



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

Community Wildfire Protection Plan

An Action Plan for Wildfire Mitigation and Conservation of Natural Resources

Morgan County

January 2020



Aerial view of Mallard Ridge Road Wildland Urban Interface area

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Morgan County Southern Wildfire Risk Assessment Summary Report (SWRA)

I. OBJECTIVES AND COMMUNITY COLLABORATION

A Community Wildfire Protection Plan (CWPP) provides a community with a road map to reduce its risk from wildfire. A CWPP is designed through collaboration between state and local fire agencies, homeowners and landowners, and other interested parties such as city councils, utilities, home owner associations, environmental organizations, and other local stakeholders.

The plan identifies strategic sites and methods for risk reduction and structural protection projects across jurisdictional boundaries.

Comprehensive plans provide long-term guidance for growth, reflecting a community's values and future expectations. The plan implements the community's values and serves to protect natural and community resources and public safety. Planning also enables communities to address their development patterns in the Wildland Urban Interface and determine how they can reduce their risk through alternative development patterns. The formal legal standing of the plan and its central role in local government decision making underscores the opportunity to use this planning process as an effective means for reducing wildfire risk.

The mission of the following plan is to set clear priorities for the implementation of wildfire mitigation in Morgan County. The plan includes prioritized recommendations for the appropriate types and methods of fuel reduction and structure ignitability reduction that will help 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 about 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.
- Develop and implement effective community ordinances and codes.

This plan should become a working document that is shared by local, state, and federal agencies that will use it to accomplish common goals. 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.

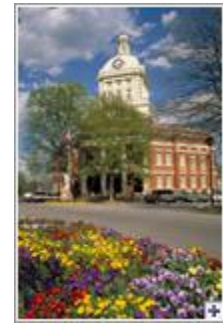
II. COUNTY BACKGROUND & WILDFIRE HISTORY

Morgan County



Morgan County, in central Georgia, was created from Baldwin County by an act of the state legislature in 1807. It was named in honor of Revolutionary War (1775-83) general Daniel Morgan. In 1809 the town of Madison was incorporated and named the county seat. Until 1818, when Walton County was created, Morgan County was a part of the western frontier of Georgia—all lands to the west of it being Creek Indian territory. This situation was forcibly brought home in 1813, when Creeks attacked settlers in the western portion of the county, in what is now Hard Labor Creek State Park, northwest of the town of Rutledge. Some ten or eleven people were killed in the attack, which may have been made in conjunction with the Creek alliance with the British in the War of 1812 (1812-15).

The 1820 census lists "13,520 souls" for Morgan County, of whom 44.7 percent were slaves. The next few decades saw a general decline in the white population, while the slave population increased with the coming of large cotton plantations. By 1890 the county's population was up to 16,041, but the cotton boll weevil crisis of the 1910s and 1920s, and the Great Depression of the 1930s, led to a drastic decrease. The 2000 census shows Morgan County's population to be 15,457—still less than that of 1890.



Morgan County Courthouse

By 1841 the Georgia Railroad had reached Madison and, soon after that, Rutledge, bringing businessmen and early tourists to the county, with hotels and boardinghouses springing up to accommodate them. Before the Civil War (1861-65) two colleges for women were founded in Madison: Georgia Female College, incorporated in 1849 as the Madison Collegiate Institute, and Madison Female College, established in 1850. These colleges, which no longer exist, along with private academies, placed Morgan County among the educational centers of Georgia at that time. The early 1870s marked the beginning of public school education in the county and the decline of private academies.

Near the end of the Civil War, the Union troops of General William T. Sherman's army swept through the county on the March to the Sea, burning railway depots, cotton gins, and warehouses, and wrecking the railroads for miles. Sherman's men set afire an old cotton mill that had once been a prison for Union officers, though it did not burn completely. Most houses were spared, though a few of them were burned, including the plantation house of the anti-secessionist Joshua Hill, former senator from Georgia.



New Morgan Hotel

By the late 1880s another railroad, the Macon and Northern (originally the Covington and Macon), came to Morgan County. The towns of Rutledge, Godfrey, Apalachee, and Buckhead, as well as Madison, were serviced by these two railroads. A third railroad, now defunct, served the town of Bostwick. In the post-Civil War era cotton remained the county's principal product, though on a smaller scale. This continued into the twentieth

century, until the devastation caused by the boll weevil brought another agricultural endeavor: dairying. From the 1930s through the 1960s Morgan County became one of the principal milk producers of Georgia. In the 1970s and 1980s timber production also became an important income source for Morgan County landowners.

The coming of Interstate Highway 20 through the county in the early 1970s accelerated the growth of industry and tourism in the area. Lake Oconee, a Georgia Power Company facility, also has been a significant catalyst for growth in the county. The county's economy is becoming more diverse: cotton farming is making a comeback, dairying is still going strong, timber production continues, and tourism is booming. One of the largest employers is Georgia-Pacific.

Morgan County still maintains its rural character, though it is within an hour of Atlanta on Interstate 20 and thirty minutes from Athens and the University of Georgia. Well-known residents of the county include historian Albert B. Slaye and self-taught artist George Andrews, the father of artist Benny Andrews and writer Raymond Andrews.



Hay Rolls, Morgan County

The above information is courtesy of the *New Georgia Encyclopedia*.

Wildfire History

Wildland Fire is not a serious problem in Morgan County when contrasted to other counties in Georgia. This is attributed to rapid response and excellent cooperation between local County response fire stations and the Georgia Forestry Commission. The table on the following page outlines fire numbers, acreages, and causes for the past complete fiscal year (2019) which ended in June of 2019. This year was a record breaking year for low wildfire occurrence in Morgan County and throughout much of the State due to above average precipitation during the year.

Wildfire Protection Plan: An Action Plan for Wildfire Mitigation

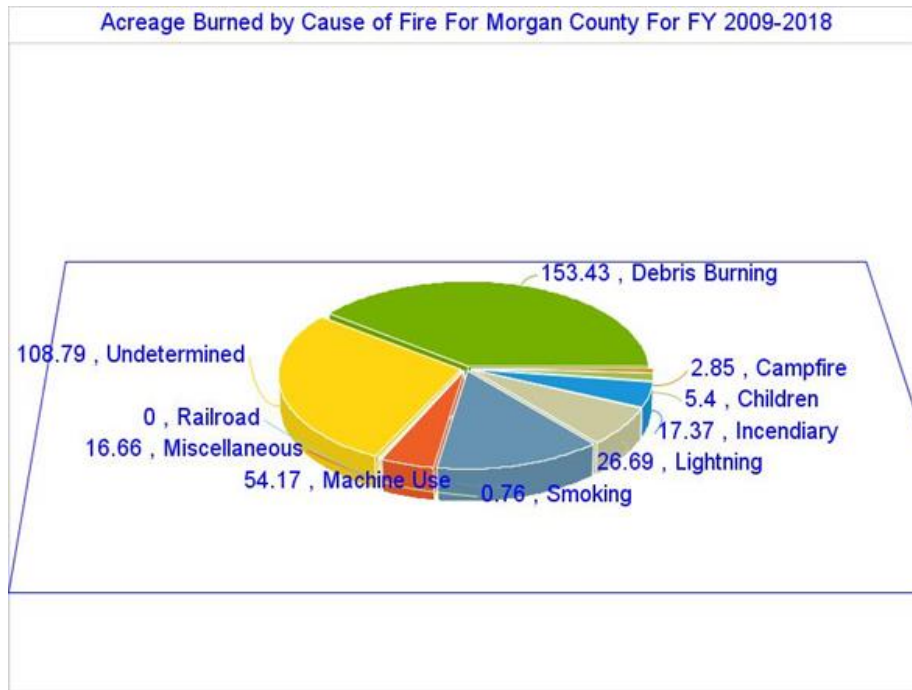
Wildfire activity reported by the Georgia Forestry Commission during the last complete fiscal year, July 1, 2018 – June 30, 2019.

