
30
40
2007
2009
2011
2013
2016
Years


Acreage Burned For Stewart County For FY 2007-2016
Annual Acre
Average through the period
Acreage Burned
0
100
200
2007
2009
2011
2013
2016
Years

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

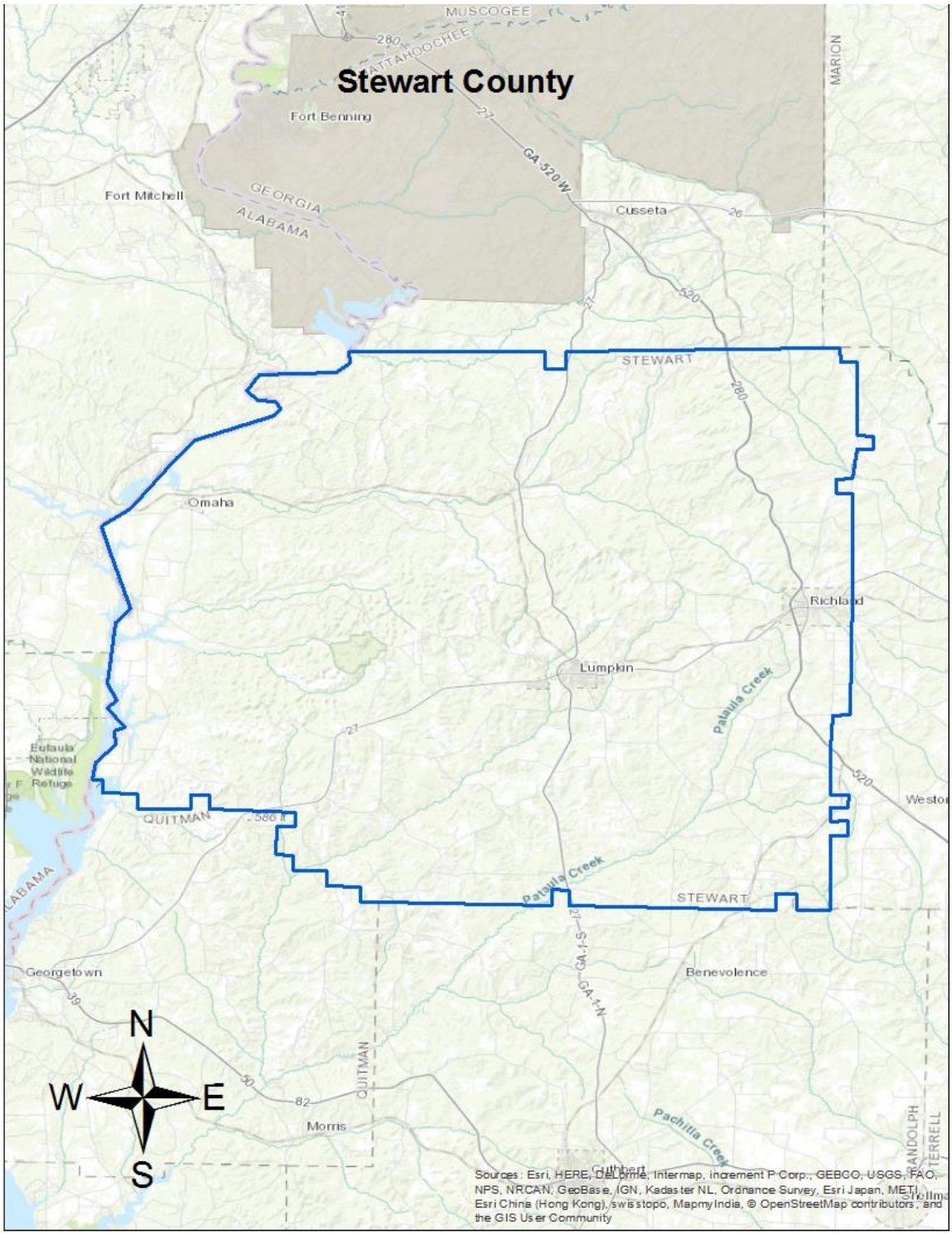


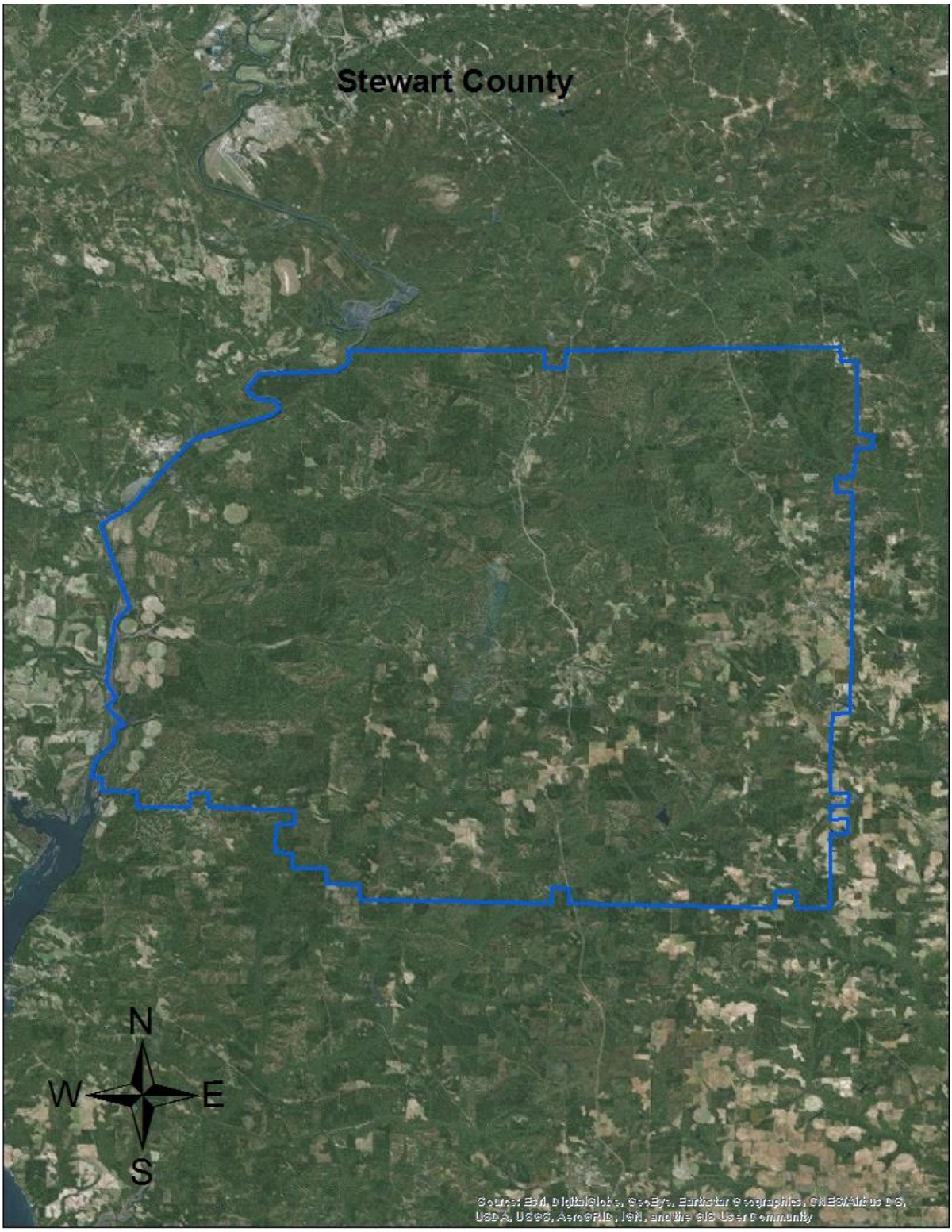


GEORGIA FORESTRY COMMISSION

GEORGIA FORESTRY COMMISSION

IV. COUNTY BASE MAPS




Stewart County
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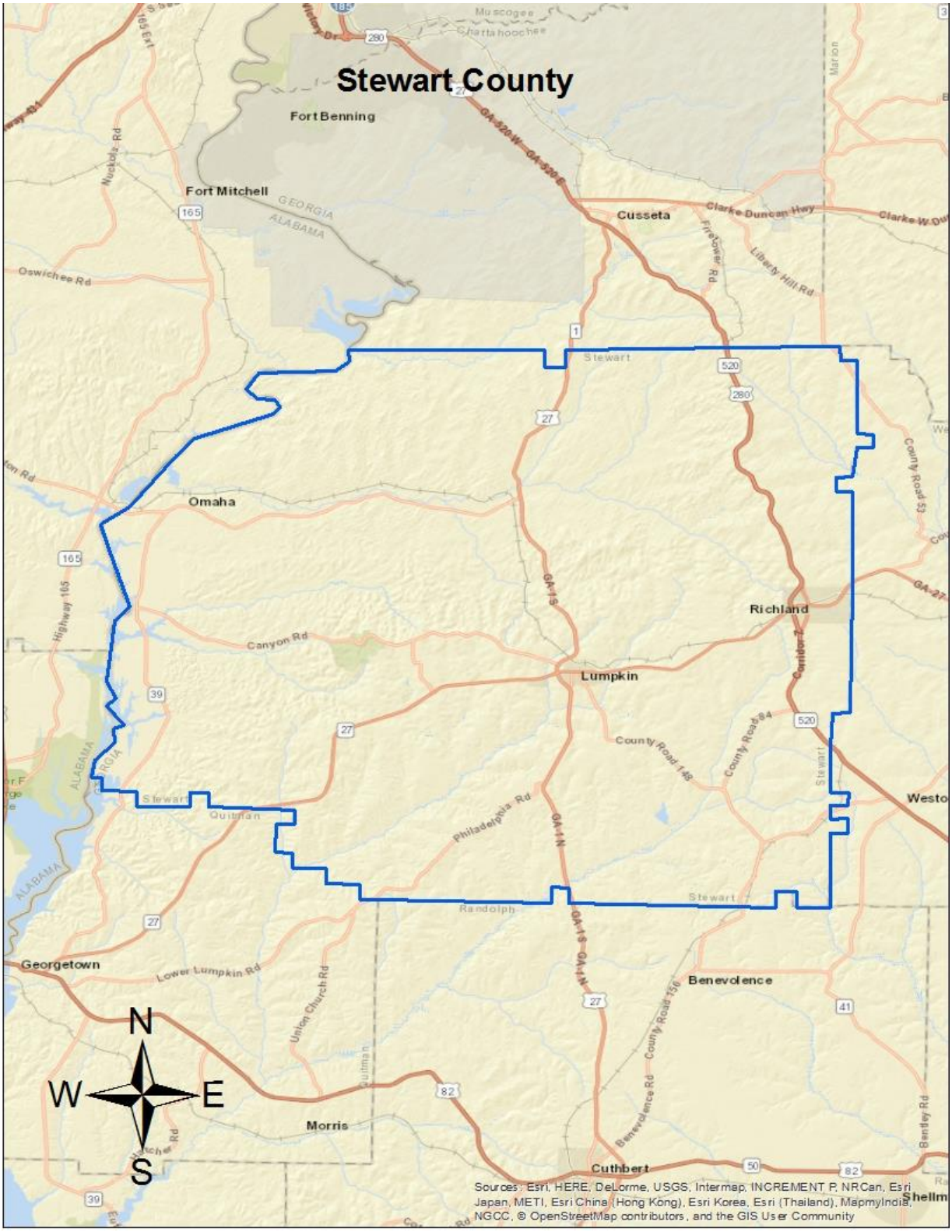
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Stewart County
Fort Benning
Fort Mitchell
GEORGIA
ALABAMA
Cusseta
Clarke Duncan Hwy
Oswichee Rd
Omaha
Richland
Lumpkin
Canyon Rd
Philadelphia Rd
Randolph
Georgetown
Lower Lumpkin Rd
Union Church Rd
Morris
Benevolence
Cuthbert
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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. WHAT ARE "COMMUNITIES-AT-RISK"?

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

In Stewart County, there are many individual (isolated) homes and outbuildings on farms and small properties that could be damaged or destroyed in the event of a disastrous wildfire. On these properties, the owners must be educated so they can assume a greater responsibility for wildfire protection - - - by making improvements to their residential landscape and their homes that will provide some wildfire protection until the fire department can arrive. This can only be accomplished if rural residents know how to make their homes and properties "Firewise".

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

Modifications in and around individual residences may need to be budgeted by the residents over time (for example, making a roof more fire resistant may have to wait until it is time to replace the current roof covering), however, moving firewood away from the home, skirting raised decks and keeping roofs free of accumulated flammable debris are improvements most families can do in the shortrun.

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

Pictured here is a Forestry masticating mower removing understory vegetation to reduce fire risk. This type of practice is sometimes used near structures or areas where prescribed fire may not be practical. Private contractors can provide this service.

