

GEORGIA FORESTRY  
COMMISSION



# Community Wildfire Protection Plan

## *An Action Plan for Wildfire Mitigation and Conservation of Natural Resources*

### Pierce County, Georgia

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



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Peirce County Southern Wildfire Risk Assessment Summary Report (SWRA)

Pierce County Wildfire Pre-suppression Plan

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

## **Preface**

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

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

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

This plan will:

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

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

## I. OBJECTIVES

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

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

## II. COMMUNITY COLLABORATION

The core team convened on October 27<sup>th</sup>, 2011 to assess risks and develop the Community Wildfire Protection Plan. The group is comprised of representatives from local government, local fire authorities, and the state agency responsible for forest management. Below are the groups included in the task force:

Pierce County EMA  
Pierce County Volunteer Fire Departments  
Pierce County Board of Commissioners  
City of Blackshear Fire Department  
City of Patterson Fire Department  
Georgia Forestry Commission

It was decided to conduct community assessments on the basis individual fire districts in the county. The chiefs of the fire departments in the county assessed their districts and reconvened on June 25<sup>th</sup>, 2012 for the purpose of completing the following:

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

### III. COMMUNITY & WILDFIRE HISTORY

#### Community History



Covering 343 square miles in southeast Georgia, Pierce County is the state's 120th county, created in 1857 from Appling and Ware counties. It was named for Franklin Pierce, the fourteenth president of the United States and an anti-abolitionist from New Hampshire. The land was originally held by Creek Indians who were expelled from their territory by General David Blackshear under orders from the U.S. government after the start of the War of 1812 (1812-15). (Blackshear also directed the building of a military road through the area in 1814-15.) Parts of Pierce County were later appropriated to form Bacon County, in 1914, and Brantley County, in 1920.

The county seat is Blackshear, which was named by the state legislature before the town was created. In 1858 those responsible for choosing a site decided to build the community around a depot constructed in 1857 by the Atlantic and Gulf Railroad. The first courthouse in Blackshear was built in 1858. When it burned down in 1875, a new courthouse was constructed. This building, replaced in 1902 by the current courthouse, is now a private residence. Remodeled in the 1970s and provided with an addition in 1975, the current courthouse was placed on the National Register of Historic Places in 1980. In addition to Blackshear, two other incorporated towns, Offerman and Patterson, are found in Pierce County.



Pierce County Courthouse

The Civil War (1861-65) began soon after Pierce County was formed, with the result that many of its healthy young men went to war before they could join in the formation of communities. The few townspeople who remained in the county's 333 households found themselves hosts to a temporary Confederate prisoner-of-war camp from November 1864 through January 1865. Nearly 5,000 Union captives were brought to Blackshear to prevent their release by Union general William T. Sherman as he marched through the state; the prisoners were subsequently sent on to Savannah for the same reason.

During the nineteenth century, agriculture was the primary occupation in Pierce County. The county's lush pine forests were tapped for both timber and turpentine. The timber industry brought new residents to work in the county's forests and sawmills and contributed to its growth. Businesses developed to serve those who came, and railroad lines were brought in to transport people and products. Cotton was also a major product until the 1920s, when a boll weevil infestation devastated much of Georgia's harvest. Many of Pierce County's cotton planters shifted to tobacco culture, which was the county's major agricultural product from the 1920s until late in the twentieth century.

Blackshear Presbyterian Church, built in 1874, is the oldest Presbyterian church in the county. The Reverend I. S. K. Axson of Savannah (grandfather of U.S. president Woodrow Wilson's first wife, Ellen Axson) performed the dedication service, and the church's first pastor, the Reverend Richard Quarterman Way, was a retired missionary from China. Shiloh Primitive Baptist Church and its cemetery, which is the oldest in the county, was first used in the 1830s. Civilians as well as veterans of all American conflicts through the Vietnam War (1964-73) are buried there. Other historic sites include the Brantley Brick Warehouse. Dating from around 1900, it is



**Pierce County Jail**

one of the oldest brick tobacco warehouses in Georgia and has been converted into retail and office space. The site of the temporary Confederate prison camp is indicated by a historical marker on the outskirts of Blackshear. The Pierce County Jail, built in 1894, was added to the National Register of Historic Places in 1980. Used until the 1920s and garnering the nickname "Hanging Jail" because of its high tower, it was the third of the county's five jails.

The Heritage Museum, located in the Blackshear Depot, mounts displays pertaining to the lives of the early settlers in the county, with exhibitions on agriculture, church histories, and the Civil War. It also has a large photograph and document collection as well as a genealogical library.



**Blackshear Depot**

The Pierce County Chamber of Commerce is housed in an Atlantic Coast Line Railroad depot, which was added to the National Register of Historic Places in 2000.

The Marian Anderson Library Rosenwald School, in Blackshear, was completed in 1926. This school was one of many Rosenwald schools built in Georgia. Currently used for storage by a local business, it once served as a school for the area's African American children and housed a collection of books and paintings relating to the African American experience. The collection was moved in the 1950s to the Lee Street Resource Center, which today offers youth mentoring programs.

Pierce County shares the Little Satilla Wildlife Management Area with Wayne County.

According to the 2010 U.S. census, the population of Pierce County was 18,758, an increase from the 2000 population of 15,636.

*Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia*

## **Wildfire History**

Pierce County in south east Georgia, is still 51% forested, despite a strong agricultural presence in the county. Perhaps with the exception of the large blocks of woodlands on the eastern side of the county, there are homes and communities scattered throughout. The risks and hazards from the wildland urban interface are fairly general and substantial throughout the county even on the edges of the three incorporated cities.

Pierce County is protected by 11 organized volunteer fire departments located in Blackshear (2 stations), Patterson, Offerman, Hacklebarney, Sunset, Walkerville, Northside, Southside and Bearville. The Georgia Forestry Commission maintains a county protection unit located one mile east of Patterson on GA Hwy 32 to respond to wildfires throughout the county. The cities of Blackshear, Patterson and Offerman are serviced by pressurized water systems with hydrants available.

Over the past 54 years, Pierce County has averaged 64 reported wildland fires per year, burning an average of 261 acres per year. Using more recent figures over the past 10 years, this number has dropped somewhat to an average of 44 fires per year burning on average 155 acres annually. The marked decrease in acres may be due to better detection and equipment over the years. The occurrence of these fires during this later period shows a pronounced peak during the months of January, February, March, and April accounting for 54% of the annual fires and 67% of the average acreage burned. There is a significant decrease during the remainder of the year, particularly during the fall months.

