



Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

McIntosh County, Georgia

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



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

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Appended Documents:

McIntosh County Southern Wildfire Risk Assessment Summary Report (SWRA)

McIntosh County Wildfire Pre-suppression Plan

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

I. OBJECTIVES

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

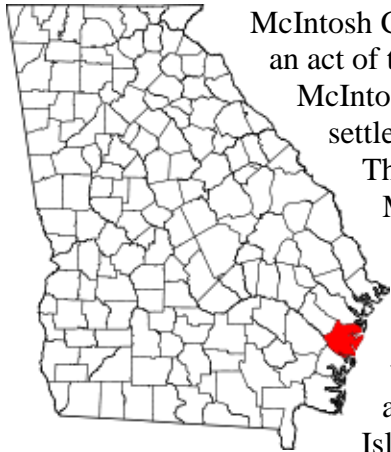
The core team convened on November 19th, 2008 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

McIntosh County Government
Fire Department
Emergency Management
Board of County Commissioners
Georgia Forestry Commission
Georgia Department of Natural Resources.
US Fish and Wildlife Service.

It was decided to conduct community assessments on the basis of the on high risk communities and the individual fire districts in the county. The core team assessed the identified communities and districts and reconvened on May 8th, 2009 for the purpose of completing the following:

Risk Assessment	Assessed wildfire hazard risks and prioritized mitigation actions.
Fuels Reduction	Identified strategies for coordinating fuels treatment projects.
Structure Ignitability	Identified strategies for reducing the ignitability of structures within the Wildland interface.
Emergency Management	Forged relationships among local government and fire districts and developed/refined a pre-suppression plan.
Education and Outreach	Developed strategies for increasing citizen awareness and action and to conduct homeowner and community leader workshops.

III. COMMUNITY & WILDFIRE HISTORY



McIntosh County, on the Georgia coast, was created from Liberty County by an act of the state legislature in 1793. The county was named for the McIntosh family, who were among the earliest Scottish Highlanders to settle the area three years after the founding of the Georgia colony.

The most prominent member of this family was General Lachlan McIntosh, commander of Georgia forces in the Revolutionary War (1775-83) and a primary force in the colony's movement toward independence.

The earliest settlers in the lands that became McIntosh County were Gule Indians, followed by Spanish missionaries from about 1595 to 1686, both on the mainland and on nearby Sapelo Island. The first English presence was established by South Carolina Rangers, who built Fort King George in 1721. The first permanent settlement was a group of Highland Scots from Inverness, who, under the auspices of James Edward Oglethorpe, founded the town Darien in January 1736.

Darien was incorporated and made the seat of McIntosh County in 1816, during a period when the area began to prosper as a primary outlet for the shipment of upland-grown cotton conveyed to the port down the Altamaha River. During the antebellum period rice and Sea Island cotton plantations made McIntosh County one of the wealthiest sections of the south Atlantic coast.

Rice shipments from the local Altamaha delta exceeded 6 million pounds in 1859, the peak year for exports. The leaders in the production of this valuable commodity were Pierce Butler, Jacob Barrett, and Robert B. Rhett. Meanwhile, the county's most prominent citizen of the time, Thomas Spalding of Sapelo Island, established one of the leading plantations of the antebellum South.



McIntosh County was devastated by Union military and naval action during the Civil War (1861- 65). Darien, deserted and undefended, was sacked and burned by Union colonel Robert Gould Shaw and his 54th Massachusetts regiment in June 1863, and most of the county's river plantations were destroyed in a series of raids in 1862-64.

During Reconstruction, Tunis G. Campbell, an agent of the Freedmen's Bureau, became McIntosh County's first African American elected official, serving in the Georgia General Assembly as well as in various local positions. During his period of public service, Campbell did much to enhance educational and economic opportunities for McIntosh County's freed slaves.

McIntosh County was an international timber market for four decades after the Civil War. The volume of rafts of virgin yellow-pine timber floating down the Altamaha River from the interior of Georgia established Darien as the primary outlet for lumber and timber on the Atlantic coast. Sawmills and loading docks in the county provided employment for hundreds of local black citizens displaced by the war.

Sailing vessels and steamships from Europe, South America, and the Far East loaded cargoes of lumber processed at mills in and around Darien. Later, investments of northern capital further energized the county and led to the construction of a railroad into Darien in 1895. In 1900 an all-time record of more than 112 million board feet of lumber was processed and shipped overseas from McIntosh County. By 1915 the Altamaha River timber supply was exhausted because of overcutting upriver from Darien, and the local timber trade was all but over by 1925.



The demise of timber as an economic resource led numerous county citizens to seek their livelihoods from other sources—primarily the nearby Atlantic Ocean. In the first half of the twentieth century McIntosh County became a leading producer of seafood, especially oysters, shrimp, and crabs. By 1960 McIntosh had one of the largest shrimp-boat fleets on the south Atlantic coast, although the county's population was then only 6,364 residents. About 1975, however, the seafood industry entered a period of steady decline, brought about by rising operating costs and the increasing importation of cheaper foreign shrimp.

During World War II (1941-45) the U.S. Army operated an air training facility with concrete runways, barracks, and support facilities at Harris Neck in a remote section of McIntosh County, for the training of P-40 fighter pilots. The Coast Guard had submarine watch stations on Sapelo and Blackbeard islands. In 1953 the University of Georgia established its Marine Institute on Sapelo Island.

The county population, according to the 2000 U.S. census, was 10,847 (61.3 percent white, 36.8 percent black, and 0.9 percent Hispanic). The largest employers continue to be forestry and commercial fishing, although the area, including Sapelo Island, has become increasingly dependent on tourism.

(Courtesy New Georgia Encyclopedia)

Wildfire History

McIntosh County, one of most rural of the coastal counties, is also one of the most heavily forested with most of the upland land area in extensive forested tracts. Even though a large portion of the eastern half of the county is tidal marsh and barrier islands there are still almost 150,000 acres of commercial timberland within the confines of the county. While the traditional population centers were Darien, the county seat, near the south end of the county and a handful of small waterfront communities along the waterways, there are now numerous small communities and developments spread the length of the county, primarily east of I-95 with a significant risk as from the wildland urban interface around them.

McIntosh County is protected by organized fire departments within the city of Darien and seven Volunteer Fire Departments in Cox, Townsend, Eulonia, Meridian, Crescent, Shellman and the Harris Neck areas. There is also a pumper truck maintained by the Georgia DNR on Sapelo Island. There are also small island communities located on Hird and Barbour Islands with no fire equipment where the only access is by water along with individual homes on several more isolated islands within the county. The Georgia Forestry Commission maintains a county protection unit located just east of Eulonia off Hwy 99 to respond to wildfires throughout the county. The city of Darien is serviced by a pressurized water system with well placed hydrants throughout.

Over the past fifty years, McIntosh County has averaged 138 reported wildland fires per year. The occurrence of these fires shows a definite peak in the months January, February, March and April accounting for 75% of the fires over the 20 year period. These fires have burned an average of 705 acres annually over the 50 year period with 70% of the acreage lost during the above mentioned first four months of the year.

Using just the data for the past 10 years, there has been a shift in this pattern. While the average number of fires per year declined to 80 per year, the average annual acreage lost increased to 806 acres per year. Also the period of peak activity in terms of numbers of fires has broadened to the period January through May with 74% of the reported fires occurring during that five month period. As for total acres lost to wildfire during the last 10 years, the five month period from March through July accounted for 91% of the annual average acres lost.