HAZARD RATINGS FOR STEWART COMMUNITIES AT RISK

Community	Score	Hazard Rating
Omaha	**121**	**Extreme Hazard**
Wrightsville	**107**	**Very High Hazard**
Rag Town	**97**	**High Hazard**
Red Hill	**52**	**Moderate Hazard**

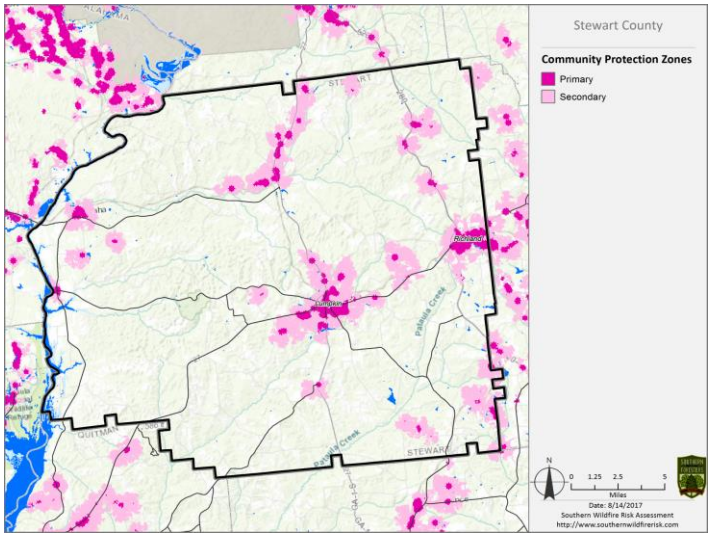
These hazard ratings were completed by John Pollard, Chief Ranger for Stewart County and Ranger I Doug Redding, during the month of June, 2010. The Georgia Forestry Commission's Hazard and Wildfire Risk Assessment Scoresheet was used. This document evaluates communities (groups of homes) based upon six criteria: community access, surrounding vegetation, building construction, fire protection, utilities, and additional rating factors. The quantitative wildfire hazard ratings range from a low hazard rating of 0 to 50 points to an extreme hazard rating of over 120 points.

Prescribed burning of woodlands is the best management practice to reduce hazardous fuel accumulation. The Georgia Forestry Commission can provide a prescribed burning plan, establish fire breaks, and can also provide equipment standby and assist with burning when personnel are available.

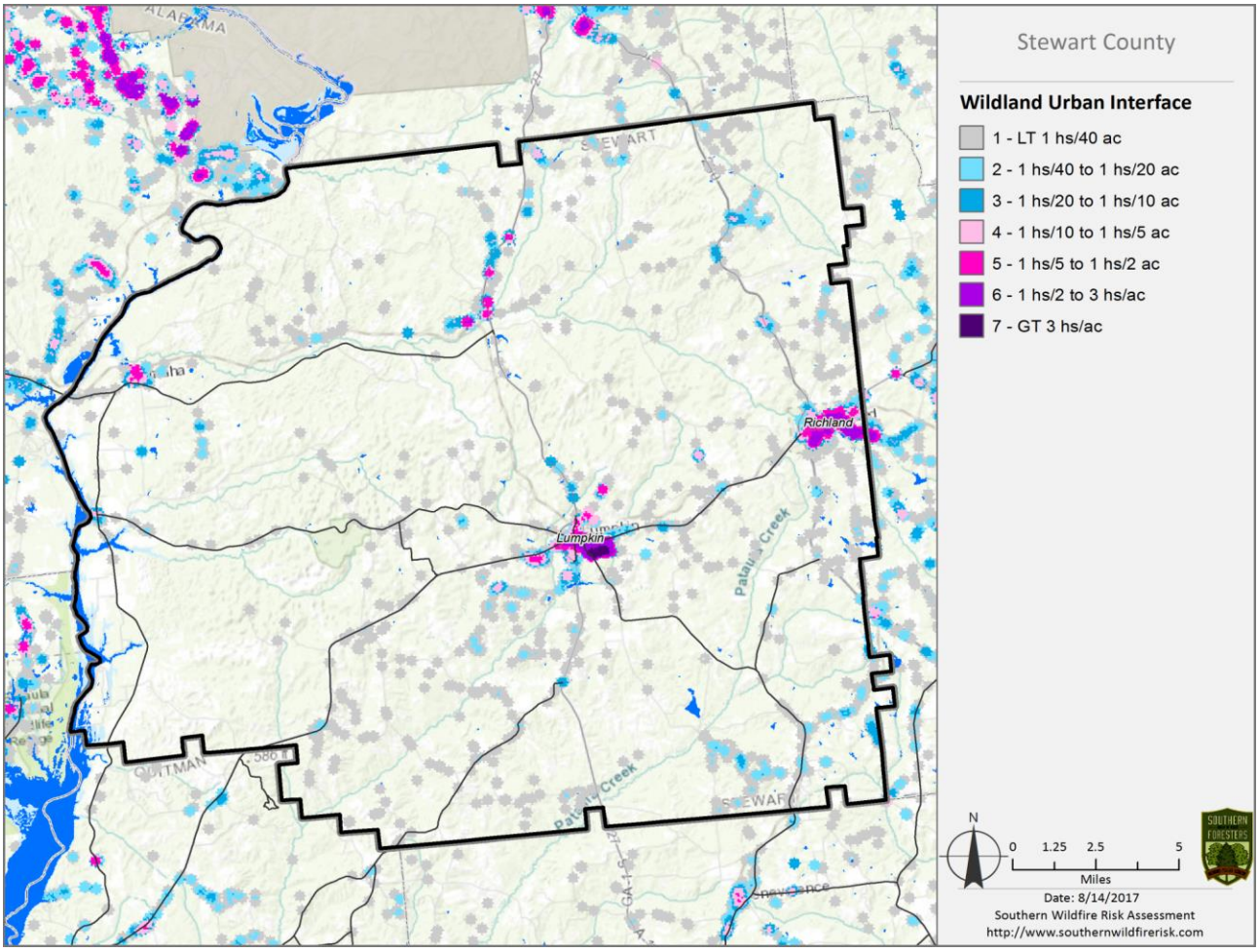
VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

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

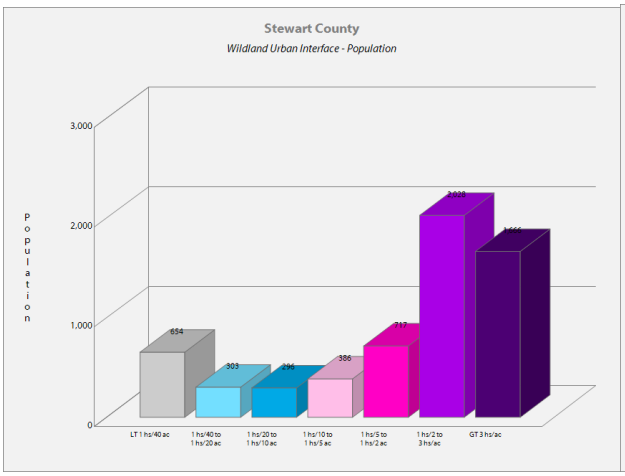
- Identify areas that are most prone to wildfire
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning
- Provide the information necessary to justify resource, budget and funding requests
- Allow agencies to work together to better define priorities and improve emergency response, particularly across jurisdictional boundaries
- Define wildland communities and identify the risk to those communities
- Increase communication and outreach with local residents and the public to create awareness and address community priorities and needs
- Plan for response and suppression resource needs
- Plan and prioritize hazardous fuel treatment