Over the past 10 years, FY 2008-FY2017, the leading causes of these fires, was debris burning causing 54% of the fires and 51% of the acres burned. Incendiary (arson) caused 10% of these fires and burned 15% of the acres. Lightning was also a major cause accounting for 9% of the fires and 10% of the acres burned.

Georgia Forestry Commission Wildfire Records show that in the past five years, FY2014-FY2018, twelve homes were damaged by wildfire in Pierce County resulting in estimated loss of \$521,000 along with 11 outbuildings valued at \$18,200. According to reports during this period 224 homes have been directly or indirectly threatened by these fires. Additionally 17 vehicles valued at \$192,000 and two other pieces of mechanized equipment valued at \$63,000 were lost. Crop damage from these fires amounted to \$5700 in losses. This is a significant loss of non-timber property attributed to wildfires in Pierce County.

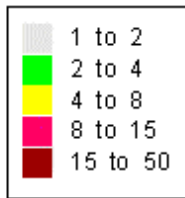
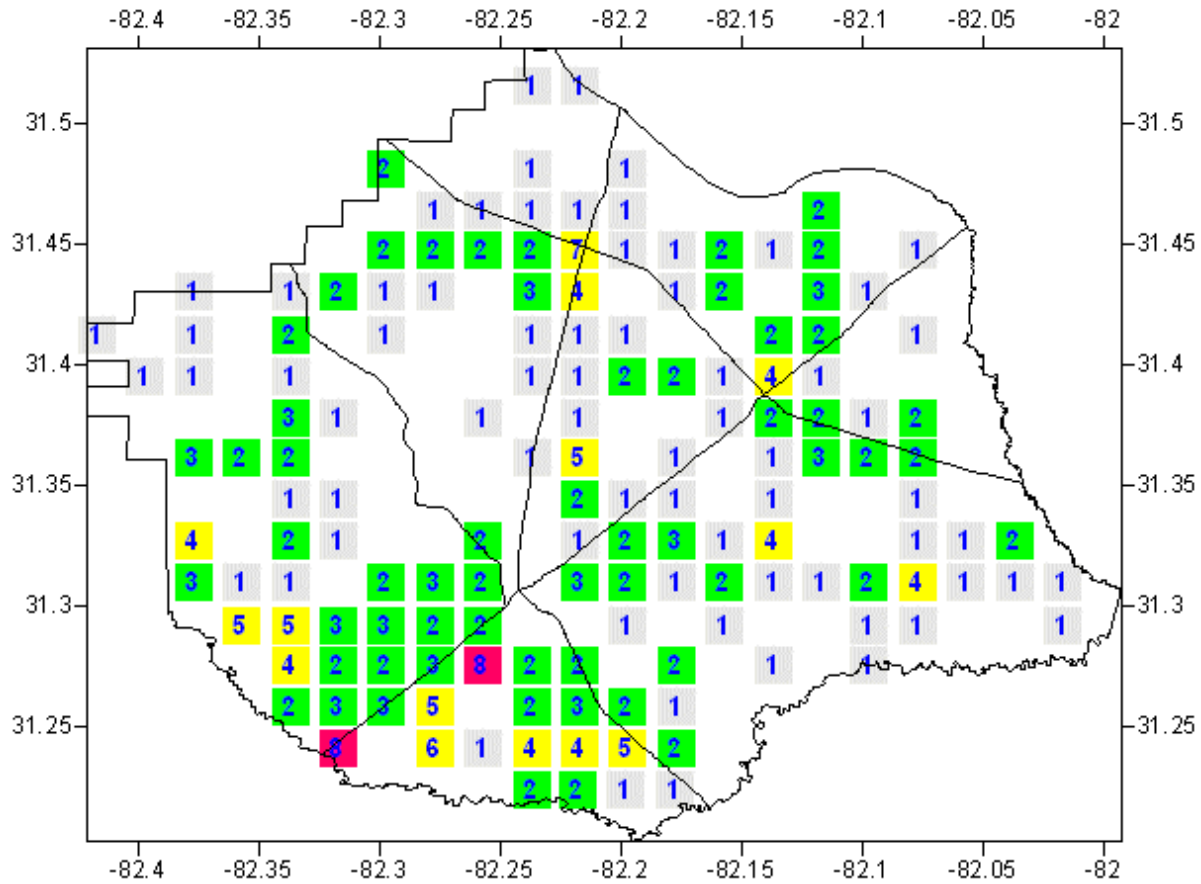


County = Pierce	Cause	Fires	Acres	Fires 5 Yr Avg	Acres 5 Yr Avg
<a href="#">Campfire</a>	Campfire	1	0.25	1.40	3.79
<a href="#">Debris: Ag Fields, Pastures, Orchards, Etc</a>	Debris: Ag Fields, Pastures, Orchards, Etc	0	0.00	0.60	0.46
<a href="#">Debris: Construction Land Clearing</a>	Debris: Construction Land Clearing	1	3.67	1.00	0.97
<a href="#">Debris: Escaped Prescribed Burn</a>	Debris: Escaped Prescribed Burn	7	20.72	5.80	62.29
<a href="#">Debris: Household Garbage</a>	Debris: Household Garbage	3	7.71	1.40	3.32
<a href="#">Debris: Other</a>	Debris: Other	0	0.00	1.20	2.04
<a href="#">Debris: Residential, Leafpiles, Yard, Etc</a>	Debris: Residential, Leafpiles, Yard, Etc	5	8.11	5.00	8.72
<a href="#">Debris: Site Prep - Forestry Related</a>	Debris: Site Prep - Forestry Related	5	7.17	4.00	6.45
<a href="#">Incendiary</a>	Incendiary	0	0.00	1.80	0.75
<a href="#">Lightning</a>	Lightning	4	32.80	4.20	11.55
<a href="#">Machine Use</a>	Machine Use	1	0.05	1.40	2.57
<a href="#">Miscellaneous: Cutting/Welding/Grinding</a>	Miscellaneous: Cutting/Welding/Grinding	0	0.00	0.20	4.27
<a href="#">Miscellaneous: Other</a>	Miscellaneous: Other	1	5.00	0.40	1.04
<a href="#">Miscellaneous: Power lines/Electric fences</a>	Miscellaneous: Power lines/Electric fences	0	0.00	1.00	0.49
<a href="#">Miscellaneous: Structure/Vehicle Fires</a>	Miscellaneous: Structure/Vehicle Fires	1	1.80	0.40	0.46
<a href="#">Miscellaneous: Woodstove Ashes</a>	Miscellaneous: Woodstove Ashes	0	0.00	0.40	0.24
<a href="#">Railroad</a>	Railroad	0	0.00	0.40	0.10
<a href="#">Smoking</a>	Smoking	0	0.00	0.20	0.48
<a href="#">Undetermined</a>	Undetermined	7	63.76	4.60	16.77
<b>Totals for County: Pierce Year: 2018</b>		36	151.04	35.40	126.76