While the numbers of fires has noticeably declined over the past 25 plus years since the advent of the burning permit law, the acreage lost has not shown a similar response. This perhaps a result of the decrease in the practice of prescribed burning and the resultant increase in wildland fuel loadings. Despite this alarming trend in fire behavior, more homes are being built outside of traditional communities into the wildland urban interface. The leading causes of these fires over the past 50 years were arson and debris burning causing 67% and 18% respectively of the fires and 65% and 13% respectively of the acres burned. Using just figures from the last 10 years of complete records, from 2008 through 2017, there has been a significant reduction from arson caused fires, but it still remains the leading cause of wildland fires in McIntosh County with 45% of the fires and 53% of the acres lost. Debris burning is still the second leading cause with 23% of the fires and 14% of the acreage burned. Lighting caused fires has been a major cause over the past ten years accounting for 26% of the acres burned.

Georgia Forestry Commission Wildfire Records show that in the past five years, FY2014-FY2018, only one home has been damaged by wildfire in McIntosh County resulting in estimated losses of \$100 along with 4 outbuildings valued at \$18,300. According to reports during this period 9 homes have been directly or indirectly threatened by these fires. Additionally 10 vehicles valued at \$230,000 and 3 pieces of equipment valued at \$155,000 were lost. While McIntosh County has been relatively lucky compared to most counties in this regard, the potential is there for significant lose to non-timber property from wildfire.

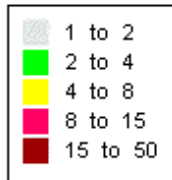
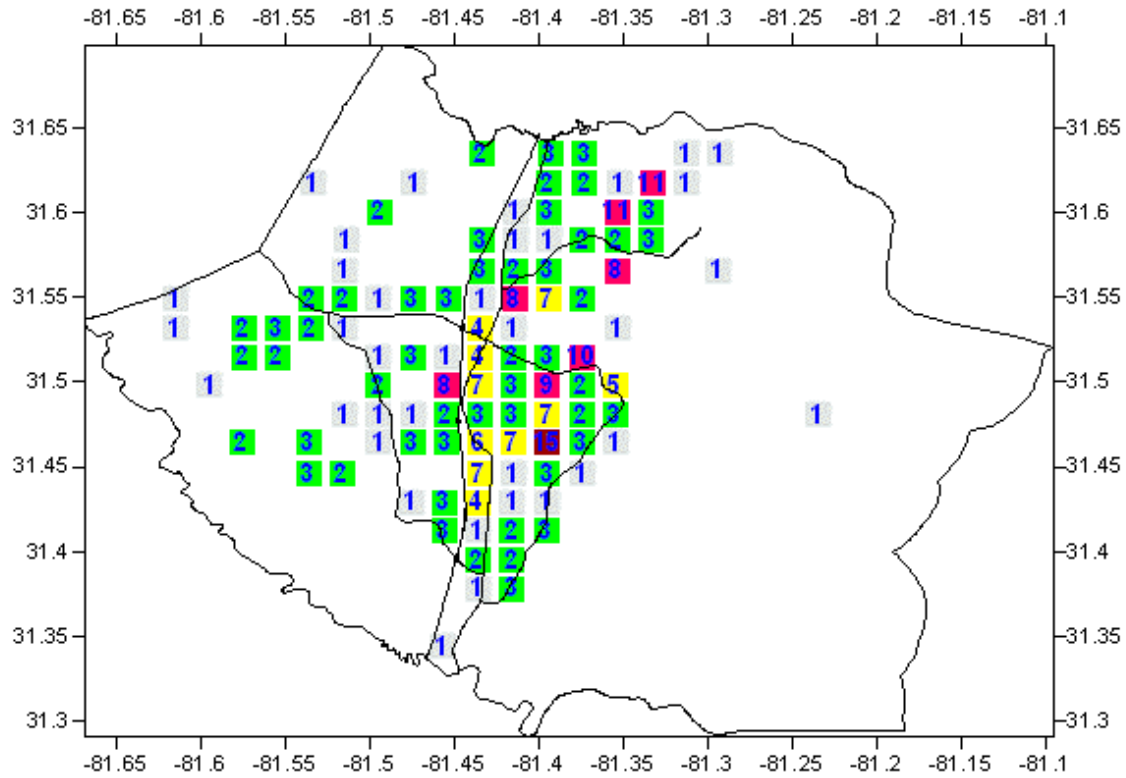
Wildfire data below for FY2018 , the most recent complete fiscal year, July 1, 2017 – June 30, 2018.

County = McIntosh	Cause	Fires		Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	1		0.25	0.40	0.10
Children	Children	0		0.00	0.60	0.36
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0		0.00	0.20	0.50
Debris: Construction Land Clearing	Debris: Construction Land Clearing	0		0.00	0.60	0.55
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	0		0.00	0.60	8.06
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	1		0.25	2.40	17.77
Debris: Site Prep - Forestry Related	Debris: Site Prep - Forestry Related	0		0.00	0.20	0.80
Incendiary	Incendiary	4		18.55	3.40	11.52
Lightning	Lightning	3		17.40	1.80	9.63
Machine Use	Machine Use	1		0.10	2.00	20.80
Miscellaneous: Firearms/Ammunition	Miscellaneous: Firearms/Ammunition	0		0.00	0.20	0.00
Miscellaneous: Other	Miscellaneous: Other	0		0.00	0.20	0.00
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	1		0.25	0.60	0.75
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	1		0.75	1.00	7.10
Totals for County: McIntosh Year: 2018		12		37.55	14.20	77.93