County = Morgan	Cause	Fires	Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
Campfire	Campfire	0	0.00	0.20	0.08
Debris: Ag Fields, Pastures, Orchards, Etc	Debris: Ag Fields, Pastures, Orchards, Etc	0	0.00	0.20	0.21
Debris: Construction Land Clearing	Debris: Construction Land Clearing	0	0.00	0.40	0.87
Debris: Escaped Prescribed Burn	Debris: Escaped Prescribed Burn	2	15.07	1.60	13.42
Debris: Household Garbage	Debris: Household Garbage	1	0.50	0.80	1.59
Debris: Residential, Leafpiles, Yard, Etc	Debris: Residential, Leafpiles, Yard, Etc	0	0.00	1.00	2.58
Incendiary	Incendiary	0	0.00	0.40	0.38
Lightning	Lightning	0	0.00	0.60	2.04
Machine Use	Machine Use	0	0.00	0.40	1.68
Miscellaneous: Power lines/Electric fences	Miscellaneous: Power lines/Electric fences	1	1.75	1.20	0.80
Miscellaneous: Structure/Vehicle Fires	Miscellaneous: Structure/Vehicle Fires	0	0.00	0.20	0.09
Miscellaneous: Woodstove Ashes	Miscellaneous: Woodstove Ashes	0	0.00	0.20	0.05
Undetermined	Undetermined	0	0.00	1.40	21.67
Totals for County: Morgan Year: 2019		4	17.32	8.60	45.47

The tables below reflects the number of wildfire, acres burned, causes, and average sizes for the past ten complete fiscal years (2009 – 2018) Average size in Morgan County is contrasted to the average size for all counties in Georgia. Fire activity was increased statewide in FY 2011 and 2017, due to large wildfires in SE Georgia and statewide drought conditions. FY 2015, 2016, and 2019 were record setting years for low wildfire activity due to above average precipitation.

Acreage Burned /Number of Fires For Morgan County For FY 2009-2018				
Year	Acreage Burned	Number of Fires	Average Size	Statewide Average Size
2009	23.19	7	5.66	3.90
2010	38.32	7	7.01	3.93
2011	50.50	13	7.61	17.56
2012	8.96	11	6.74	5.08
2013	13.90	8	14.37	4.53
2014	41.24	7	11.94	5.02
2015	7.23	4	7.03	4.42
2016	10.67	4	3.90	6.29
2017	132.47	23	4.15	11.60
2018	59.64	8	8.61	5.25

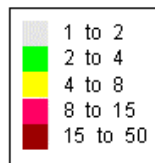
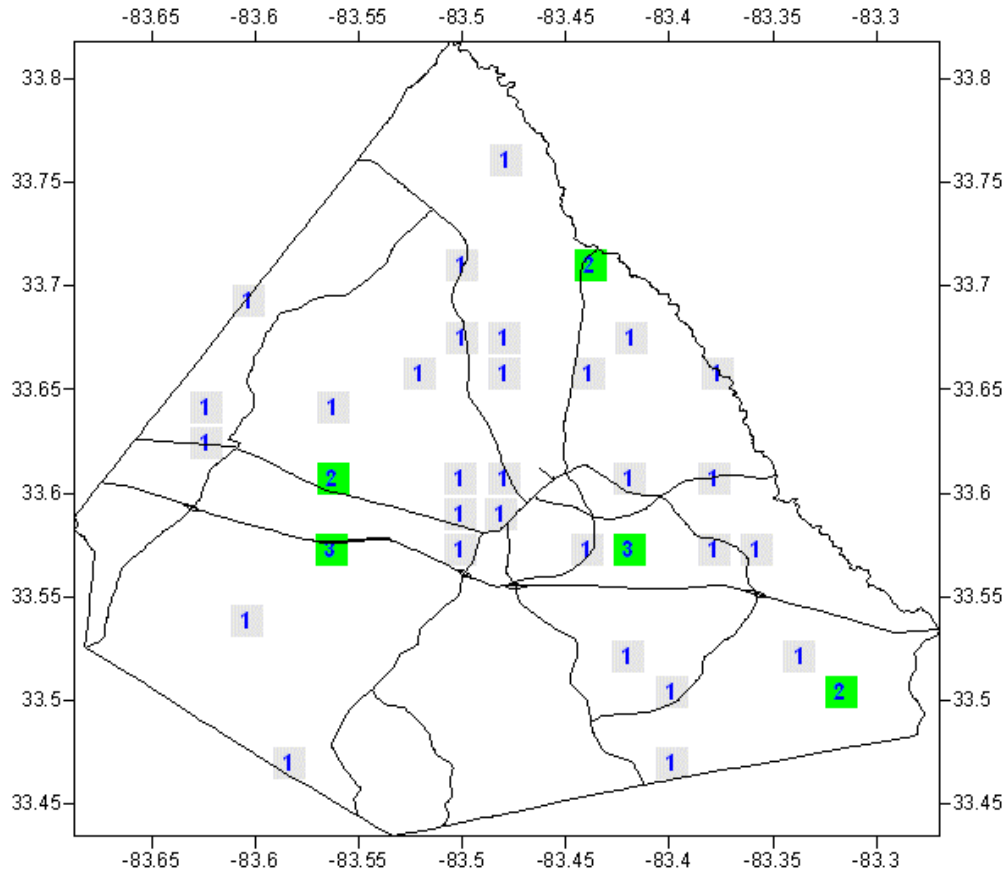
Fire Cause	Acreage Burned	Number of Fires
Campfire	2.85	3
Children	5.40	2
Debris Burning	153.43	33
Incendiary	17.37	8
Lightning	26.69	7
Machine Use	54.17	13
Miscellaneous	16.66	17
Railroad	0.00	0
Smoking	0.76	1
Undetermined	108.79	8
Total	386.12	92



The major cause in Morgan County during the last 10 years is Debris Burning, which accounted for 36% of the fires and 40% of the acreage burned during this time. The table and chart below indicate the debris burn sub-causes and acreage burned.

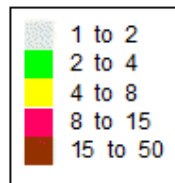
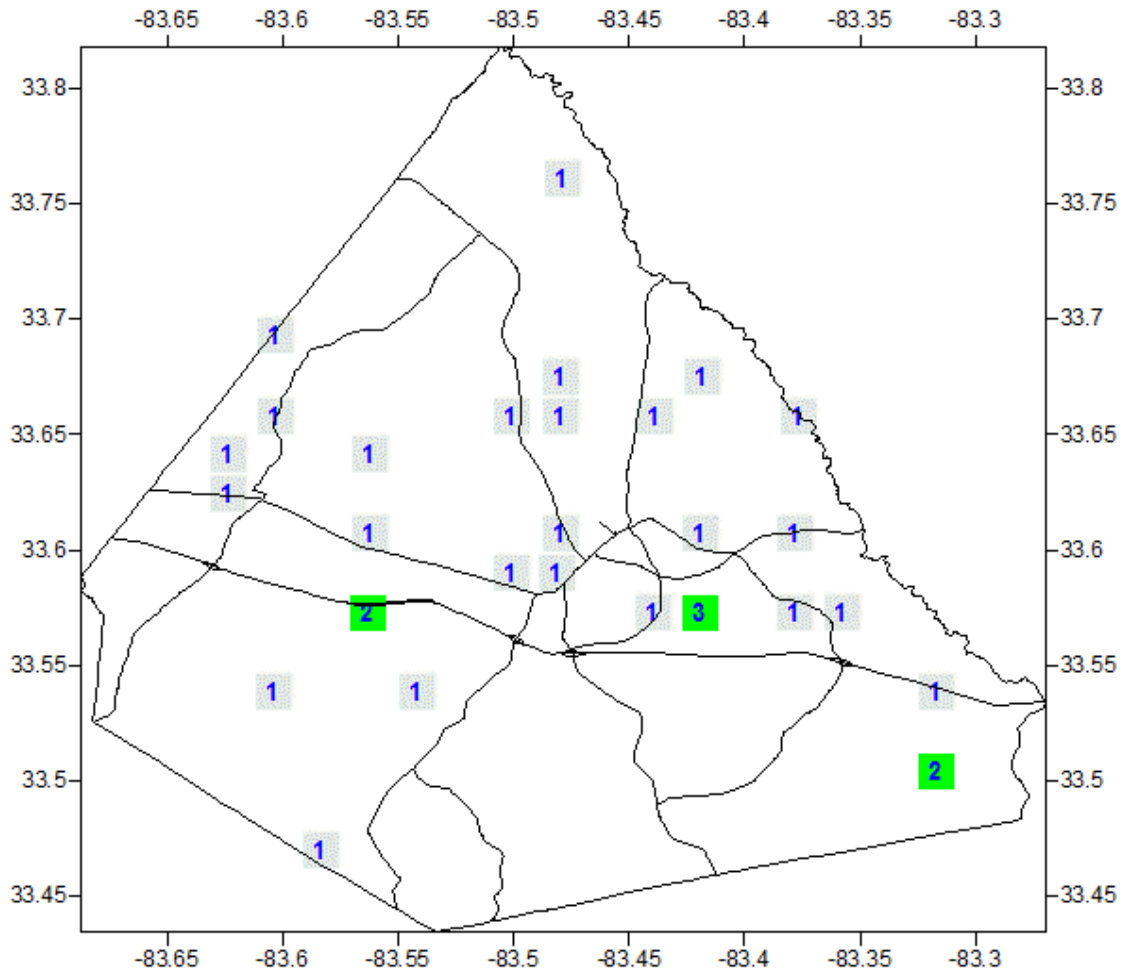
Debris Burn Sub-Cause for Morgan County For FY 2009-2018		
Debris Burning Sub-Cause	Acreage Burned	Number of Fires
Non-Categorized	0.00	0
Agriculture	43.25	3
Construction	5.97	4
Escaped Rx Fire	63.89	9
Household Garbage	9.66	4
Others	10.24	3
Residential	18.43	8
Site Prep	1.99	2
Total	153.43	33