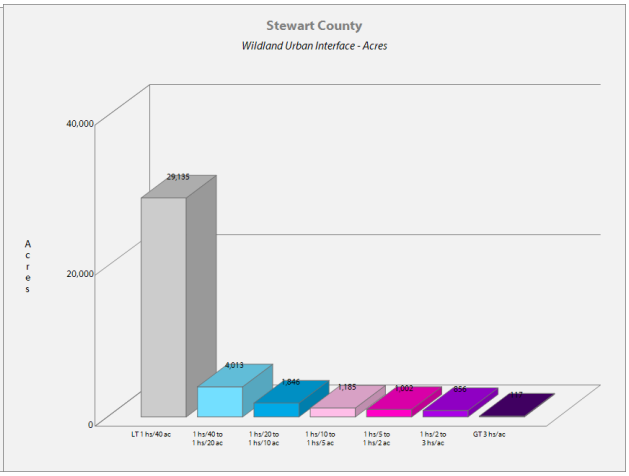


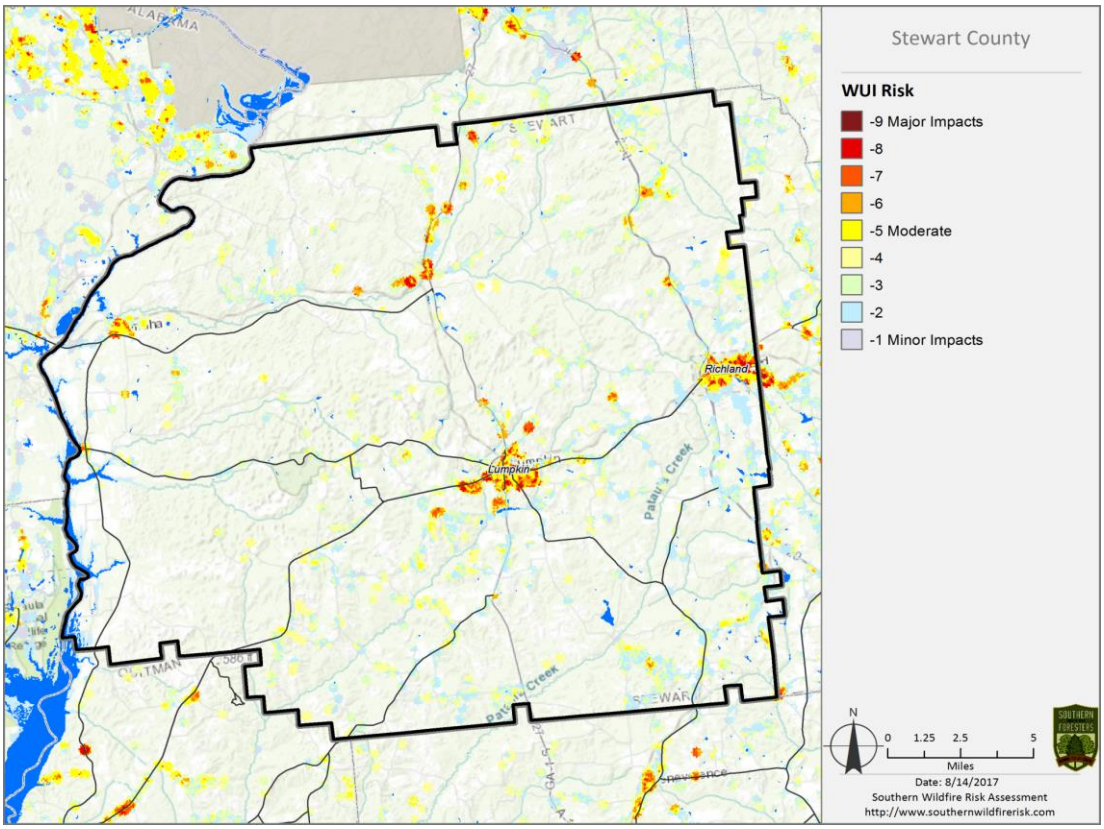
Community Protection Zones map from the Stewart County SWRA