<b>Acres Burned /Number of Fires For Pierce County For FY 2008-2017</b>				
<b>Year</b>	<b>Acres Burned</b>	<b>Number of Fires</b>	<b>Average Size</b>	<b>Statewide Average Size</b>
2008	30.50	29	1.05	4.56
2009	301.64	38	7.94	3.90
2010	95.67	47	2.04	3.93
2011	481.26	101	4.76	17.56
2012	55.57	48	1.16	5.08
2013	62.57	36	1.74	4.53
2014	22.20	22	1.01	5.02
2015	67.64	35	1.93	4.42
2016	265.00	37	7.16	6.29
2017	127.90	47	2.72	11.60

<b>Acres Burned /Number of Fires by Fire Cause For Pierce County For FY 2008-2017</b>		
<b>Fire Cause</b>	<b>Acres Burned</b>	<b>Number of Fires</b>
Campfire	51.32	21
Children	1.39	5
Debris Burning	759.54	232
Incendiary	230.01	42
Lightning	145.54	39
Machine Use	240.03	30
Miscellaneous	43.85	37
Railroad	0.00	0
Smoking	3.05	5
Undetermined	21.40	20
<b>Total</b>	<b>1,496.13</b>	<b>431</b>

# Fire Occurrence Map for Pierce County for Fiscal Year 2007-2011



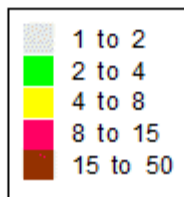
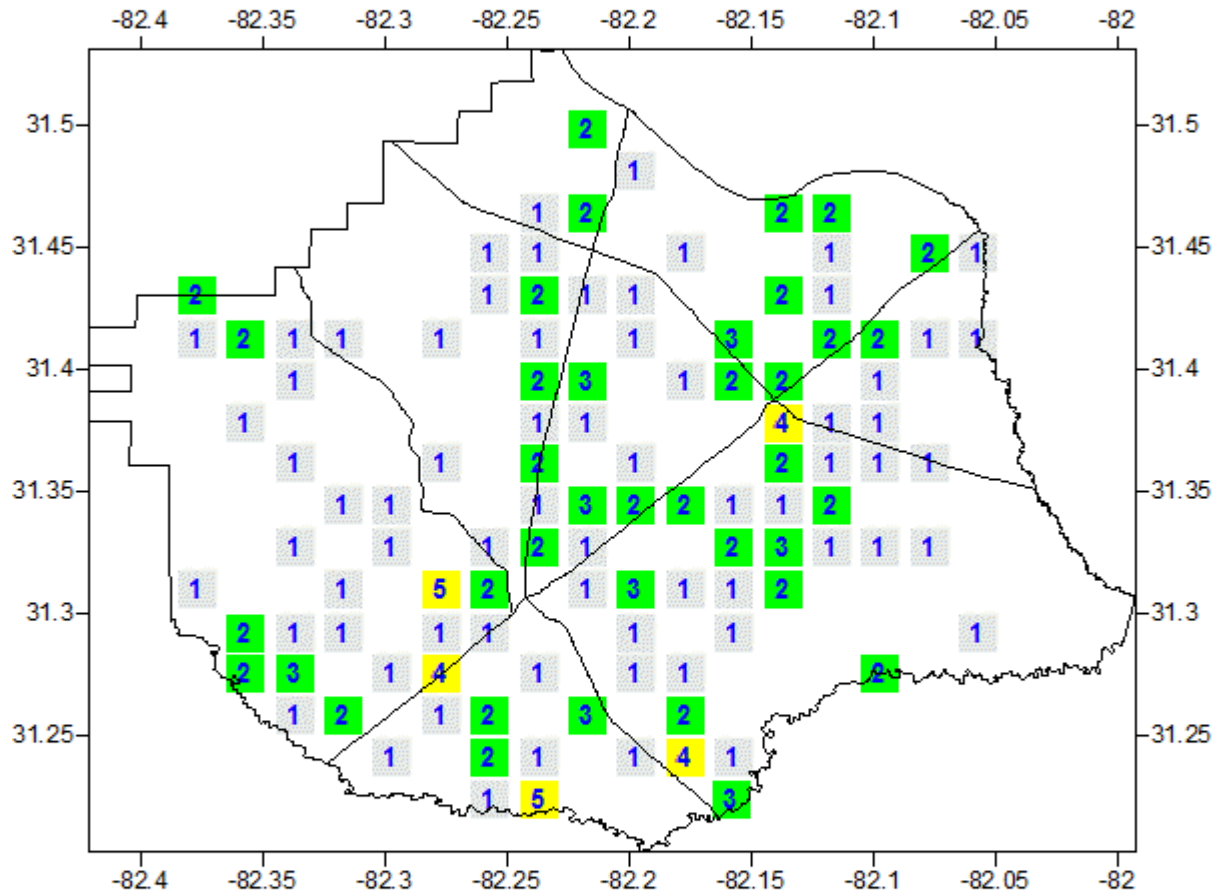
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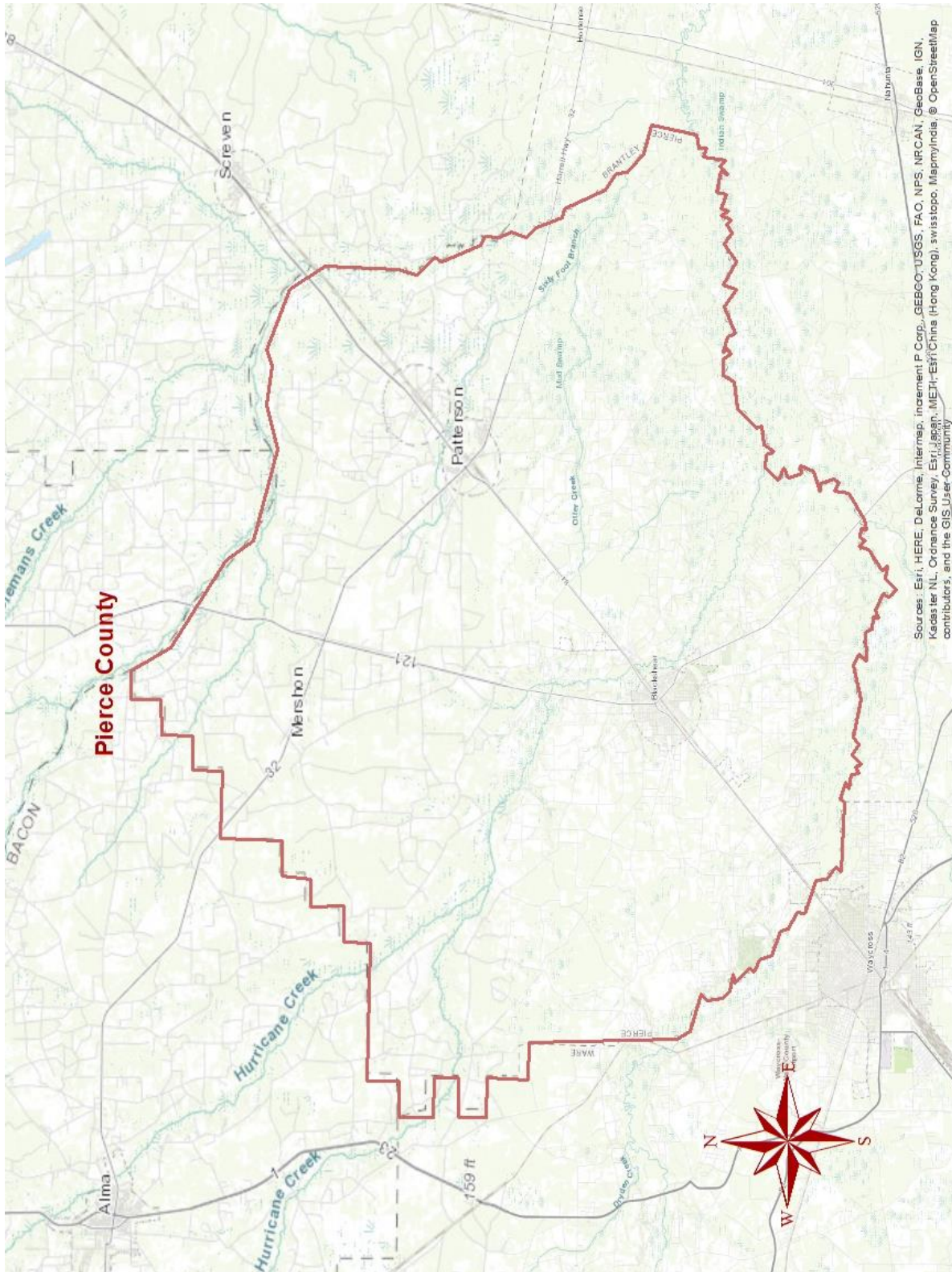
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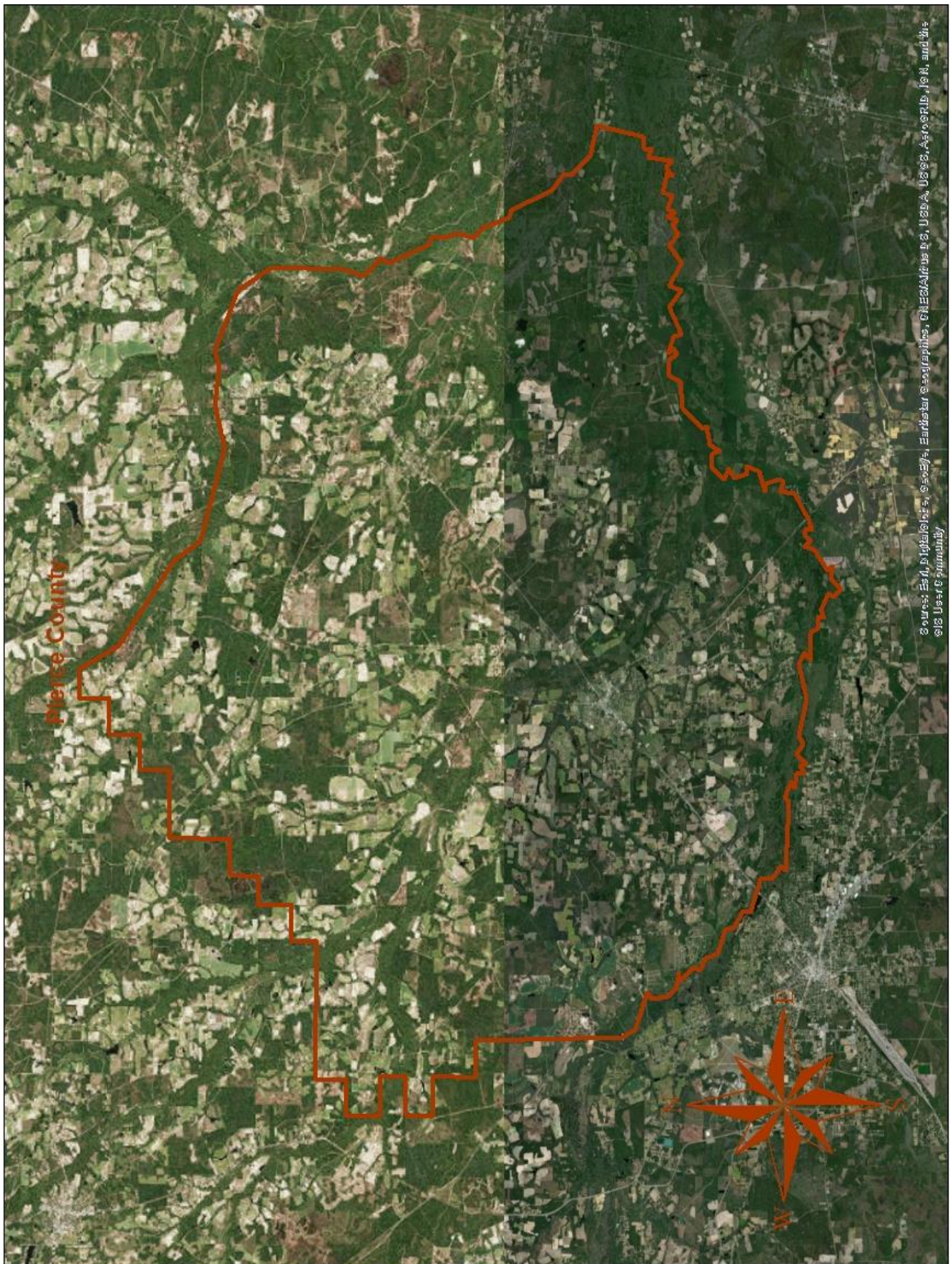