Fire Occurrence Map for Morgan County for Fiscal Year 2011-2015

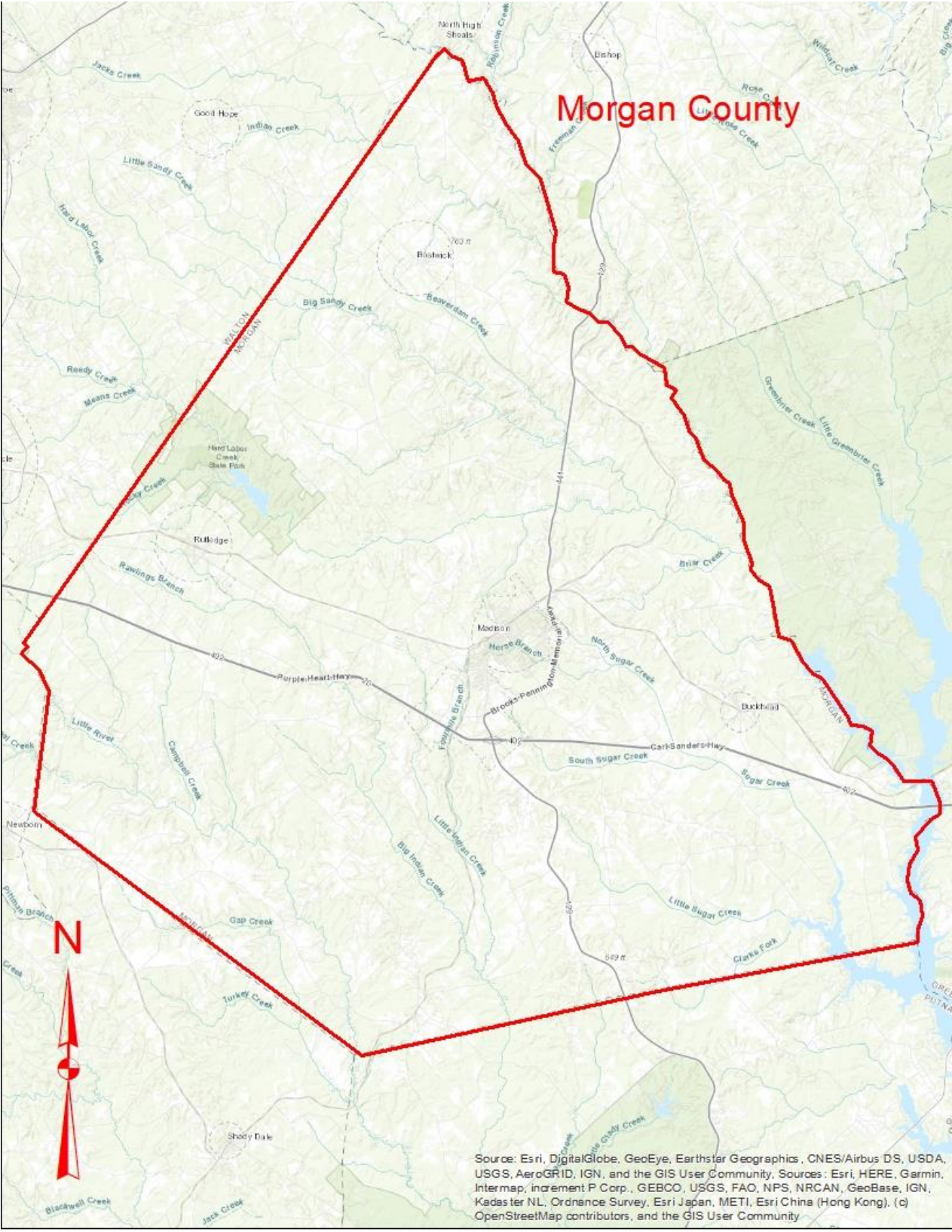


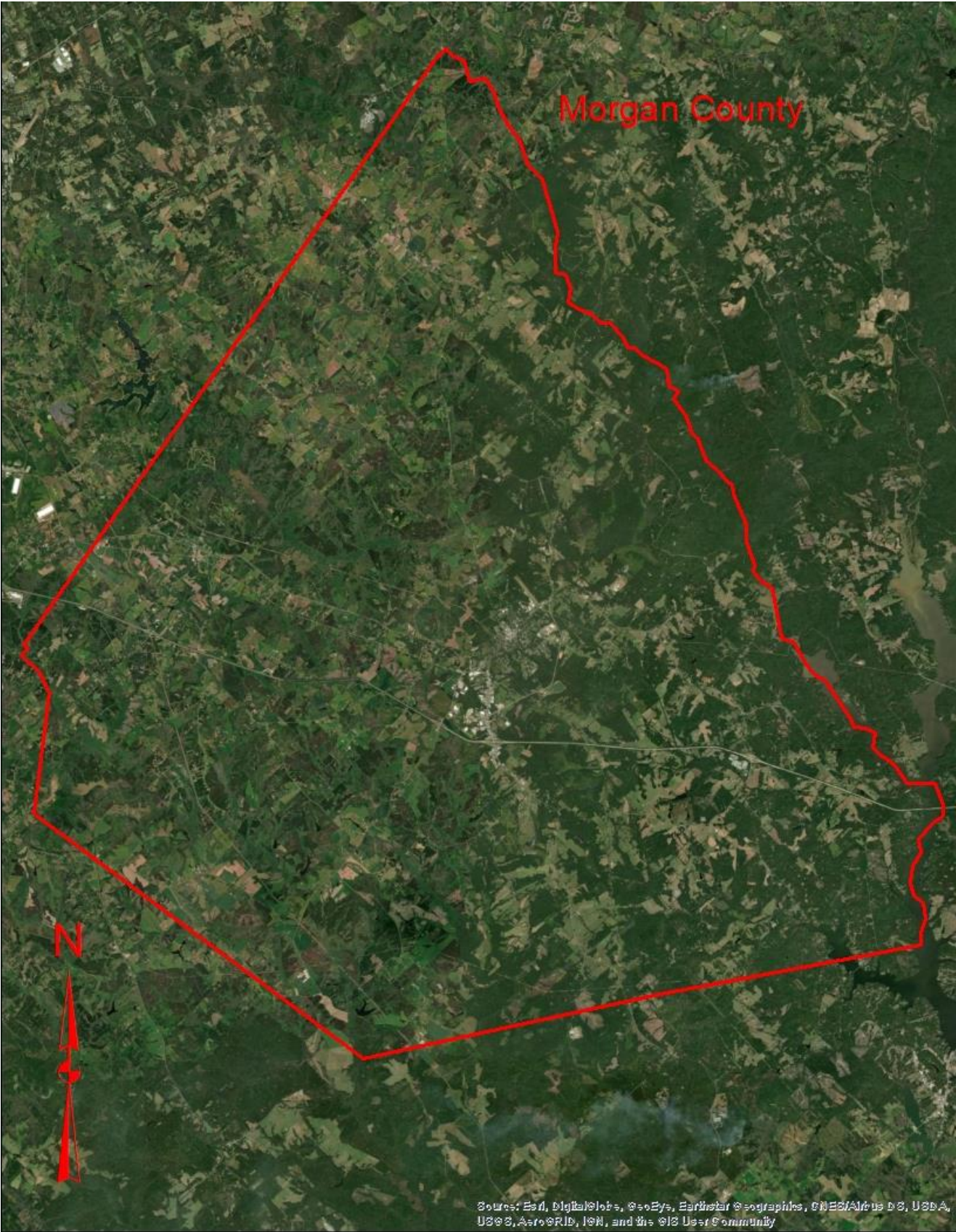
The map above indicates where wildfires occurred during the FY 2008 thru 2012 period. These are wildfires in which the Georgia Forestry Commission reported and responded to during this 5 year period. Morgan County Fire Department responded to and extinguished many smaller grass and brush fires using water resources. This rapid dispatch and response helped keep the size of wildfires to a minimum. Occurrence map on the following page is for FY 2012 thru 2016.