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

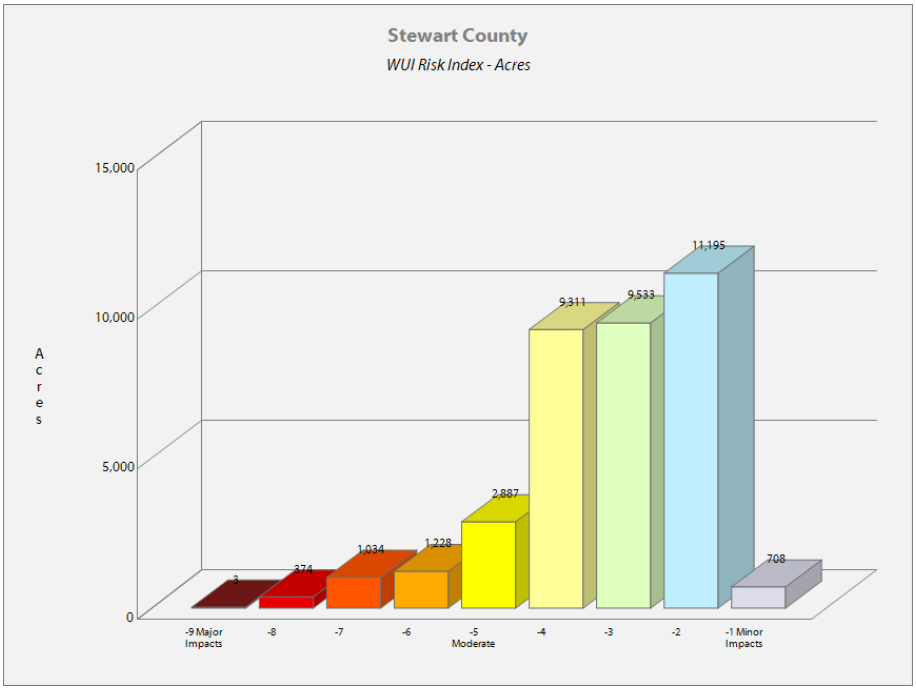


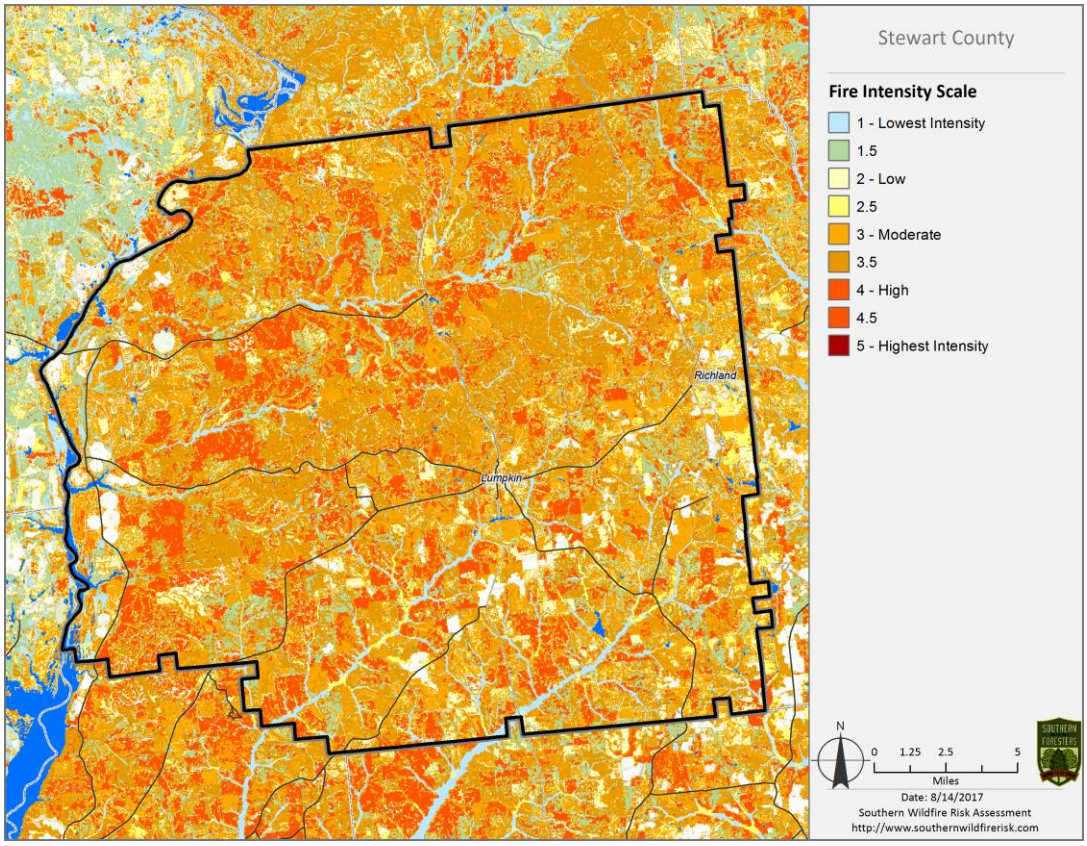




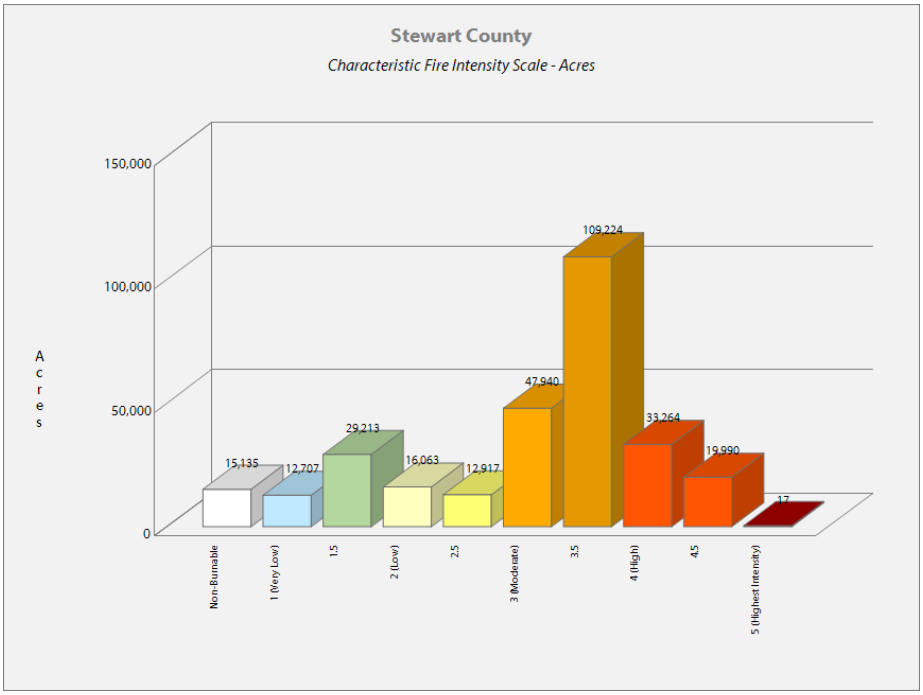
Above: Wildland Urban Interface (WUI) Risk map