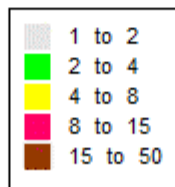
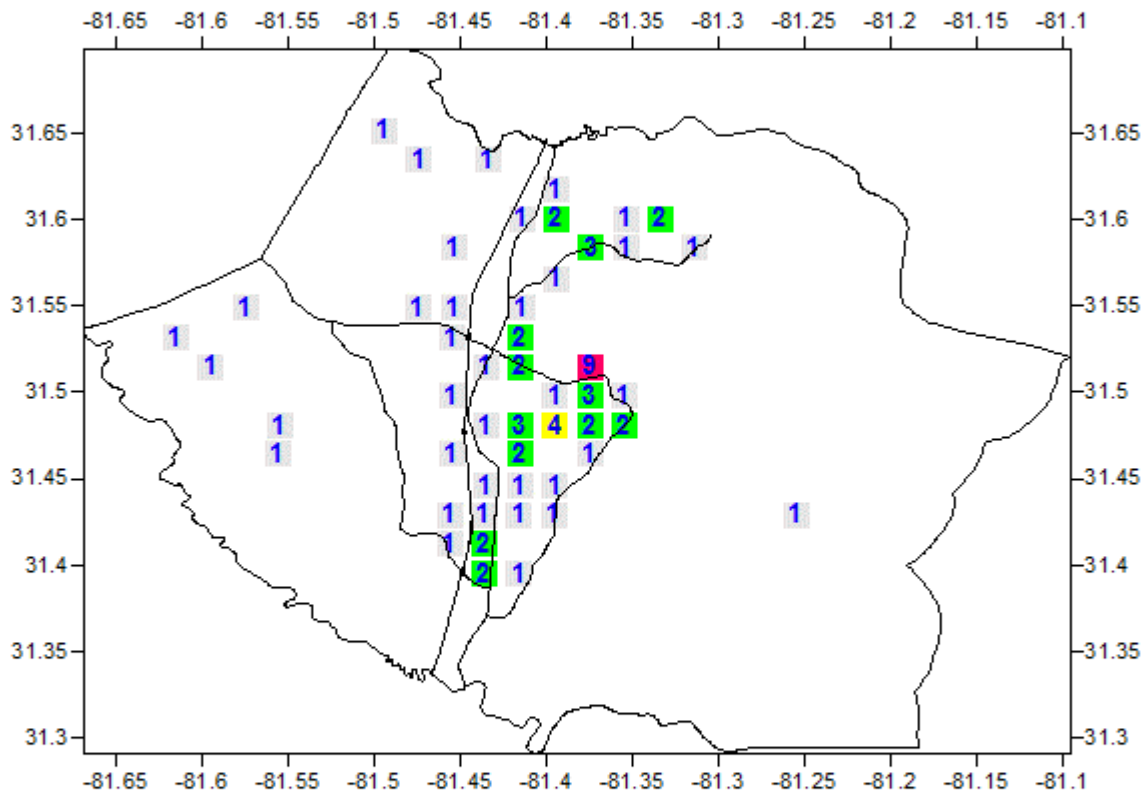
Acreage Burned /Number of Fires For McIntosh County For FY 2008-2017				
Year	Acreage Burned	Number of Fires	Average Size	Statewide Average Size
2008	216.81	48	4.52	4.56
2009	51.12	32	1.60	3.90
2010	33.13	47	.70	3.93
2011	2,427.78	83	29.25	17.56
2012	335.30	30	11.18	5.08
2013	34.08	9	3.79	4.53
2014	21.80	11	1.98	5.02
2015	18.05	10	1.81	4.42
2016	121.70	17	7.16	6.29
2017	190.54	21	9.07	11.60

Acreage Burned /Number of Fires by Fire Cause For McIntosh County For FY 2008-2017		
Fire Cause	Acreage Burned	Number of Fires
Campfire	14.70	6
Children	4.48	7
Debris Burning	486.32	71
Incendiary	1,827.59	140
Lightning	884.81	23
Machine Use	161.46	31
Miscellaneous	61.70	24
Railroad	0.00	0
Smoking	9.25	6
Undetermined	0.00	0
Total	3,450.31	308

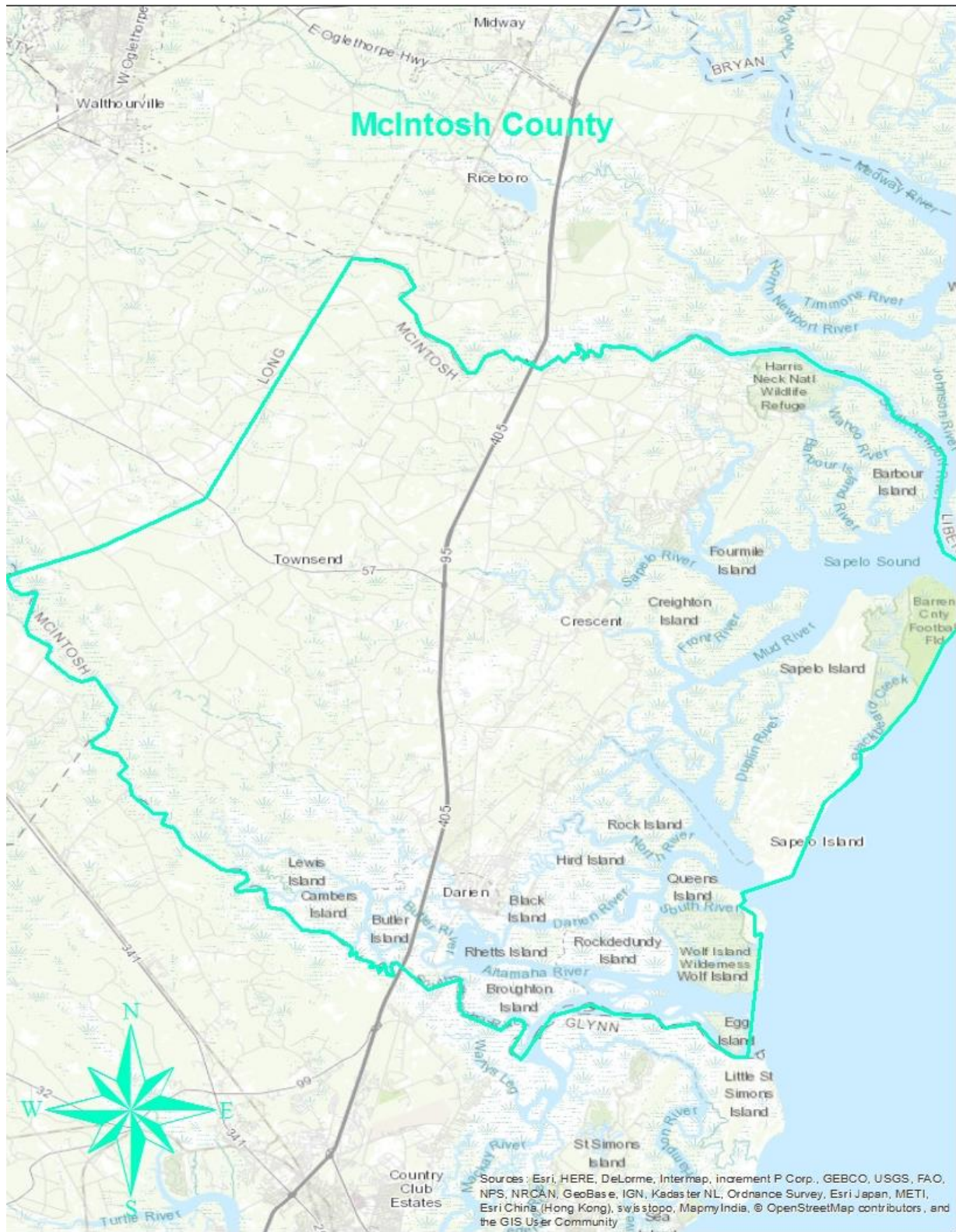
Fire Occurrence Map for McIntosh County for Fiscal Year 2007-2011



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



IV. COMMUNITY BASE MAPS







V. COMMUNITY WILDFIRE RISK ASSESSMENT

The Wildland-Urban Interface

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

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

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

The wildland fire risk assessments conducted in 2009 by the McIntosh County Fire Departments returned an average score of 109, placing McIntosh County in the “very high” hazard range. The risk assessment instrument used to evaluate wildfire hazards to McIntosh County’s WUI was the Woodland Community Wildfire Hazard 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 score for McIntosh County:

- Dead end roads with inadequate turn arounds.
- Narrow roads without drivable shoulder.
- Long, narrow, and poorly labeled driveways.
- Limited street signs and homes not clearly addressed.
- Thick, highly flammable vegetation surrounding many homes.
- Minimal defensible space around structures.
- Homes with wooden siding and roofs with heavy accumulations of vegetative debris.
- No pressurized or non-pressurized water systems available.
- Above ground utilities.
- Large, adjacent areas of forest or wildlands.
- Heavy fuel buildups in adjacent wildlands.
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations.
- Distance from fire stations.
- Island Communities with limited or no firefighting capacity.
- Lack of homeowner or community organizations.