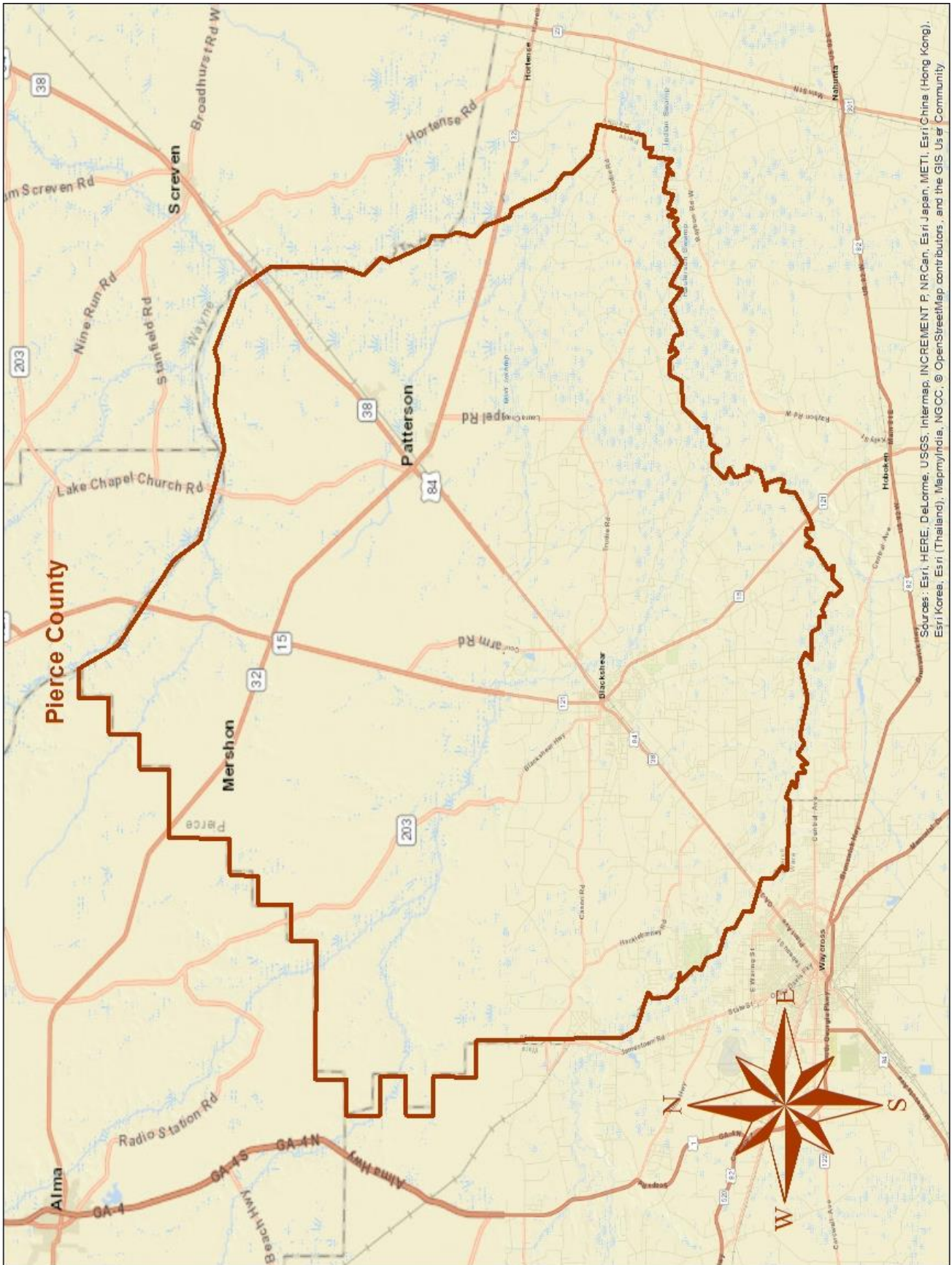
# Fire Occurrence Map for Pierce County for Fiscal Year 2012-2016



## 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.



## **Wildland Urban Interface Hazards**

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

### **Hazardous Materials**

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

### **Illicit Activities**

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

### **Propane Tanks**

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

### **Utility Lines**

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

### **Septic Tanks and Fields**

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

### **New Construction Materials**

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

### **Pets and Livestock**

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

### **Evacuation Occurring**

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

### **Limited Access**

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



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

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

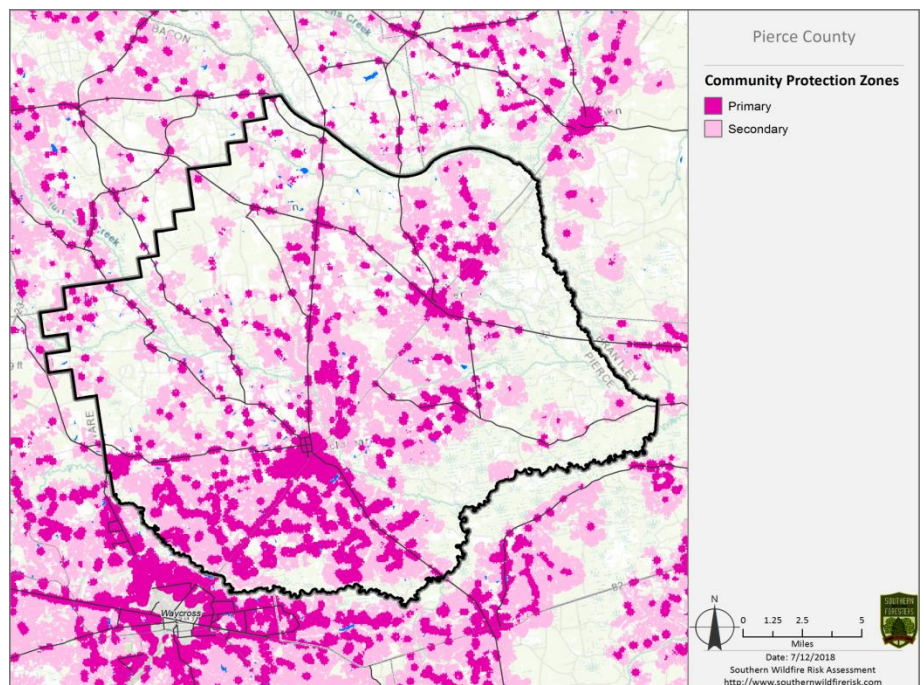
- Unpaved roads and private driveways with inadequate culverts.
- Narrow roads without drivable shoulders and inadequate overhead clearance
- Dead-end roads without “turnarounds”
- Access blocked by railroads
- Lack of uniform address signs
- Minimal defensible space around structures
- Homes with wooden siding
- Lack of pressurized or non-pressurized water systems available outside of cities.
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