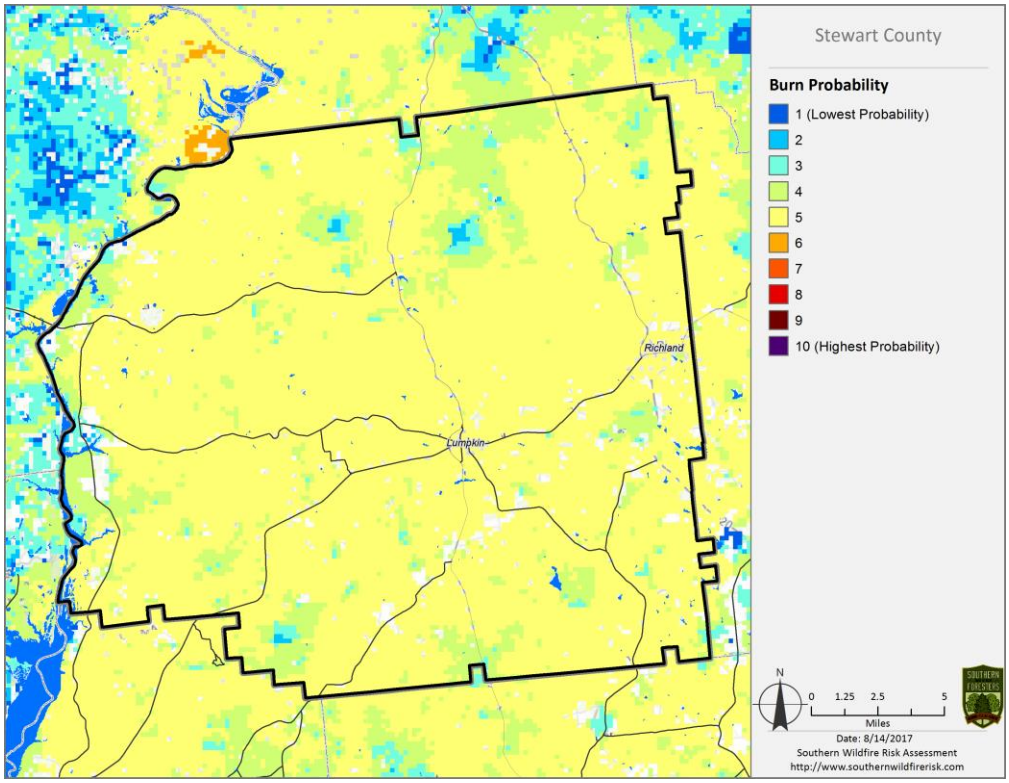
Below: WUI Risk Index - Acres



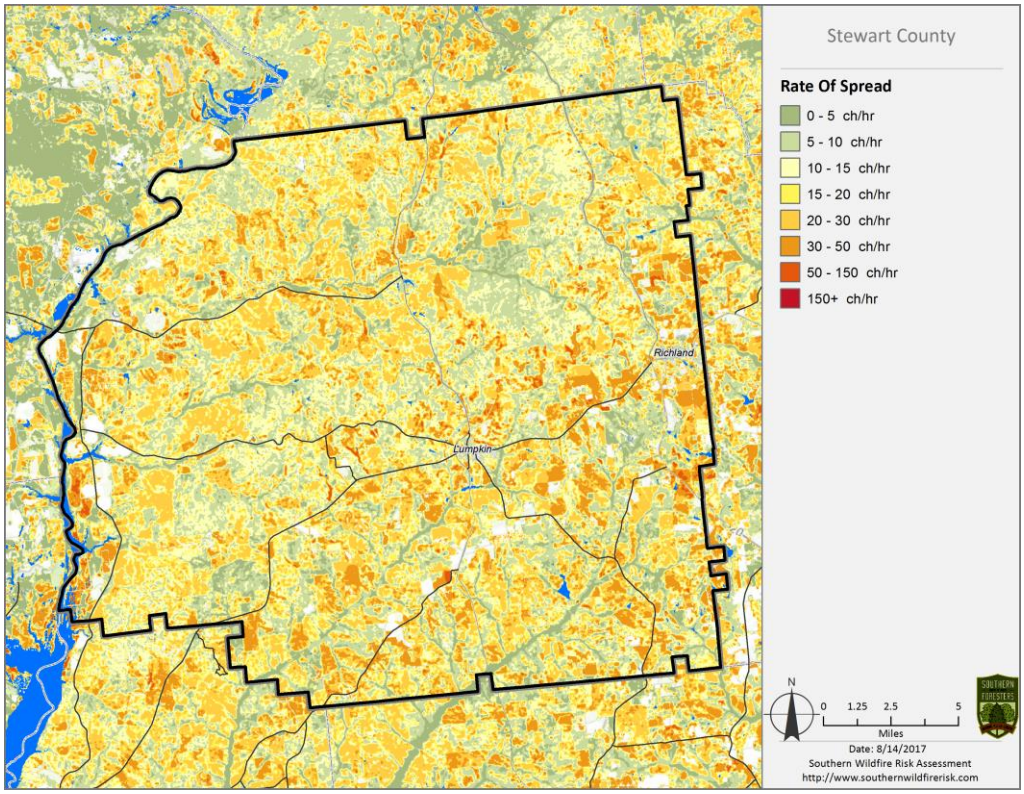


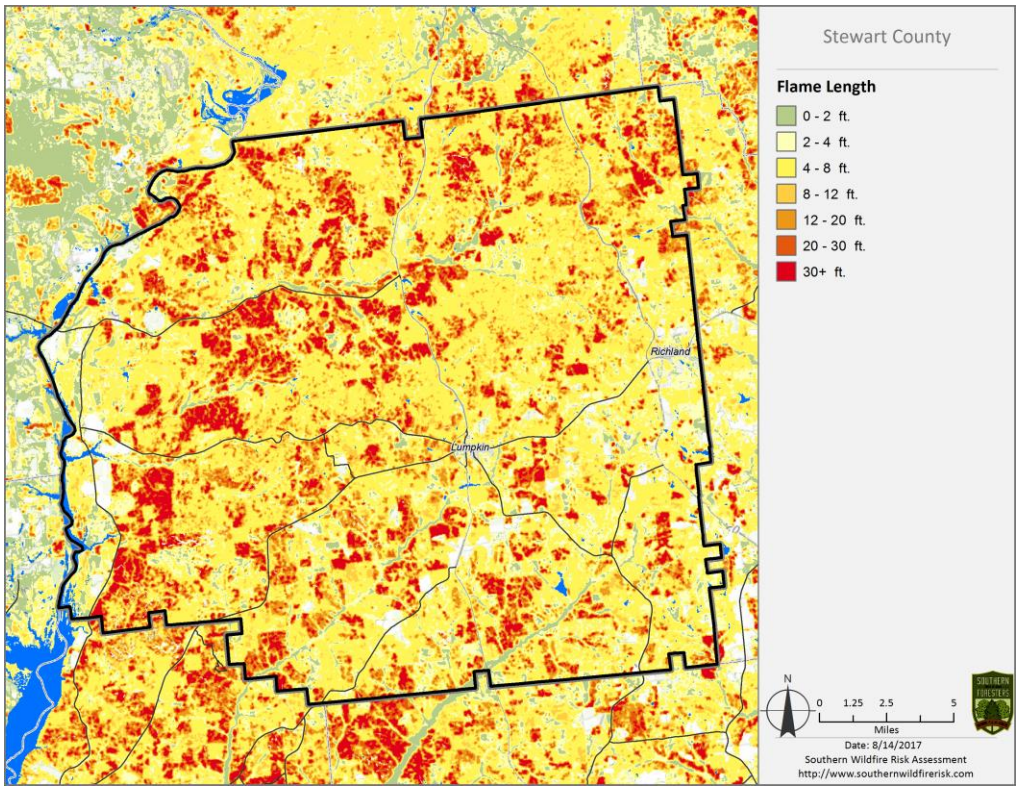
Above: Fire Intensity Scale map Below: Fire Intensity Scale – Acres graph