Summary of McIntosh County Assessment Ratings

Community	Fire Station	Community Design	Site Hazard	Building Construction	Add. Hazards	Total Hazard	Score Rating
Darien, Blounts Crossing, Ridge	Northside	10	51	21	43	125	Moderate
Cox, Barrington, Blues Reach	Cox	18	35	30	42	125	Moderate
Townsend, Briardam, Churchill, Warsaw	Townsend	14	39	30	42	125	Moderate
Jones, LaCount, Youngs Island	Jones	14	41	20	47	122	Moderate
Eulonia, Crescent, Briar Patch	Eulonia	20	4	25	45	135	High
Shellman, Contentment, Sutherlands, White Chimney	Shellman	12	42	20	40	114	Moderate
Crescent, Bellville, Meridian, Sapelo, Smith Rd	Meridian	16	70	18	36	140	Extreme
Eagles Nest, Harris Neck Rd, Belvidere, Springfield	Harris Neck	10	49	17	39	115	Moderate
Sapelo Island, Hog Hammock, Barbour Island, Hird Island	Sapelo Island DNR	20	65	22	46	153	Extreme

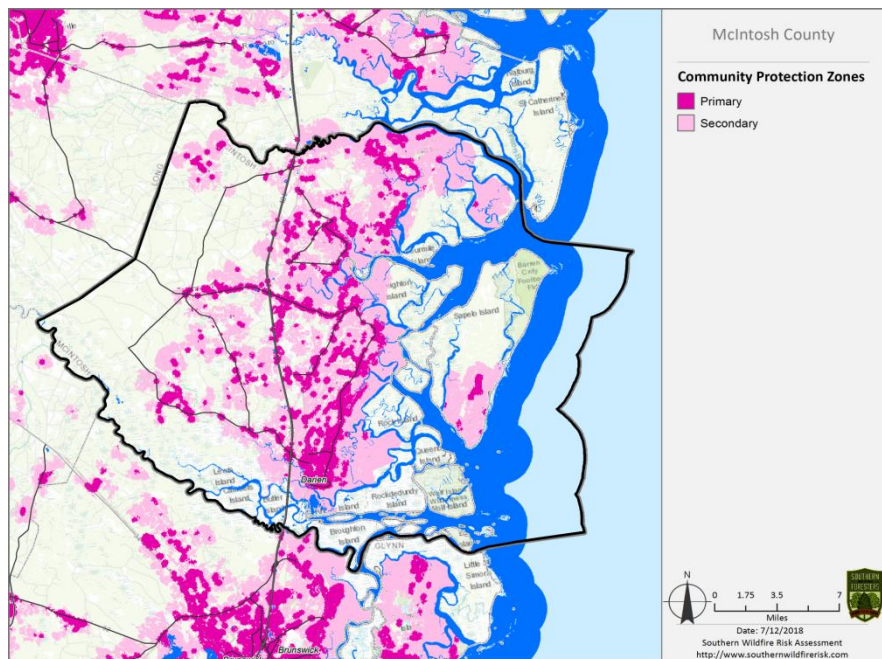


Wildland Urban Interface (WUI) is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels.

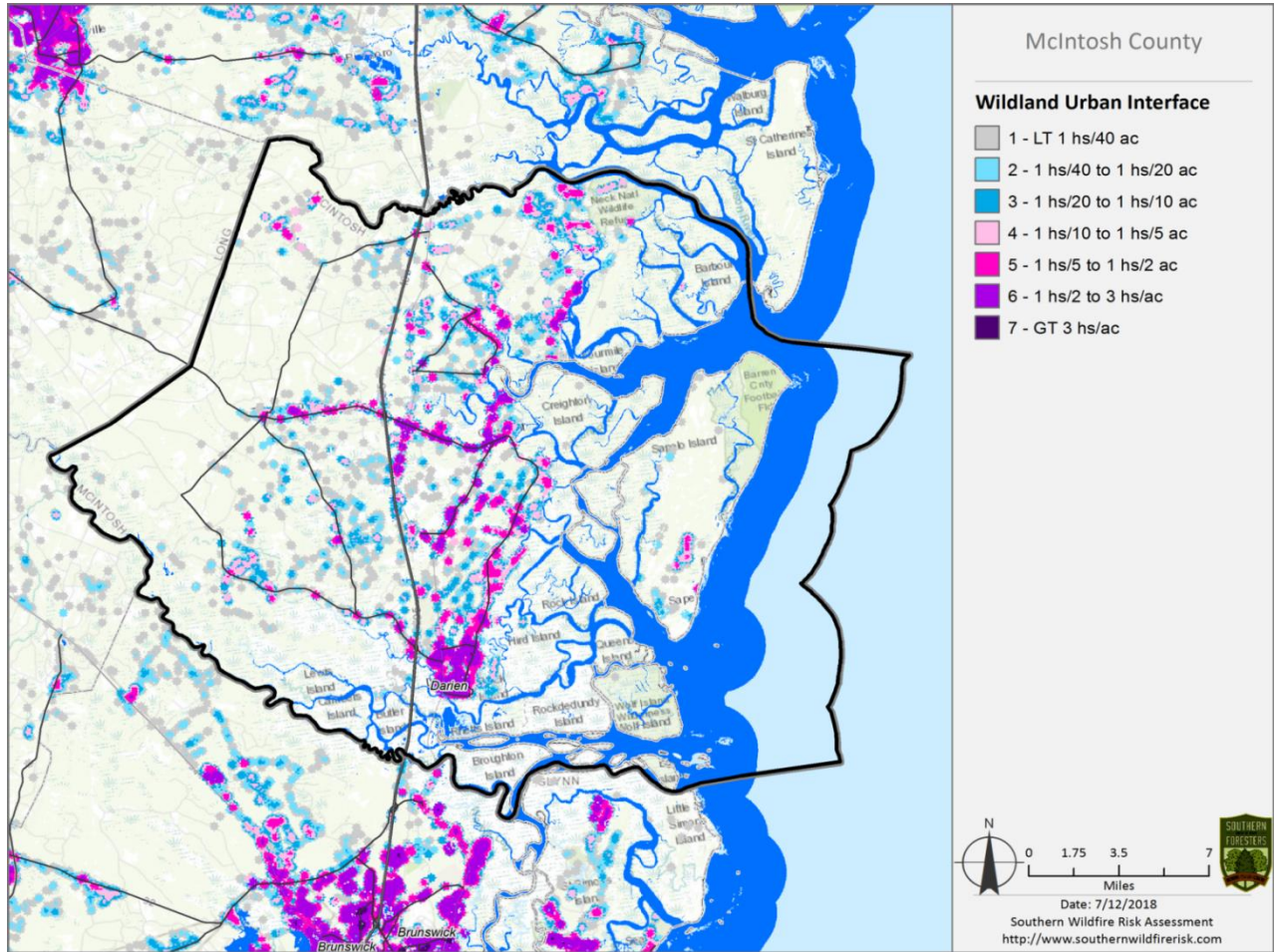
VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