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

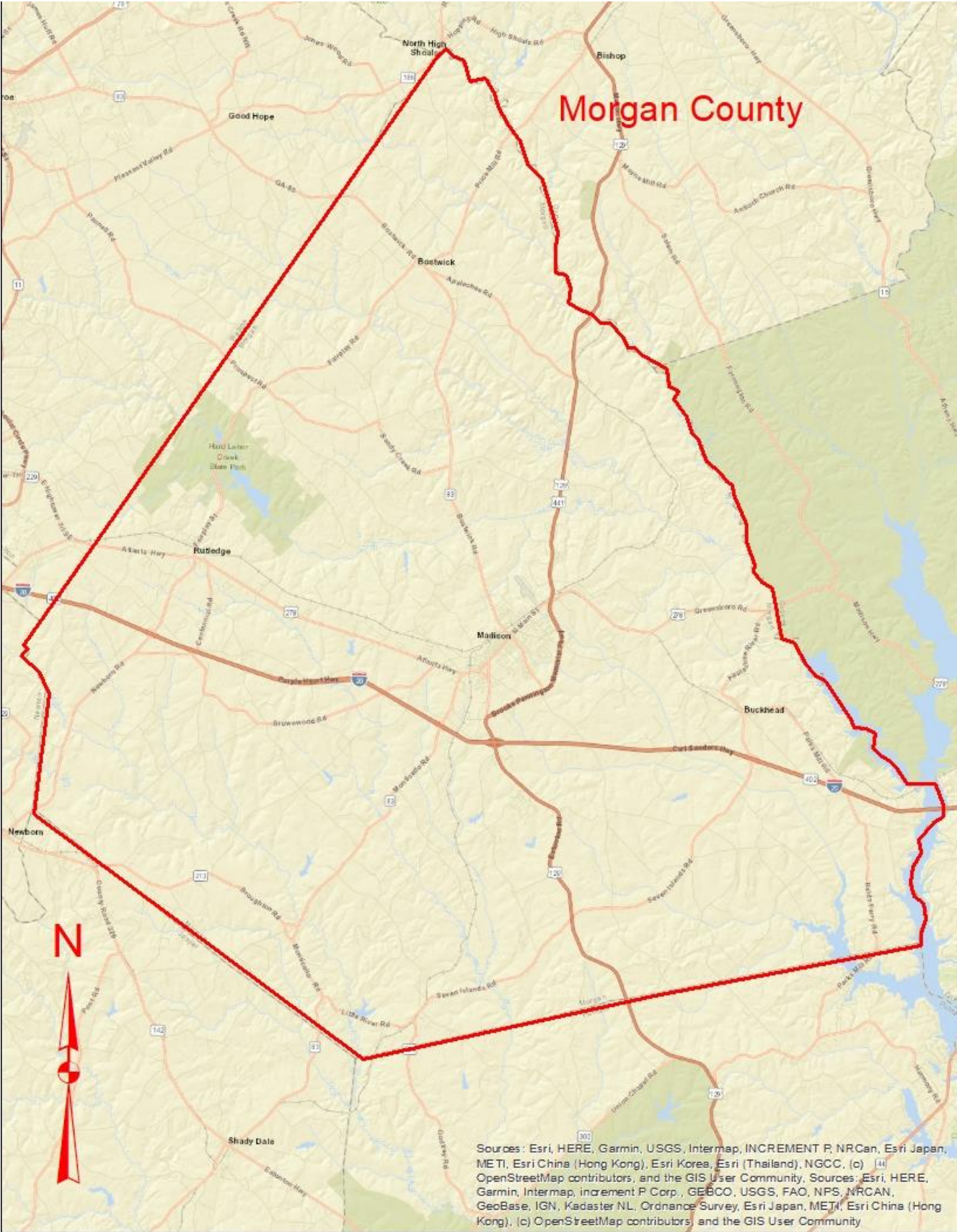


III. COUNTY BASE MAPS





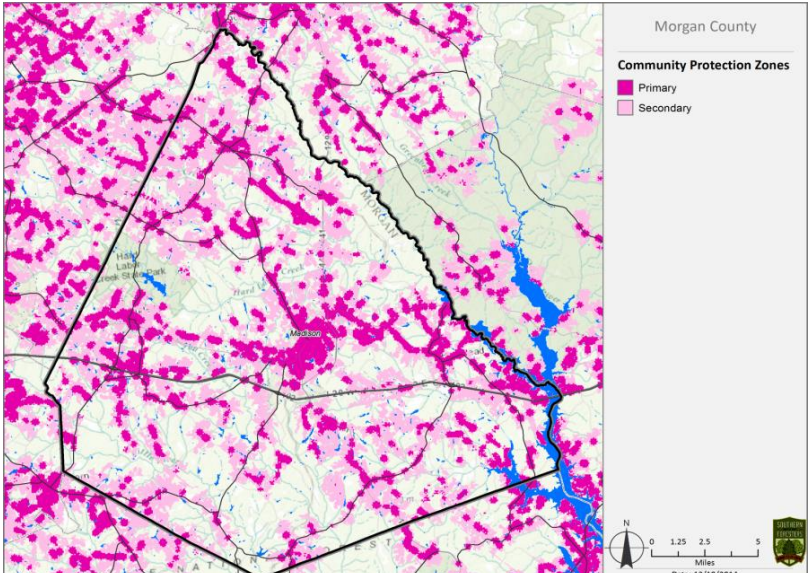
Wildfire Protection Plan: An Action Plan for Wildfire Mitigation



IV. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

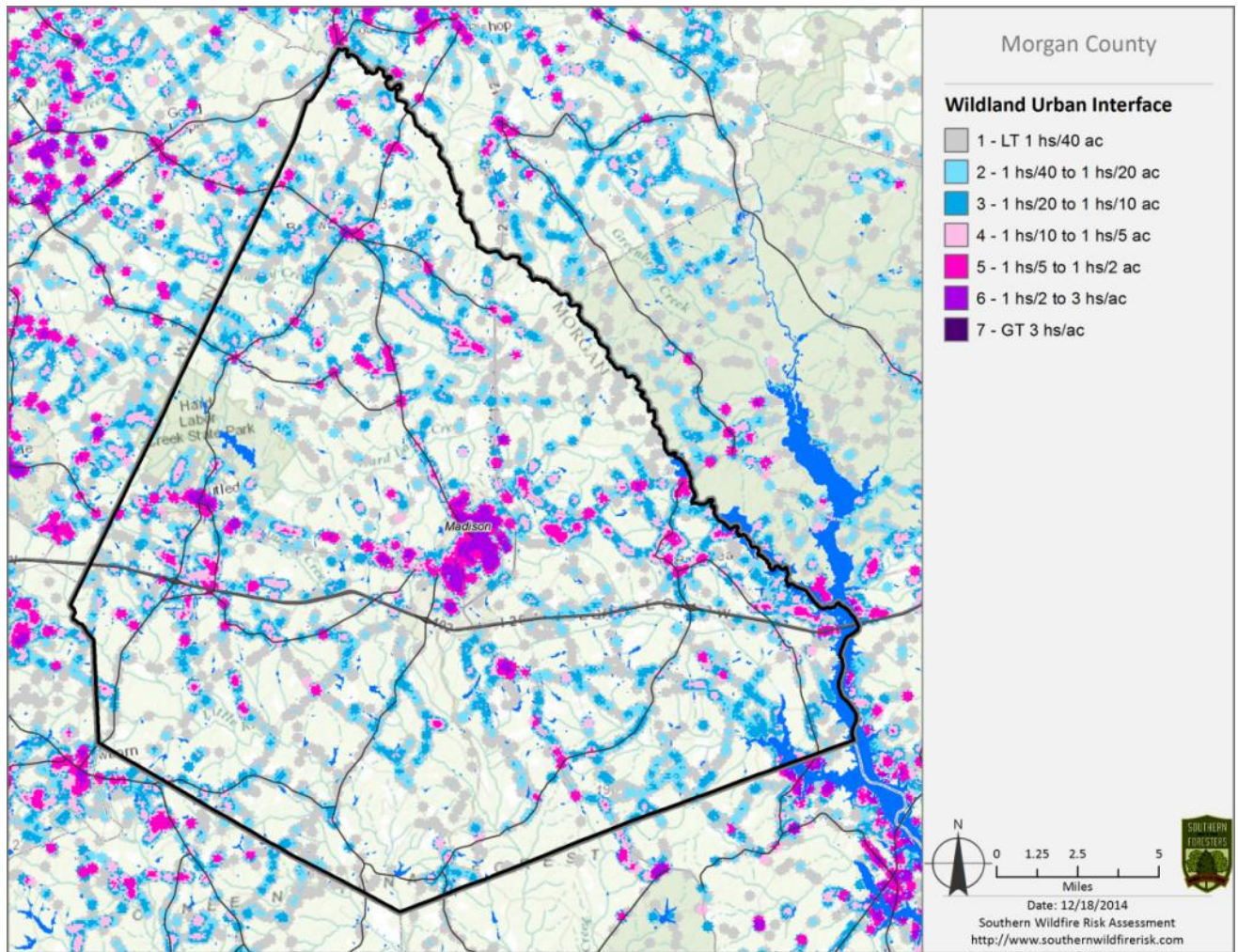
The Southern Wildfire Risk Assessment tool, developed by the Southern Group of State Foresters, was released to the public in July 2014. This tool allows users of the Professional Viewer application of the Southern Wildfire Risk Assessment (SWRA) web Portal (SouthWRAP) to define a specific project area 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 Morgan County. The SouthWRAP (SWRA) products included in this report are designed to provide the information needed to support the following key priorities:

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



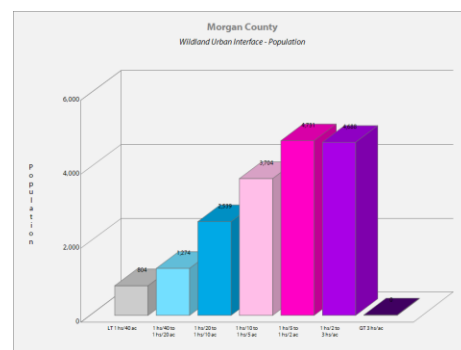
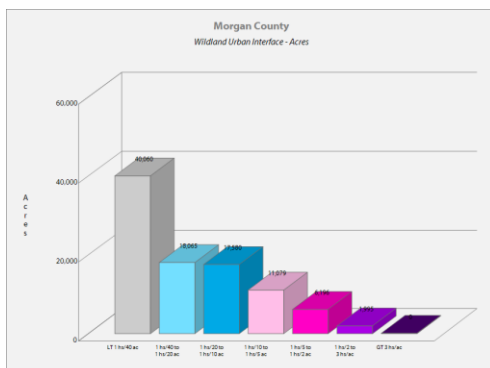
Community Protection Zones Map from the Morgan County SWRA Report

Wildfire Protection Plan: An Action Plan for Wildfire Mitigation

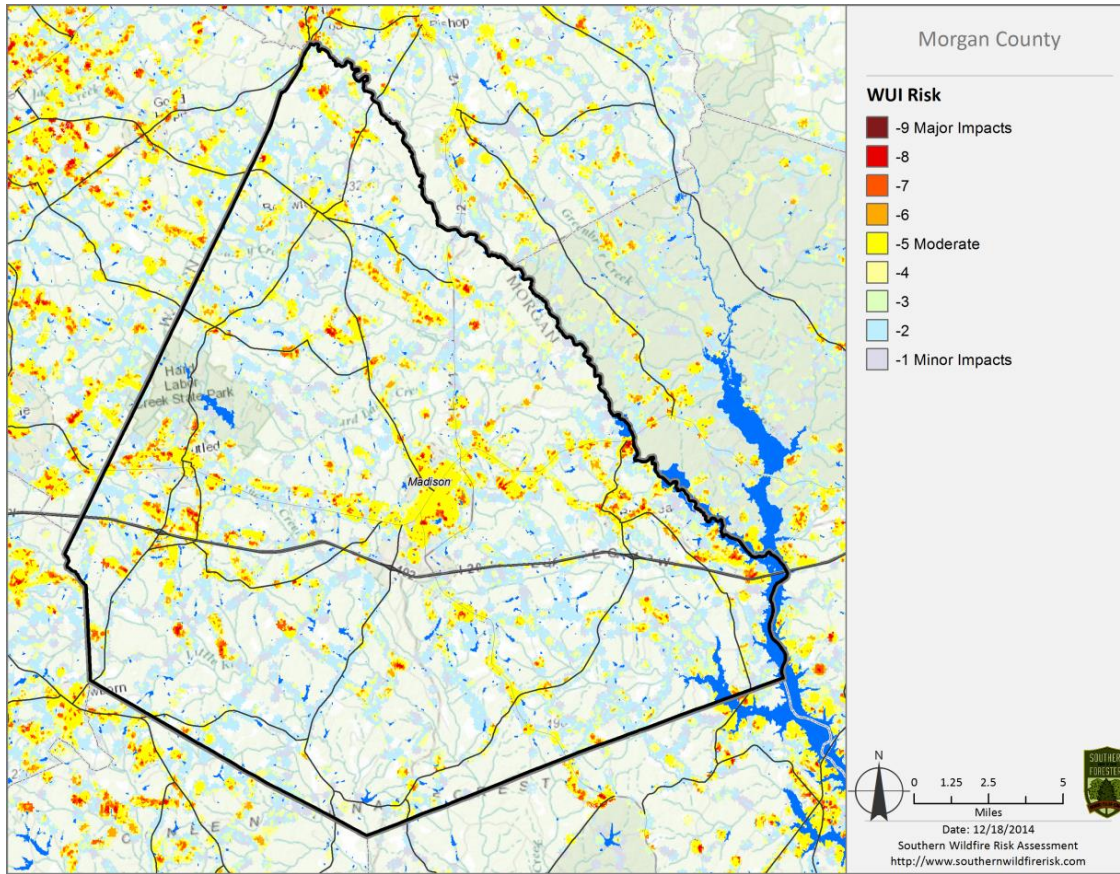


Above: Wildland Urban Interface (WUI) Map

Below: WUI Acres (left) and WUI Population (right)