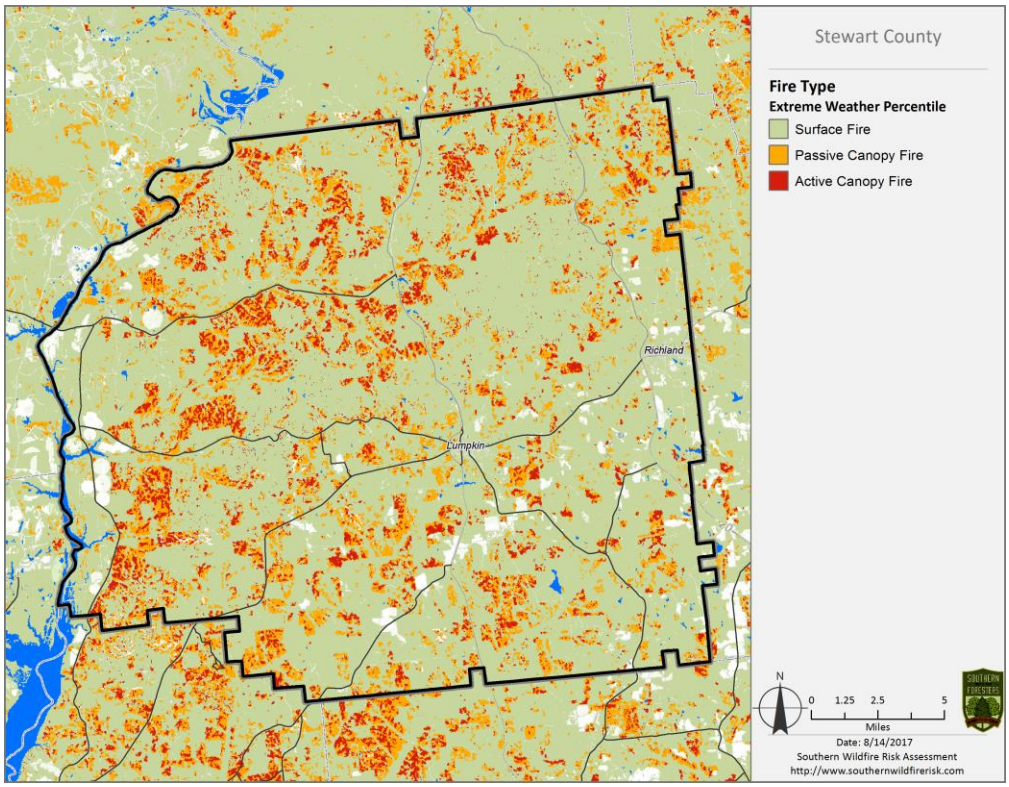


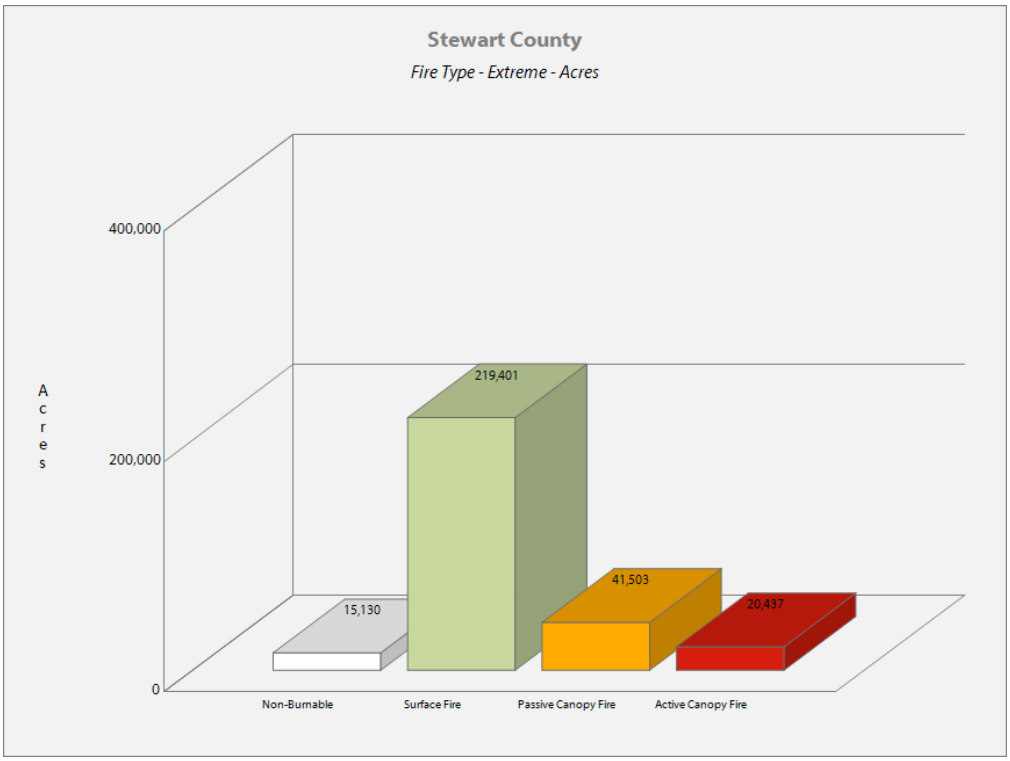
Above: Burn Probability map Below: Rate of Spread map





Above: Flame Length map Below: Fire Type map





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

Passive Canopy Fire
A type of crown fire in which the crowns of individual trees or small groups of trees burn, but solid flaming in the canopy cannot be maintained except for short periods (Scott & Reinhardt, 2001).

Active Canopy Fire
A crown fire in which the entire fuel complex (canopy) is involved in flame, but the crowning phase remains dependent on heat released from surface fuel for continued spread (Scott & Reinhardt, 2001).

VII. MITIGATION & ACTION PLAN

Critical Facilities

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

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

Critical Facilities in Stewart County:

Stewart County Elementary School
Stewart Detention Center (CCA)
Pumping stations for natural gas and propane
Stewart-Quitman High School
Electrical power transfer stations

RECOMMENDATION: Meet with owner/operators of Critical Facilities to evaluate any wildfire hazard and suggest what owner/operators might do to mitigate any observed hazards and improve wildfire protection.

Public Education Needs

"Firewise" structures are homes and other buildings in the wildland/urban interface that have been built, designed and maintained to survive a wildfire event even in the absence of firefighters on the scene.

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

The key to the reduction of structural losses in the wildland/urban interface cannot rest solely with improved response by the local fire services. There will never be enough fire trucks and firefighters to adequately protect homes in the wildland/urban interface. A major part of the solution to this problem lies with the homeowner – homeowners in the wildland/urban interface must become "partners" with the fire services and assume some responsibility for maintaining their home (structure) and landscape (yard) so that the home can be saved should a wildfire occur in the immediate area. This means a home with no combustible debris on the roof and in the gutters, wood decks that are skirted underneath,

chunky bark or lava rock mulch near the house instead of pine straw or cypress mulch and a "lean, clean and green" landscape of less-flammable plants within 30 feet of the structure.

RECOMMENDATIONS: Initiate a community public education program for Stewart County residents

- Host a Firewise Workshop each year at a centrally-located facility with a meal and refreshments for those who attend.
- Make Firewise Communities brochures available to the public at central locations such as: Farm Services Agency, Chamber of Commerce and the County Courthouse.
- Encourage neighborhoods/communities that qualify to apply for recognition as a Firewise Community/ USA.

Reduction of Hazardous Fuels

Because approximately 81 percent of Stewart County is forested, the accumulation of brush (and other mostly ground vegetation) can create conditions that could fuel a disastrous wildfire. Treatment of forested areas with prescribed fire can significantly reduce this hazard while improving pulpwood and sawtimber production and enhancing wildlife habitat. Prescribed burning, however, must be conducted by experienced personnel when weather conditions are conducive to a safe burn and when an authorization has been obtained from the local office of the Georgia Forestry Commission.
Other ways to reduce wildland fuel (vegetation) include:

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

The above alternatives to prescribed burning are more intensive and hence, more costly and generally suitable only for smaller acreages. This service is available from private contractors.