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

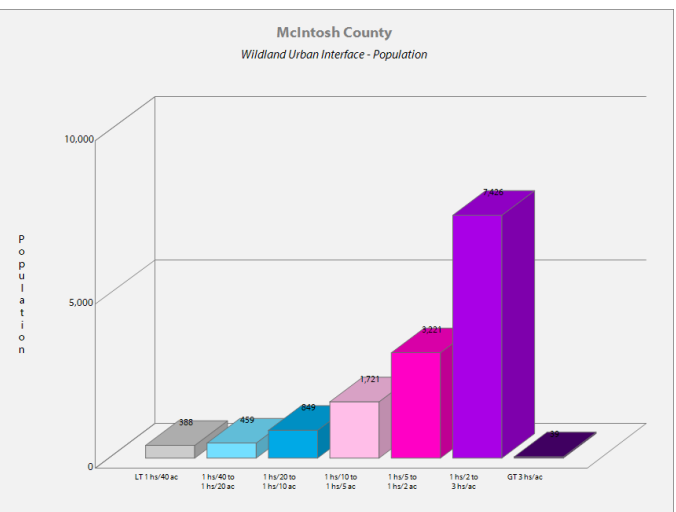
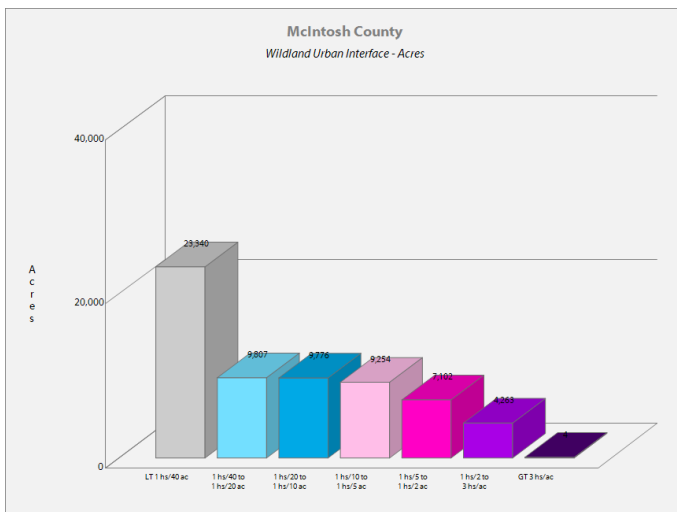
- Identify areas that are most prone to wildfire.
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning.
- Provide the information necessary to justify resource, budget and funding requests.
- Allow agencies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