<b>Area/ Community</b>	<b>Community Access</b>	<b>Surrounding Vegetation</b>	<b>Building Construction</b>	<b>Fire Protection</b>	<b>Utilities</b>	<b>Add. Factors</b>	<b>Score</b>	<b>Hazard Rating</b>
Blackshear	3	15	0	4	1	5	28	Low
Patterson	3	15	0	4	4	5	31	Low
Offerman	14	20	0	20	7	15	76	High
Hacklebarney	14	20	0	12	4	10	60	Moderate
Walkerville	14	20	0	18	7	15	74	Moderate
Otter Creek	14	20	0	8	7	20	69	Moderate
Bearville	14	20	0	12	7	19	62	Moderate
Sunset	14	20	0	18	7	15	74	Moderate
Southside	14	20	0	12	7	12	65	Moderate
Northside	14	20	0	18	7	15	74	Moderate

## VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

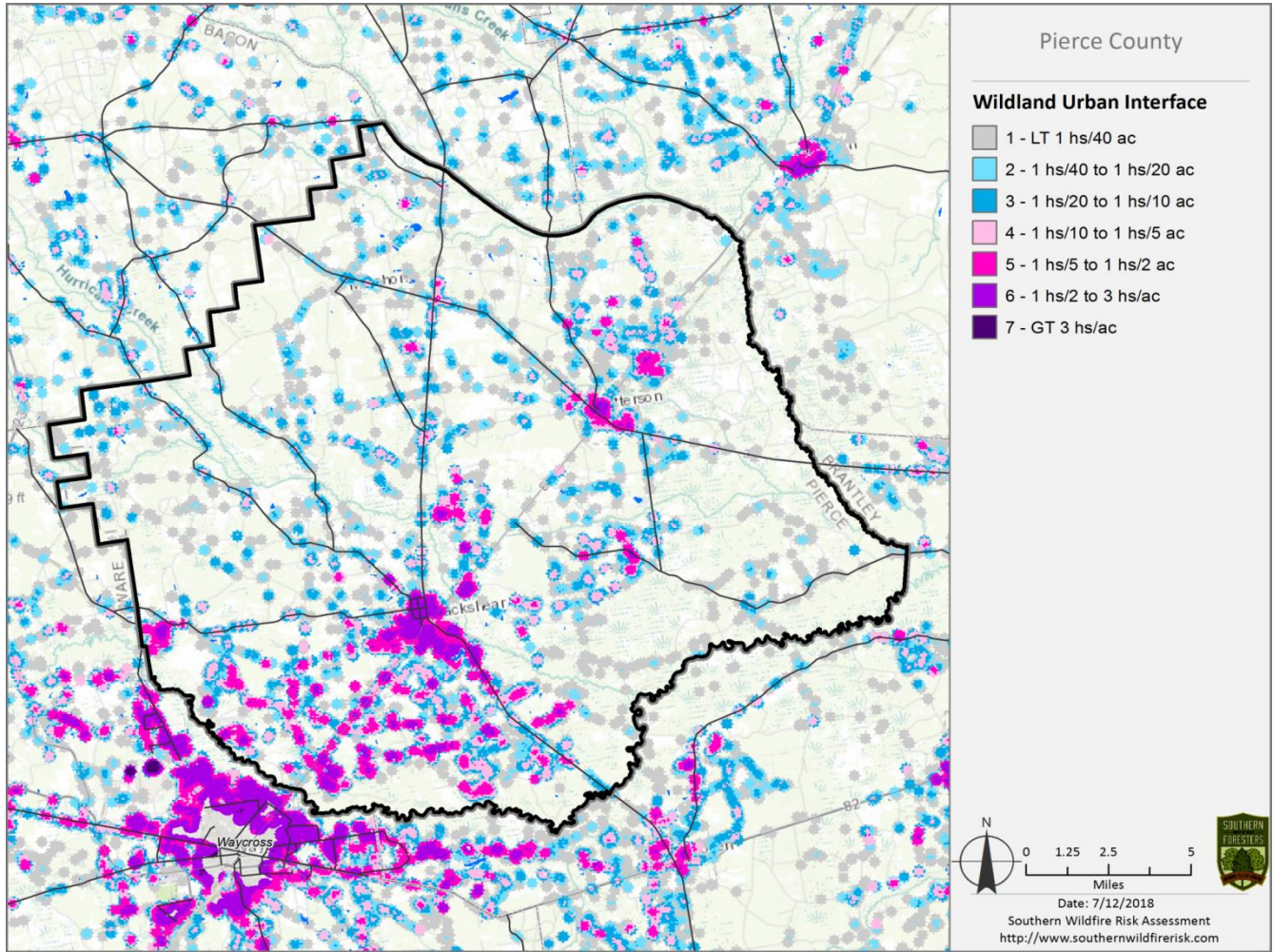
The Southern Wildfire Risk Assessment tool, developed by the Southern Group of State Foresters, was released to the public in July 2014. This tool allows users of the Professional Viewer application of the Southern Wildfire Risk Assessment (SWRA) web Portal (SouthWRAP) to define a specific project area 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 Pierce 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.

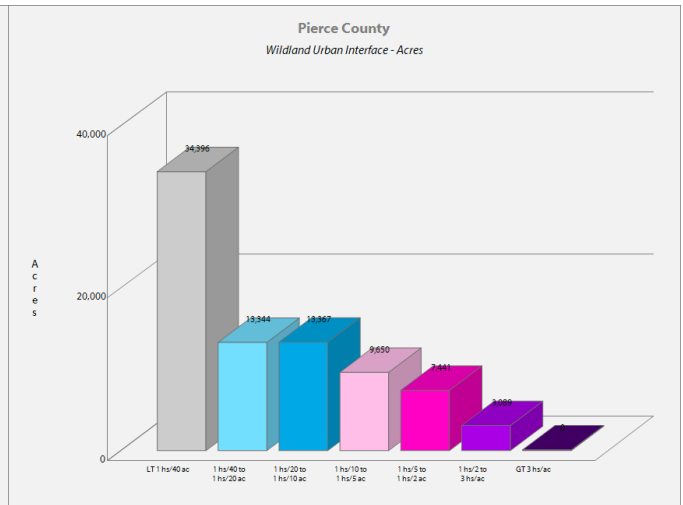
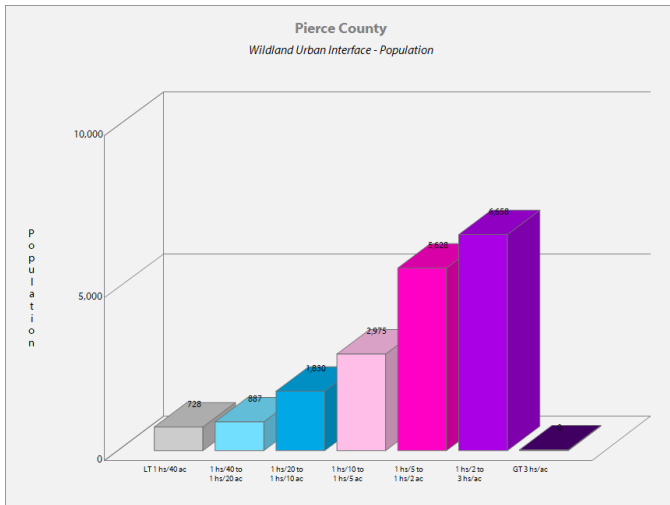