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

RECOMMENDATION: Promote the use of prescribed burning in Stewart County for wildland fuel reduction.

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

NEW DEVELOPMENT IN THE COUNTY

Site Plan Review

If farm and ranch land is conserved as a mainstay of the County's rural economy, new development will, by necessity, occur more frequently on forest and wildland areas. The County Planning and Zoning Board Building Inspector 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, the los of homes and outbuildings 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 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 multi-unit subdivisions are built in rural areas (sometimes referred to as the wildland/urban interface), a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments. In 2012 the International Code Council created the International Wildland Urban Interface Code (IWUIC). This code was adopted in 2014 by Georgia Legislature for Georgia counties to use in developing building regulations in WUI and high risk areas.

RECOMMENDATION:

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

- Evaluate (assess) the wildfire hazard of proposed new development in rural areas as part of the site plan review process (Resource: GFC Hazard & Wildfire Risk Assessment Scoresheet).
- Consider the "adoption by reference" of NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.
- Utilize the International Wildland Urban Interface Code (IWUIC) for development of county zoning and building regulations.

FIRE SERVICES CAPABILITY

Volunteer Fire Departments

Structural fire protection in the county is provided by the Stewart County Volunteer Fire Department and the City of Richmond VFD. The Stewart County Volunteer Fire Departments operates four fire stations, located in the more populated areas of the county. There is, however, no fire station in the vicinity of Wrightsville, in the south end of the county.

Stewart County VFD: Ed Lynch, Fire Chief

- Lumpkin Station
- Louvale Station
- Omaha Station

City of Richland VFD; Eddie Story, Fire Chief

Firefighting equipment and personnel:
Stewart County VFD

- Louvale Station – 1 GFC engine
- Omaha Station – 1 engine
- Lumpkin Station – 2 municipal engines

City of Richland VFD – 2 municipal engines

Equipment and Training Needed

Countywide Nomex type wildland personal protective equipment (PPE) is not available for use by volunteer firefighters and none of the VFD's are equipped with fire shelters. Volunteer firefighters have completed the Incident Management Training Courses, I-100 & I-700, however, none of the county's firefighters have had the basic wildfire training courses (S-130, Standards for Survival and S-190, Basic Wildfire Behavior). Ready Set Go training is available through the National Fire Chief's Association. This is good WUI wildfire planning training for firefighters, as well as, the general public.

Water Tankers

There are no water tankers (4,000 – 6,000 gallon capacity) in Stewart County to transport sufficient water for a prolonged response to structural fires in remote areas.

Fire Hydrants

Pressurized fire hydrants exist in the immediate vicinity of the incorporated areas of Omaha, Louvale and Brooklyn. The hydrant system also extends into other parts of the county where development exist.

Geographical Features

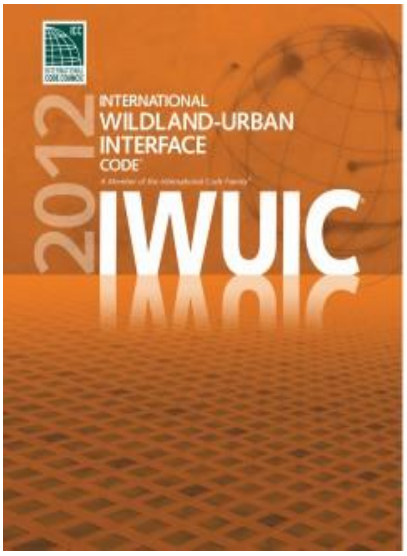
The west portion of the county is characterized by hills and steep slopes. Such terrain can be a significant impediment to wildfire response with engines or crawler tractors. In addition, wildfires are typically more dangerous on this terrain (wildfire behavior can be erratic and fires move much faster up steep slopes) making suppression more difficult and more dangerous for firefighters.

STEWART COUNTY ACTION PLAN

Community/Area at Risk	Project	Agency	Funding Needs	Priority	Community Recommendation
"Communities-at-risk" (Omaha, Wrightsville, Rag Town)	Public Safety/ Mitigate Wildfire Hazard	County/GFC	$15,000	High	Implement community fuel reduction/improve emergency access/educate homeowners in 3 high priority "communities-at-risk"
Countywide	Firefighter Training	GFC/County	$15,000	High	Courses for volunteer firefighters: Standards for Survival (S-130) & Wildland Fire Behavior (S-190) Ready Set Go training
Countywide	Wildland Fire PPE & Hand Tools	County	$20,000 PPE $5,000 Hand Tools	High	Personal Protective Equipment & Fire Shelters plus hand tools
Countywide	Wildfire Prevention Workshop	GFC/County	$1,500	Medium	1 wildfire prevention/Firewise Communities workshop
Countywide	Dry Hydrants	County	$15,000	Medium	Install 10 dry hydrants in strategic locations of county
Countywide	(2) 2,500 Gallon Water Tankers	County	$200,000	High	Two water tankers to improve water availability for firefighting in rural areas of the county

NOTE: The Action Plan summarizes a recommended course of action for implementation of this Community Wildfire Protection Plan. Some projects can be implemented at little or no added cost, however, the County or assigned agency will be able to implement most projects only if grant funding is available.

International Wildland Urban Interface Code (IWUIC), developed in 2012 and adopted in Georgia the following year, is available from the National Fire Protection Association.



VIII. GRANT FUNDING AND MITIGATION ASSISTANCE

Community Protection Grant: US Forest Service sponsored prescribed fire program. Communities with "at-risk" properties that lie within ten miles of a National Forest, National Park Service or Bureau of Land Management tracts may apply with the Georgia Forestry Commission to have their land prescribe burned free-of-charge. Forest mastication, where it is practical with Georgia Forestry Commission equipment, is also available under this grant program.

FEMA Mitigation Policy MRR-2-08-01: through GEMA – Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation Program (PDM).

1. To provide technical and financial assistance to local governments to assist in the implementation of long term, cost effective hazard mitigation accomplishments.

2. This policy addresses wildfire mitigation for the purpose of reducing the threat to all-risk structures through creating defensible space, structural protection through the application of ignition resistant construction and limited hazardous fuel reduction to protect life and property.

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 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.

IX. 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 a*ction that moderates the severity of a fire hazard or risk.*

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

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

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

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

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

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

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

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

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

X. 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.wildfireprepday.org

ATTACHMENTS

Stewart County Southern Wildfire Risk Assessment Summary Report (SWRA)

Wildfire Hazard Assessment Scoresheets: Wrightsville, Red Hill, Rag Town, Omaha

Georgia Forestry Commission

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Dry Branch, Ga. 31020

1-800-GA-TREES
GaTrees.org

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