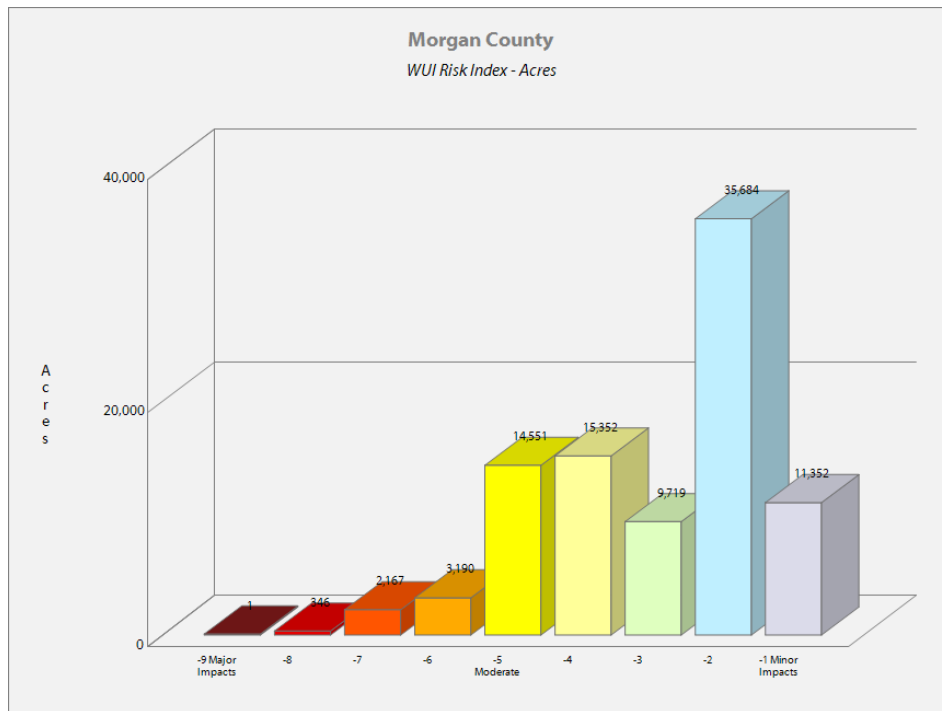


Wildfire Protection Plan: An Action Plan for Wildfire Mitigation

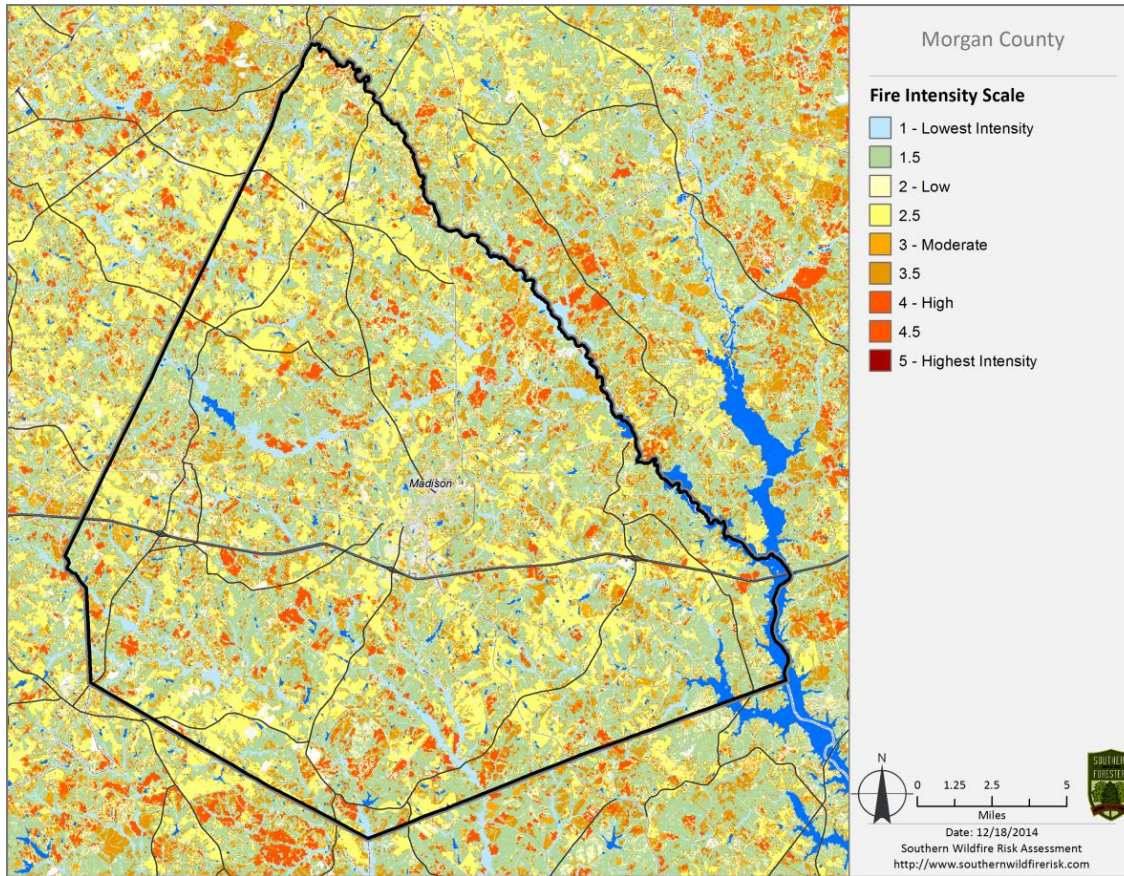


Above: Wildland Urban Interface (WUI) Risk map

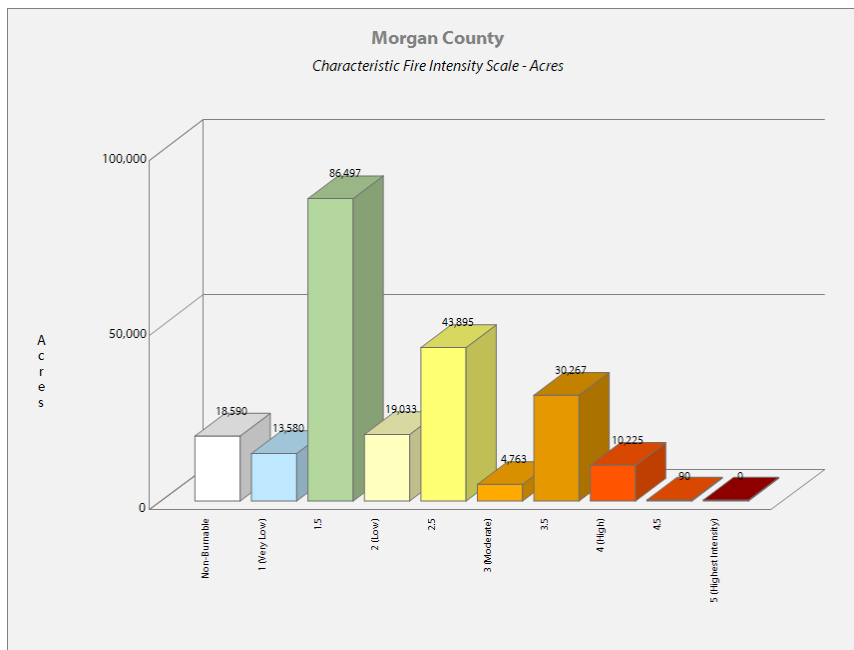
Below: WUI Risk Acres



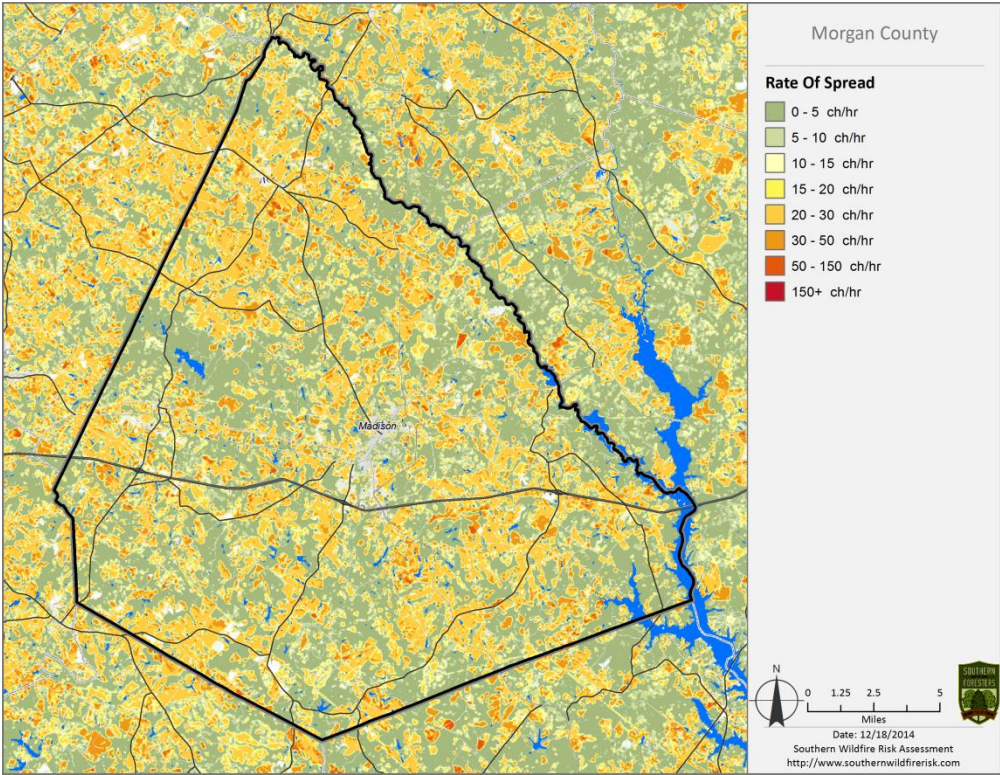
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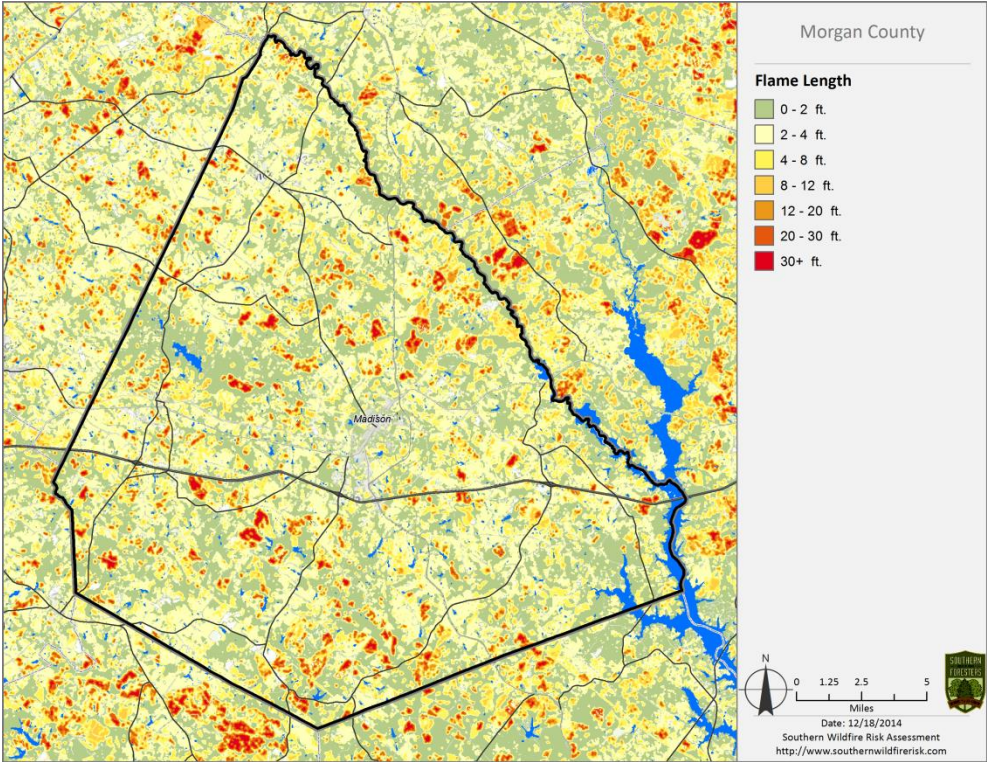
Above: Fire Intensity Scale Map Below: Fire intensity Scale Acres