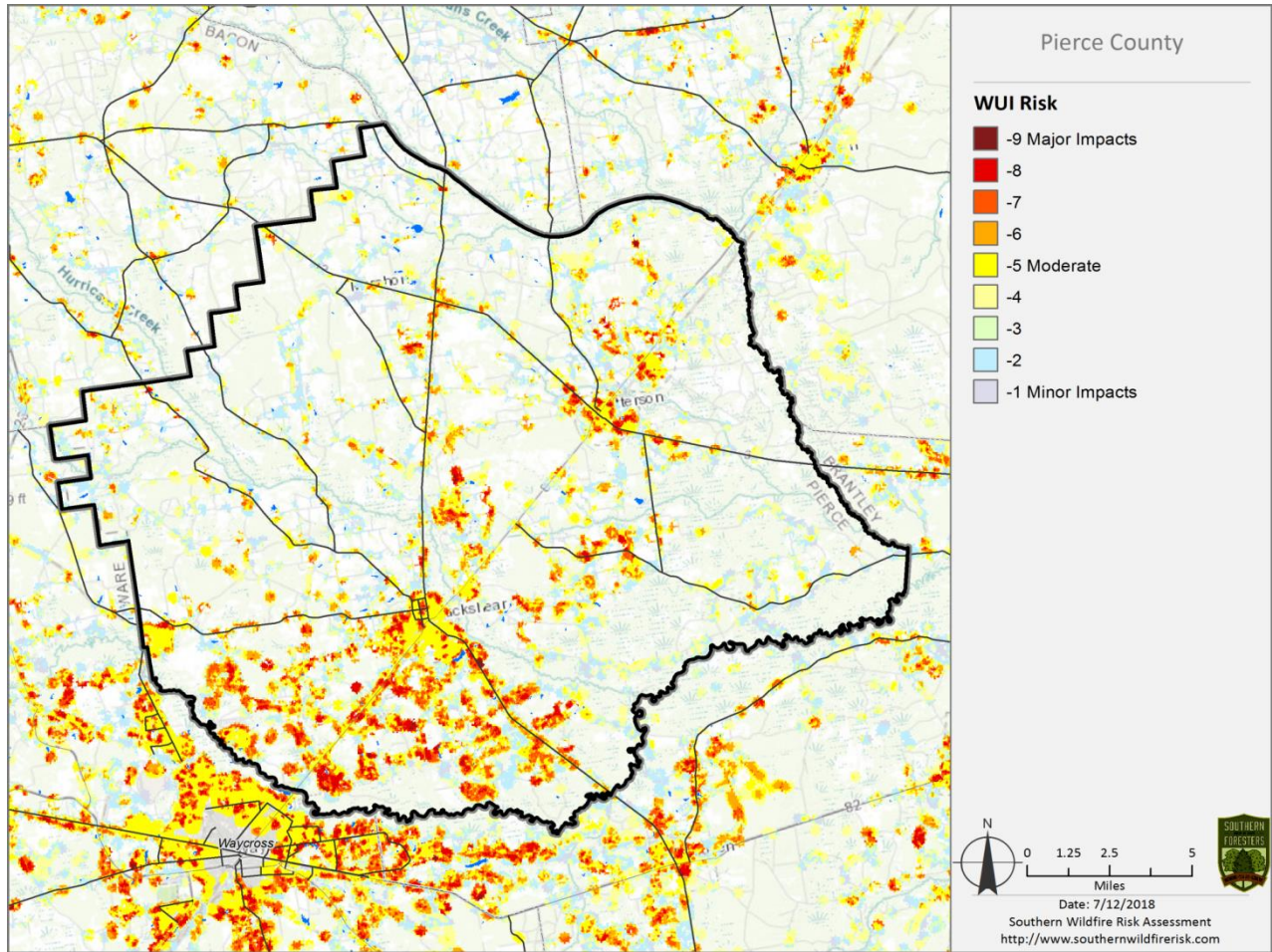
Community Protection Zones map from the Pierce County SWRA