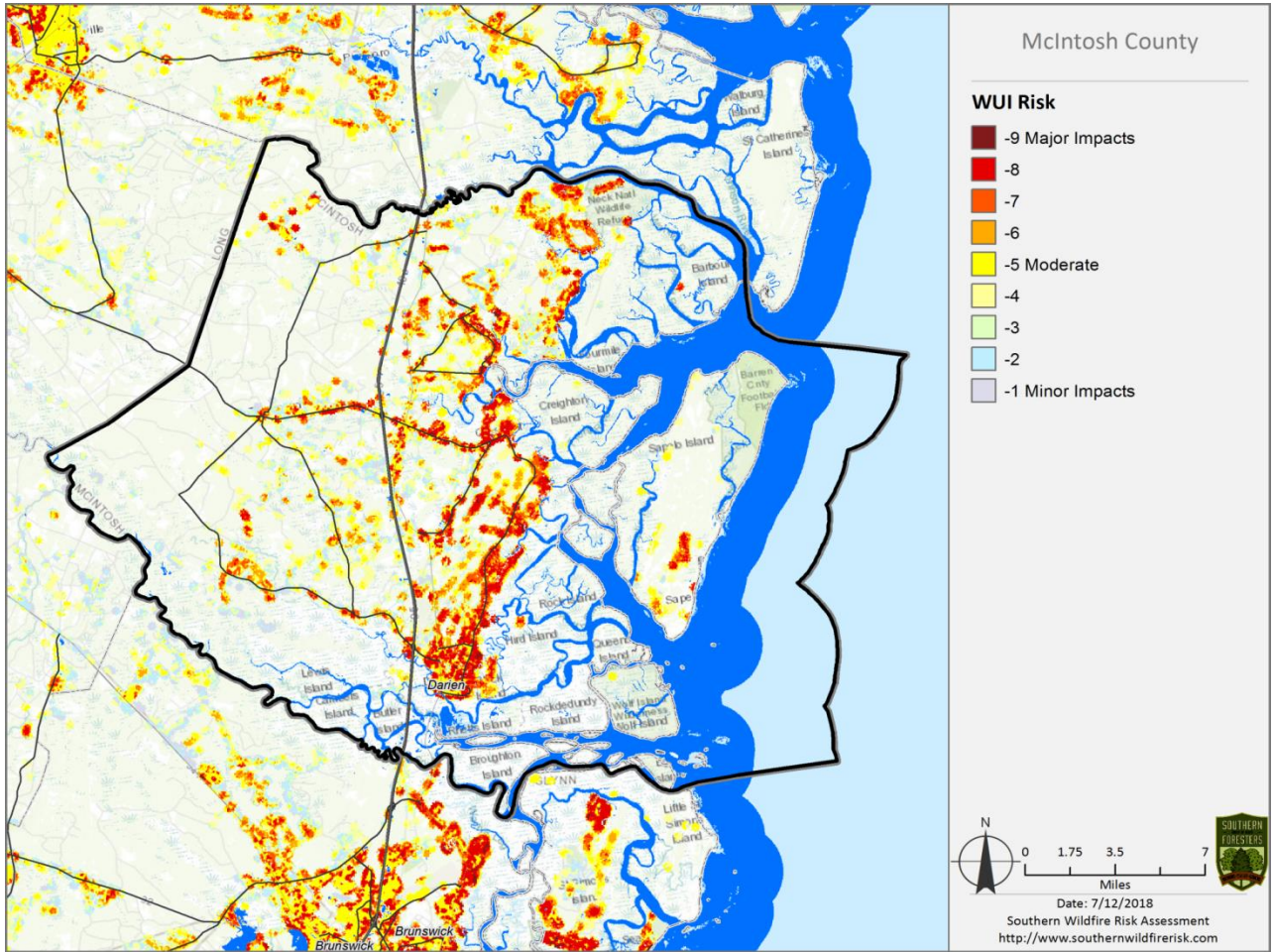


Community Protection Zones map from the McIntosh County SWRA

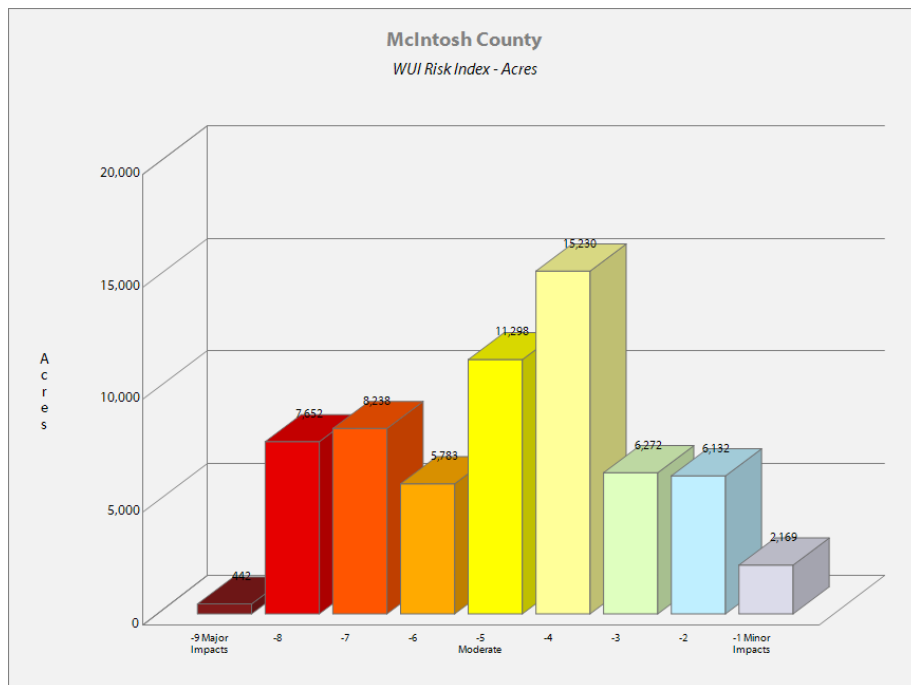


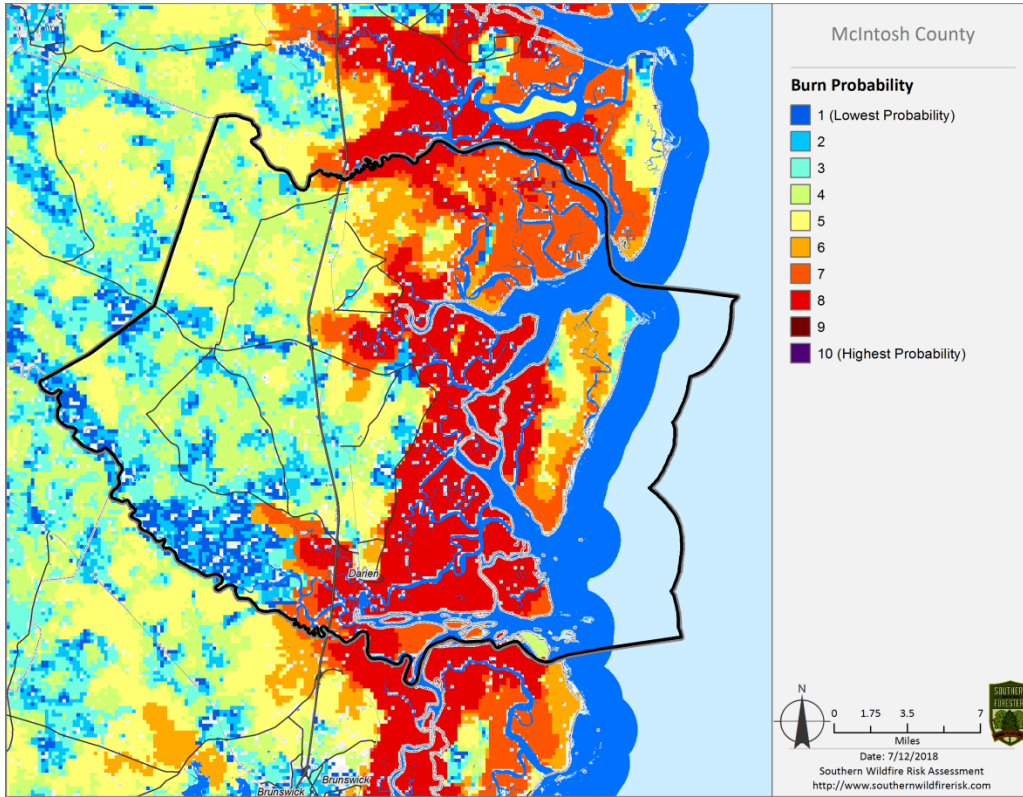
Above: Wildland Urban Interface (WUI) map Below: WUI Acres (left) WUI Population (right)