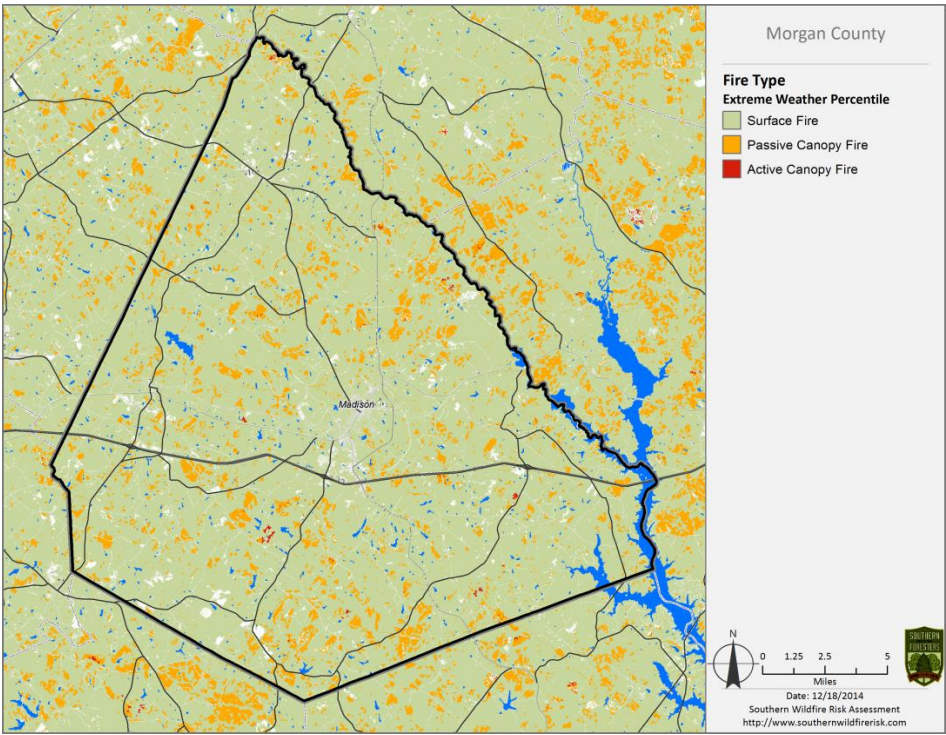


Wildfire Protection Plan: An Action Plan for Wildfire Mitigation



Above: Rate of Spread map Below: Flame Length map





Above: Fire Type Map --There are two primary fire types – surface fire and canopy fire. Canopy fire can be further subdivided into passive canopy fire and active canopy fire. A short description of each of these is provided below.

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).



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.

Morgan County is typical of a county that is undergoing a gradual transition from an isolated rural county to one that is more developed. This is due in large part to the influence of Interstate Hwy 20. It contains mixtures of both boundary and intermix interface.



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

Wildland Urban Interface Hazards

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

- **Hazardous Material**

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

- **Illicit Activities**

Marijuana plantations or drug production labs may be found in wildland urban interface areas. Extremely hazardous materials such as propane tanks and flammable/toxic chemicals may be encountered. These areas may also contain some type of booby trap.

- **Propane Tanks**
Both large (household size) and small (gas grill size) liquefied propane gas (LPG) tanks can present hazards to firefighters, including explosion.
- **Utility Lines**
Utility lines may be located above and below ground and may be cut or damaged by tools or equipment. Don't spray water on utility lines or boxes.
- **Septic Tanks and Fields**
Below-ground structures may not be readily apparent and may not support the weight of engines or other apparatus.
- **New Construction Materials**
Many new construction materials have comparatively low melting points and may "off-gas" extremely hazardous vapors. Plastic decking materials that resemble wood are becoming more common and may begin softening and losing structure strength at 180 degrees Fahrenheit though they normally do not sustain combustion once direct flame is removed. However, if they continue to burn they exhibit the characteristics of flammable liquids.
- **Pets and Livestock**
Pets and livestock may be left when residents evacuate and will likely be highly stressed, making them more inclined to bite and kick. Firefighters should not put themselves at risk to rescue pets or livestock.
- **Evacuation occurring**
Firefighters may be taking structural protection actions while evacuations of residents are occurring. Be very cautious of people driving erratically. Distraught residents may refuse to leave their property, and firefighters may need to disengage from fighting fire to contact law enforcement officers for assistance. In most jurisdictions firefighters do not have the authority to force evacuations. Firefighters should not put themselves at risk trying to protect someone who will not evacuate!
- **Limited Access**
Narrow one-lane roads with no turn-around room, inadequate or poorly maintained bridges and culverts are frequently found in wildland urban interface areas. Access should be sized-up and an evacuation plan for all emergency personnel should be developed.
- **Abandoned wells**
Found around old home sites, open wells can be a hazard for firefighters, especially while working a wildfire during the night.

Community Risk Assessments

Personnel of the Morgan Walton office of the Georgia Forestry Commission conducted assessments of selected communities during late 2010 and early 2011. In all, 6 areas were assessed utilizing the Woodland Community Wildfire Hazard Assessment form 140. This form calculates community risk from wildland fire based on numerical scores in four hazard rating areas Subdivision design, Site hazard, Building Construction, and Additional factors. Communities are classified as being at extreme, high, moderate, or low risk. The following table contains information for the communities that were assessed. There was one community rated as being at extreme risk. This community is located on Mallard Ridge Road in the Northeast part of the County. It is located between two areas of increased historical fire occurrence which adds to its degree of risk. Three communities were rated as being at moderate risk and two were classified as low risk. Opportunities for community assessment still exist in Morgan County. The original assessment forms are retained by the Morgan Walton Unit of the Georgia Forestry Commission.

Community Name or Location	Latitude	Longitude	Homes	score	Risk Category	Jurisdiction
Mallard Ridge	33 41' 18"	83 27' 49"	68	143	Extreme	Bostwick
Riverwalk	33 46' 57"	83 28' 38"	32	107	Moderate	Bostwick
Appalachee Woods Trail	33 34' 41"	83 19' 41"	100 +/-	102	Moderate	
Keencheefoonee	33 34' 17"	83 37' 43"	23	87	Moderate	
Flat Rock	33 41' 09"	83 30' 06"	18	75	Low	
Centennial	33 35' 43"	83 36' 29"	37	74	Low	

In 2013 Hard Labor Creek State Park was designated a National Firewise Community. The initial community risk assessment, completed by the Georgia Forestry Commission, rated the Park at 127 (moderate to high). All of the parks structures were assessed for risk during the certification process. Remote cabins, constructed by the CCC in the 1930's, in Camp Daniel Morgan and Camp Rutledge were rated at an extreme risk. The Park conducts annual prescribed burning and fuel reduction and modification practices to reduce wildfire risk.



Pictured above left: Friends of the Park volunteers removing fuel around cabin.
 Right: Park personnel conducting a prescribed burn

VI. MITIGATION RECOMMENDATIONS

Executive Summary

As Morgan County continues to see increased growth from the Atlanta region and other areas seeking less crowded and warmer climates, new development will occur more frequently on forest and wildland areas. Morgan 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 25 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. The code is endorsed by the National Fire Protection Association (NFPA) and in 2014 the code was adopted by the Georgia Legislature to be used by counties to help lower fire risk in the higher risk areas in the WUI.

The following recommendations were developed by the Morgan 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.

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

The following priorities were considered. *It was acknowledged that in light of incendiary fire being a common cause in the county, protocol for investigation needs to be standard practice.*

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

Proposed Community Hazard and Structural Ignitability Reduction Priorities

<u>Hazard</u>	<u>Mitigation</u>	<u>Method</u>
Incendiarism	Standardized investigation	Utilizing state and federal fire reports, investigations should be conducted on all fires determined to be caused by incendiarism on each jurisdiction. Coordination across agency and possibly geographic boundaries should be common practice.
Lack of defensible space	Improve defensible space around structures in communities at risk	All departments should examine structures in communities at risk in their response areas. Improvements to defensible space as referenced in Firewise guidelines should be conveyed to residents through media or direct contact.
Access problems for initial attack	Improve access problems	All County response agencies and the Georgia Forestry Commission should closely examine access in all communities identified to be at risk. When problems are identified corrective measures should be made.

Proposed Community Hazard and Structural Ignitability Reduction Priorities

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

Proposed Wildland Fuel Reduction or modification Priorities

Hazard	Mitigation	Method
Fuel Hazards near Communities at risk	Prescribed Burning and pre-suppression firebreaks	Determine Communities at risk where Prescribed burning would be appropriate to use. Seek cooperation from adjacent landowners. Find funding to cover cost of burning. Prioritize burn compartments and execute. Should burning be inappropriate or undesirable install permanent or semi-permanent firebreaks.
Fuel Hazard in public or shared spaces	Fuel Modification or reduction	Determine where hazards exist. Determine appropriate method for modification or reduction. Chipping, mulching, raking and piling, County pick-up, Organized Community Clean-up days could be beneficial. Organized burning could be conducted on these days supported by local fire department personnel.

Proposed Improvements to capabilities of Wildland Response Agencies Priorities

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

Proposed Public Education Priorities

Educational Priority	Responsible party	Method
Increase public awareness concerning Firewise principles and fire prevention through direct contact	County, State and municipal governments	Conduct Firewise meetings in each fire response jurisdiction. A door to door campaign in hazardous communities could be beneficial. Encourage and assist high risk communities in getting certified in the Firewise Community USA program.
Increase public awareness concerning Firewise principles and fire prevention through use of media	County, State, and municipal governments	Use PSA's in local newspapers and local radio stations. Utilize Firewise displays in local post offices and banks. Seek use of local EMC newsletter for Firewise message. Create poster sized notices for use in common public places (stores, post offices, etc. adjacent to high hazard areas advising residents about Firewise and how to reduce risk.

VI. Action Plan, Timetables, and Assessment Strategy

Steps to implement Community Hazard and Structural Ignitability Priorities

Hazard	Specific Action and Responsible Party
Incendiarism	The Georgia Forestry Commission and Morgan County Fire officials should conduct investigations on all fires determined to be caused by incendiarism on their jurisdictions. Cooperation and resource sharing (investigators) should be made standard practice. The use of local law enforcement should be standard practice especially when arson is identified as a problem in a specific area. The use of reward based incentives to locate arsonists should be considered.
Lack of Defensible Space	Using the risk summaries referenced in section 3, each department should conduct inspections of communities at risk in their jurisdiction or area of response for lack of defensible space. Findings will be conveyed to residents and treatment methods will be recommended in accordance with Firewise principles. This would probably be best accomplished by approaching homeowner associations or organizations. Ultimately, the message should reach individual homeowners in each community. Should local organizations not exist, the builder or developer could be contacted. Such contacts would also influence future projects or developments
Access problems	Using individual Communities at Risk maps for each station, the Georgia Forestry Commission and Morgan County Fire officials should visit all identified communities at risk for the purpose of locating and resolving access difficulties. This inspection should extend into the wildland adjacent to the communities at risk looking for hindrances and most effective approaches to suppression tactics
Structural Ignitability	Morgan County Fire officials should examine structures for structural ignitability concerns at the time when the communities at risk are inspected for lack of defensible space. Using firewise guidelines for reducing structural ignitability, (a checklist could be formulated and used), structures should be assessed and findings conveyed to residents. This could be through use of media or by direct contact with residents or homeowner associations.
Codes and Ordinances	Morgan County and municipal Fire Marshalls should closely examine all codes and ordinances for gaps and oversights which could cause problems in the wildland fire arena. Examples include proximity of propane tanks to structures, accumulations of debris, lack of proper identification pertaining to address or street names, set back distances from wildland fuels, road widths in new developments. Utilize the International Wildland Urban Interface Code (IWUIC).

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

Steps to implement Fuel Reduction or Modification Priorities

Hazard	Specific Action and Responsible Party
Hazardous Wildland Fuel Accumulations	The Georgia Forestry Commission will prioritize prescribed burning projects adjacent to Communities at risk where burning is determined to be appropriate. A suggested burning project to reduce fuel near the Riverwalk Community is depicted on a photograph contained in the appendix. It will be necessary to secure the cooperation of adjacent landowners on this and any burn project being considered.
Fuel Continuity between Wildland and Woodland Communities	In areas where the need exists and fuel reduction by burning is determined to be inappropriate, permanent or semi-permanent fuel breaks could be established. These breaks should be maintained annually prior to the arrival of prime burning times. Their locations should be mapped and made known to local, state, and federal response personnel. Residents of the Communities adjacent to these breaks should be advised of their purpose and their cooperation in protecting them should be gained. These breaks could be installed by the Georgia Forestry Commission.
Hazardous Fuel Accumulations in communities and hindrances to suppression	Using the risk summary in section 3, Fire departments could conduct community clean up days in communities at risk in their respective jurisdictions aimed at reducing hazardous fuels and hindrances to suppression in shared community space. Residents would be provided with guidance and access to disposal alternatives for materials removed.

Steps to implement improvements to wildland response capability

Improvement needed	Responsible Party and specific action
Improve training and qualification of Morgan County Wildland firefighters	The Morgan County Chief Ranger, Area Fire Management Officer (FMO) of Coosa East District of the Georgia Forestry Commission and the Morgan County Fire Chief should examine all training records for personnel under their supervision. All current or potential wildland personnel should be certified Georgia Basic Wildland Firefighters or higher in qualification. Additional training and qualification should be sought for personnel identified in the Morgan County Fire plan who are assigned specific Incident Command System (ICS) functions. Sources for available funds for training should be sought at State and Federal levels. Utilize Ready Set Go training.

<p>Improve or acquire wildland firefighting equipment</p>	<p>All stations for Morgan County Fire Departments should inventory their present equipment relating to their wildland capability. Funding sources should be investigated from available grants or other sources. Needs for job specific wildland responsibilities should be examined by the GFC Chief Ranger and the Morgan County Fire Chief.</p>
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Steps to educate or inform the Public regarding wildland fire prevention and responsibilities.

Opportunity	Responsible Party and Specific Action
<p>Improve Public Education through direct contact</p>	<p>Prior to the onset of fire season(s) Rangers of the Georgia Forestry Commission and Morgan County Fire personnel should conduct Firewise meetings in conjunction with normally scheduled fire department meetings. People living in or near extreme and high risk communities should be invited to these meetings by use of door to door campaigns or by mail outs. Notices regarding these meetings could be placed in local post offices or stores near communities at risk. A Firewise display should be acquired and utilized at this meeting. This display would be retained by the Morgan Walton County unit of the Georgia Forestry Commission and used for all Firewise meetings in the County. Local news media should be invited to these meetings. Goals for potential Firewise certified communities in Morgan County could be considered after these meetings are completed.</p>
<p>Improve Public Education through use of media</p>	<p>Prior to the onset of fire season(s), or during periods of particularly high fire danger, use of the media should be stepped up by personnel of the Georgia Forestry Commission. This should include use of all available media in the County. PSA's should be run weekly during periods of high to extreme fire danger. Signs or poster boards could be developed for display in public spaces near communities at risk advising residents that they live in areas that are susceptible to wildland fire and directing them to sources of information regarding wildland fire and their role in improving their own personal safety. Utilize social media to reach a diverse audience.</p>
<p>Improve Public Education through formal certification</p>	<p>Morgan County should seek and acquire Firewise certification for the Mallard Ridge Road Area. Should lack of interest prevent certification of this community an effort should be made with another community listed on the Communities at Risk list. Continue to assist Hard Labor Creek State Park in</p>

	maintaining Firewise certification and mitigation efforts. Continue efforts with the Bethany Woods Community and other communities to complete Firewise Community certification standards.
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Timetables for Actions

Steps to implement Community Hazard and Structural Ignitability Priorities

- Steps to standardize and coordinate investigation practices should begin as soon as possible between agencies involved.
- Steps to examine communities at risk for defensible space and structural ignitability should take place as manpower and scheduling permits.
- Pre-planning to examine access and suppression problems should take place at any time during the current burning season.
- Codes and Ordinances should be examined as soon as possible in order for the legal workings of changes to take place.

Steps to implement Fuel Reduction or Modification Priorities

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

Steps to implement improvements to wildland response capability

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

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

- Direct contact with residents in Communities at risk should take place as soon as possible during calendar year 2017
- The use of media should coincide with the above action.
- Certification of Firewise communities should follow the timetable associated with the action plan

Assessment of Actions

Reduction of Community hazard and structural ignitability

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

Steps to implement Fuel Reduction or Modification Priorities

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

Steps to implement improvements to wildland response capability

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

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

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

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.

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. Forest mastication and other fuel reduction practices are available from private contractors.

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, mitigation action plan, have an annual firewise education event, have firewise leadership, and complete a 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.

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.

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

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.*

International Wildland Urban Interface Code (IWUIC) – *Adopted in Georgia in 2014 and is a model code intended to be adopted and used supplemental to the adopted building and fire codes of a jurisdiction. Its objective is the minimum special regulations for the safeguarding of life and property from the intrusion of wildfire.*

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 of 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 for no cost 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:

Morgan County Southern Risk Assessment Summary Report (SWRA)

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



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