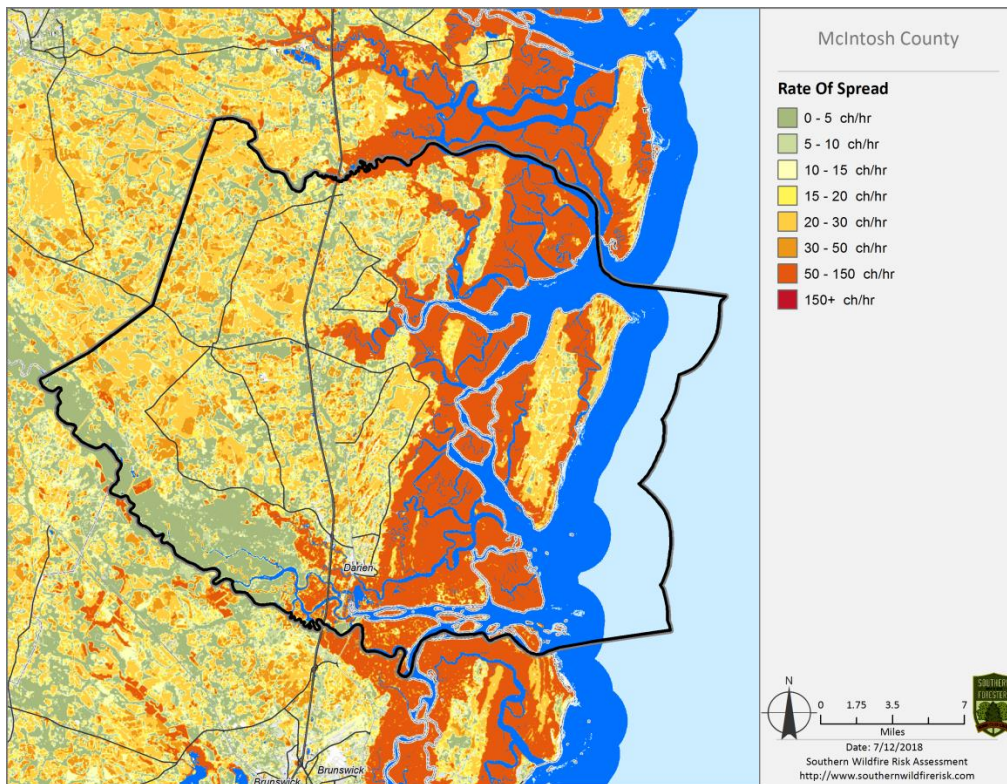


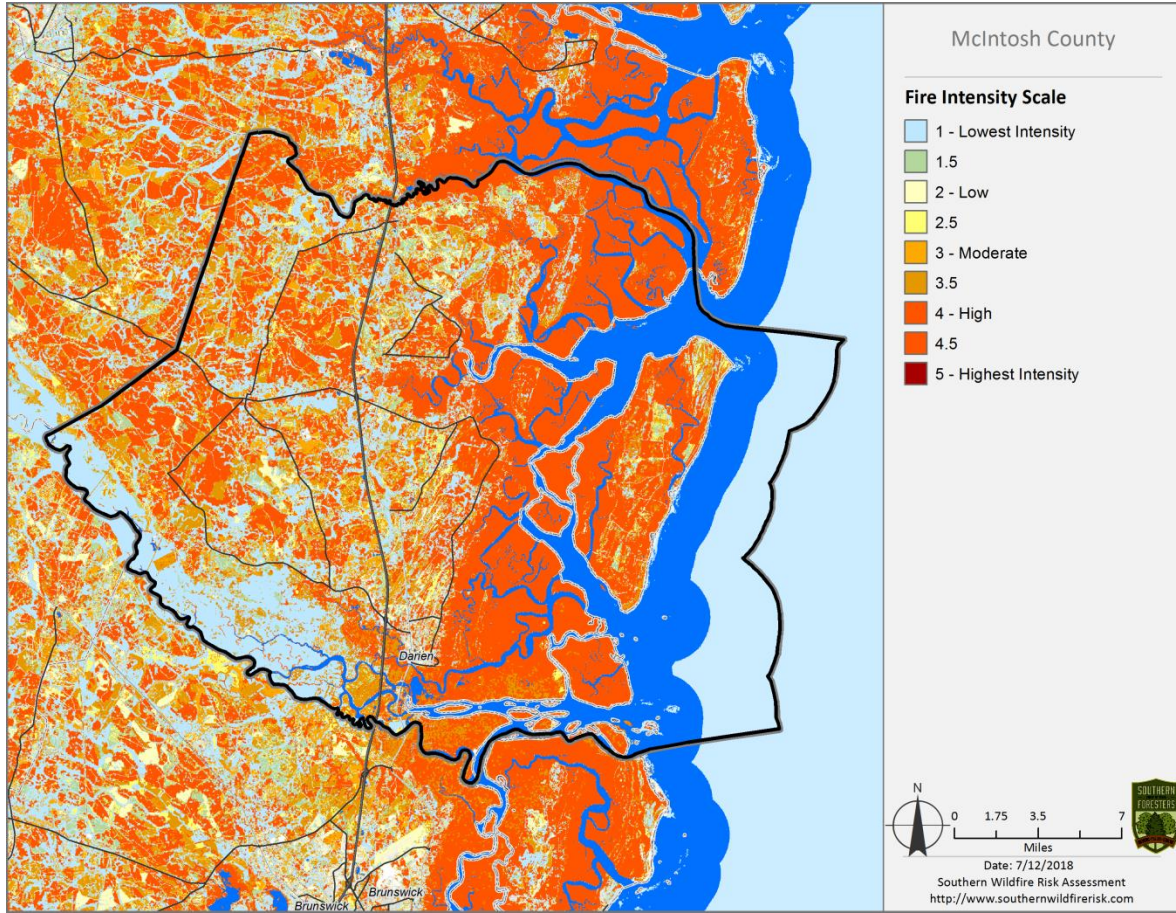
Above: Wildland Urban Interface (WUI) Risk map Below: WUI Risk Index - Acres



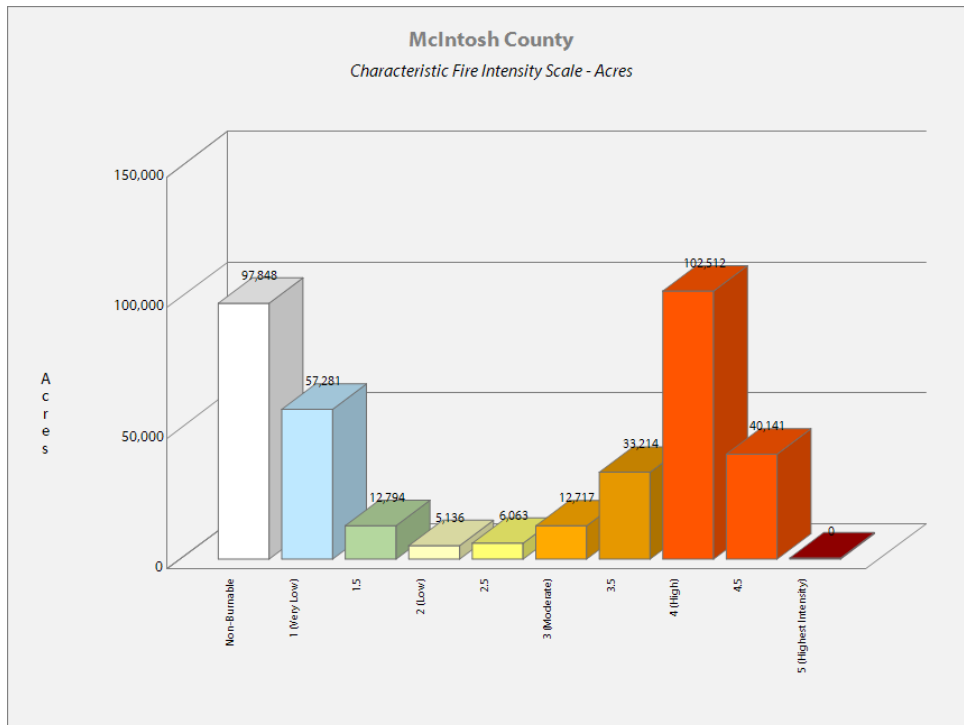


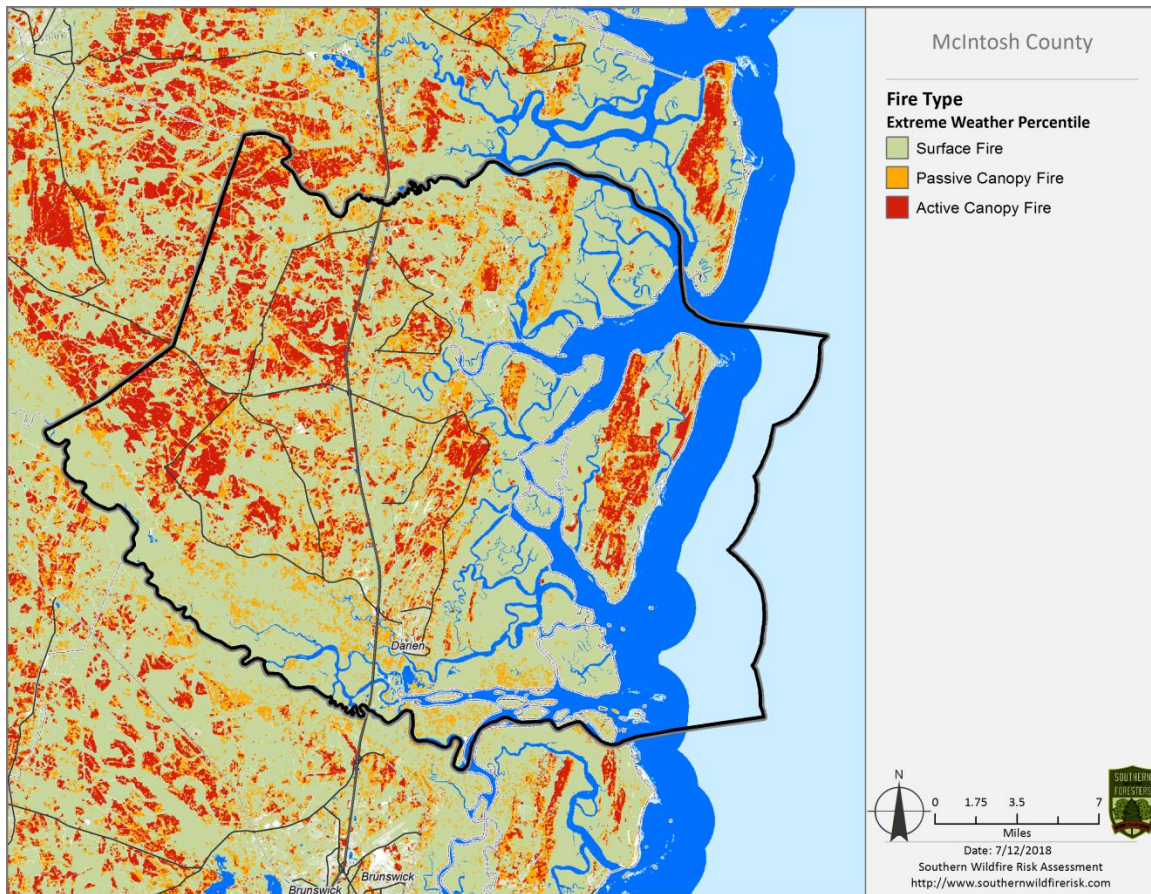
Above: Burn Probability map Below: Rate of Spread map





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





Above: 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. PRIORITIZED MITIGATION RECOMMENDATIONS

Executive Summary

As Southeast 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. McIntosh 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 30 years, much has been learned about how and why homes burn during wildland fire emergencies. Perhaps most importantly, case histories and research have shown that even in the most severe circumstances, wildland fire disasters can be avoided. Homes can be designed, built and maintained to withstand a wildfire even in the absence of fire services on the scene. The National Firewise Communities program is a national awareness initiative to help people understand that they don't have to be victims in a wildfire emergency. The National Fire Protection Association has produced two standards for reference: NFPA 1144 Standard for Reducing Structure Ignition Hazards from Wildland Fire. 2008 Edition and NFPA 1141 Standard for Fire Protection Infrastructure for Land Development in Suburban and Rural Areas.

When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

In 2012 the International Code Council developed the International Wildland Urban Interface Code (IWUIC). This code was adopted by the Georgia Legislature in 2014 for Counties to use when developing building and zoning codes in the Wildland Urban Interface (WUI) to help reduce risk and minimize structure loss.

The following recommendations were developed by the McIntosh County CWPP Core team as a result of surveying and assessing fuels and structures and by conducting meetings and interviews with county and city officials. A priority order was determined based on which mitigation projects would best reduce the hazard of wildfire in the assessment area.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

Primary Protection for Community and Its Essential Infrastructure		
Treatment Area	Treatment Types	Treatment Method(s)
1. All Structures	Create minimum of 30-foot of defensible space**	Trim shrubs and vines to 30 feet from structures, trim overhanging limbs, replace flammable plants near homes with less flammable varieties, remove vegetation around chimneys.
2. Applicable Structures	Reduce structural ignitability**	Clean flammable vegetative material from roofs and gutters, store firewood appropriately, install skirting around raised structures, store water hoses for ready access, and replace pine straw and mulch around plantings with less flammable landscaping materials.
3. Community Clean-up Day National Wildfire Preparedness Day	Cutting, mowing, pruning**	Cut, prune, and mow vegetation in shared community spaces.
4. Driveway Access	Culvert installation	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. 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 Subdivision and development ordinances for public safety concerns. Adopt uniform addressing ordinance.

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 WUI mitigation.
2. Public Lands	Reduce hazardous fuels	Work with GA DNR and USFWS on fuel reduction on public lands adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
Proposed Improved Community Wildland Fire Response Priorities		
1. Water Sources	Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants. Locate additional dry hydrants as needed.
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear. Investigate need for “brush” trucks.
3. Fire Station Coverage	New Station	Work towards establishing new station in Ardick Rd/Hwy 251 area.
4. Substandard Bridges	Improve Bridges	Survey bridge access to coastal communities.
4. Water Sources	Drafting equipment	Investigate need for additional drafting pumps.
5. Remote Island Communities	Equipment	Work towards locating pumper and drafting equipment on Hird, Barbour and Sapelo Islands.
6. 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 McIntosh 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.</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, McIntosh County Fire Departments and community residents. Set up information table with educational materials and refreshments. Initiate the event with a morning briefing by GFC Firewise coordinator and local fire officials detailing plans for the day and safety precautions. Activities to include the following:</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 McIntosh County Fire Departments discussing and commending the work accomplished.</p>
<p>4. Informational Packets</p>
<p>Develop and distribute informational packets to be distributed by realtors 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 brochures • Ready Set Go materials • Fire Adapted Community information

5. Wildfire Protection Display

Create and exhibit a display for the general public at the Blessing of the Fleet. Display can be independent or combined with the Georgia Forestry Commission display.

6. Media

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



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



Forestry mastication equipment and brush cutters, such as pictured above, can be very effective in reducing understory fuels in areas where prescribed fire may not be an option. Private contractors can provide this service. This practice is effective where homes border on the wildland urban interface.

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	
McIntosh County WUI Fire Council	Create this informal team or council comprised of residents, GFC and DNR officials, McIntosh County Fire Department officials, US Fish and Wildlife official, a representative from the city and county government and the EMA Director for McIntosh 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. 5 Work with communities for recognition as a National Firewise Community.
Target Audiences	<ol style="list-style-type: none"> 1 Homeowners 2 Forest Landowners and users 3 Civic Groups 4 School Groups
Methods	<ol style="list-style-type: none"> 1 News Releases. Radio, TV, Cable 2 Personal Contacts & Social Media 3 Key messages and prevention tips 4 Visuals such as signs, brochures and posters

Spring Clean-up Day (National Wildfire Preparedness Day – annually the 1 st Saturday in May)	
Event Coordinator	Coordinate day’s events and schedule, catering for cookout, guest attendance, and moderate activities the day of the event.
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.
Publicity Coordinator	Advertise event through neighborhood newsletter, letters to officials, and public service announcements (PSAs) for local media outlets. Publicize post-event through local paper and radio PSAs.
Work Supervisor	Develop volunteer labor force of community residents; develop labor/advisory force from Georgia Forestry Commission, McIntosh County Fire Departments, and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with local city and county officials, develop safety protocol. Supervise work and monitor activities for safety the day of the event.

Funding Needs

The following funding is needed to implement the action plan:

Project	Estimated Cost	Potential Funding Source(s)
1. Create a minimum of 30 feet of defensible space around structures	Varies	Residents will supply labor and fund required work on their own properties.
2. Reduce structural ignitability by cleaning flammable vegetation from roofs and gutters; appropriately storing firewood, installing skirting around raised structures, storing water hoses for ready access, replacing pine needles and mulch around plantings with less flammable material.	Varies	Residents will supply labor and fund required work on their own properties.
3. Amend codes and ordinances to provide better driveway access, increased visibility of house numbers, properly stored firewood, minimum defensible space brush clearance, required Class A roofing materials and skirting around raised structures, planned maintenance of community lots.	No Cost	To be adopted by city and county government.
4. Spring Cleanup Day	Varies	Community Business Donations.
5. Fuel Reduction Activities	\$35 / acre	FEMA & USFS Grants

Assessment Strategy

To accurately assess progress and effectiveness for the action plan, the McIntosh 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 McIntosh 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 McIntosh 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.wildfireprepdays.org

Appended Documents:

McIntosh County Southern Wildfire Risk Assessment Summary Report (SWRA)

McIntosh County Wildfire assessment scoresheets

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



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The Georgia Forestry Commission provides leadership, service, and education in the protection and conservation of Georgia's forest resources.

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