WILDFIRE PROTECTION PLAN: AN ACTION PLAN FOR WILDFIRE MITIGATION

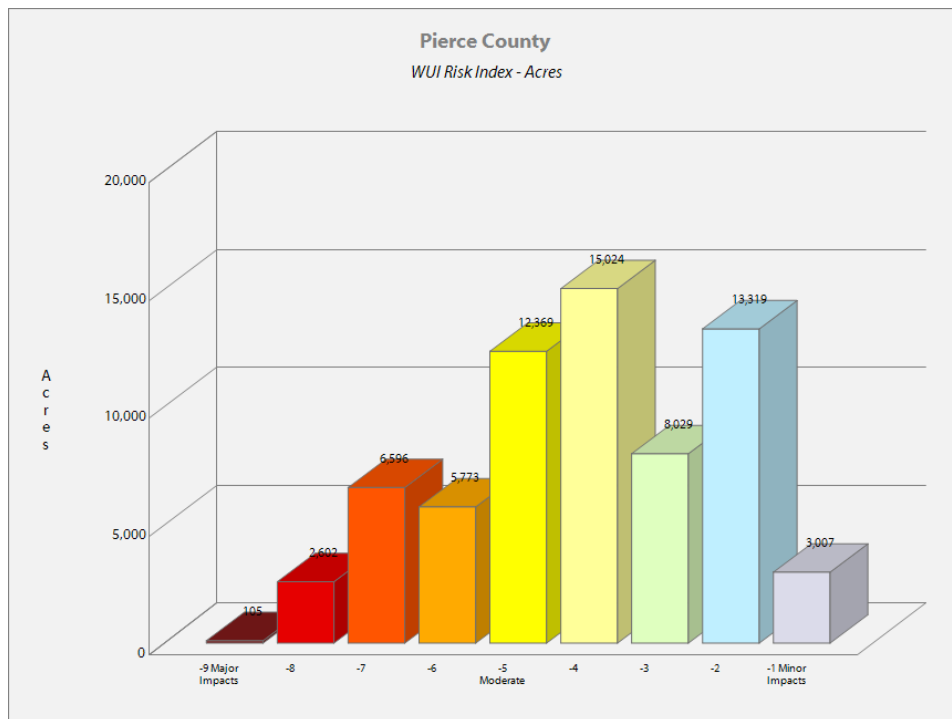


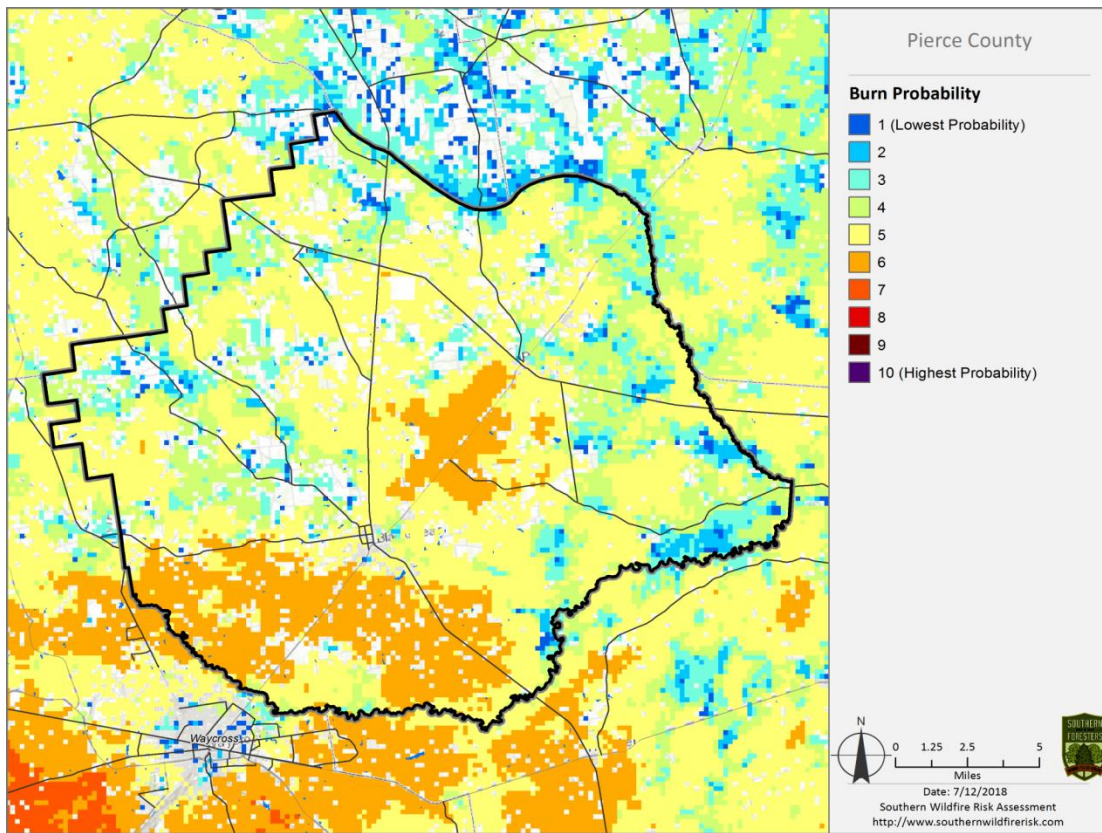
Above: Wildland Urban Interface (WUI) map      Below: WUI Population (left) WUI Acres (right)



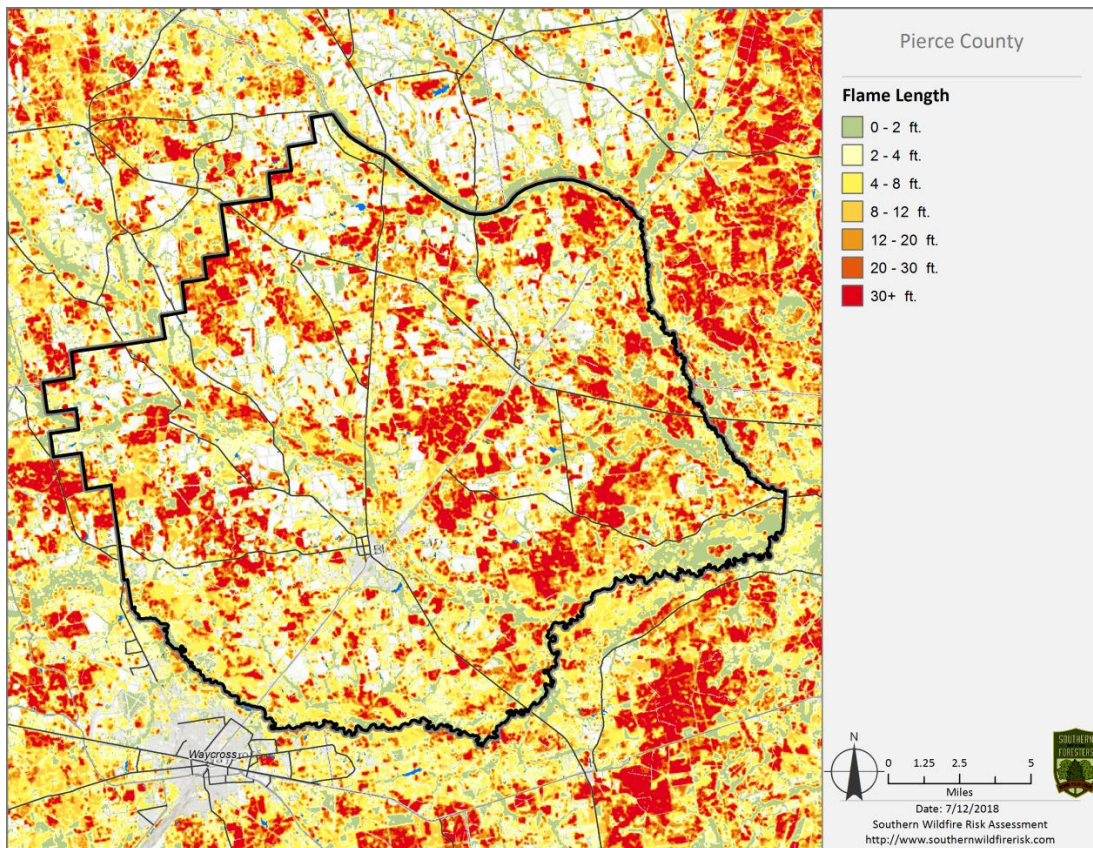


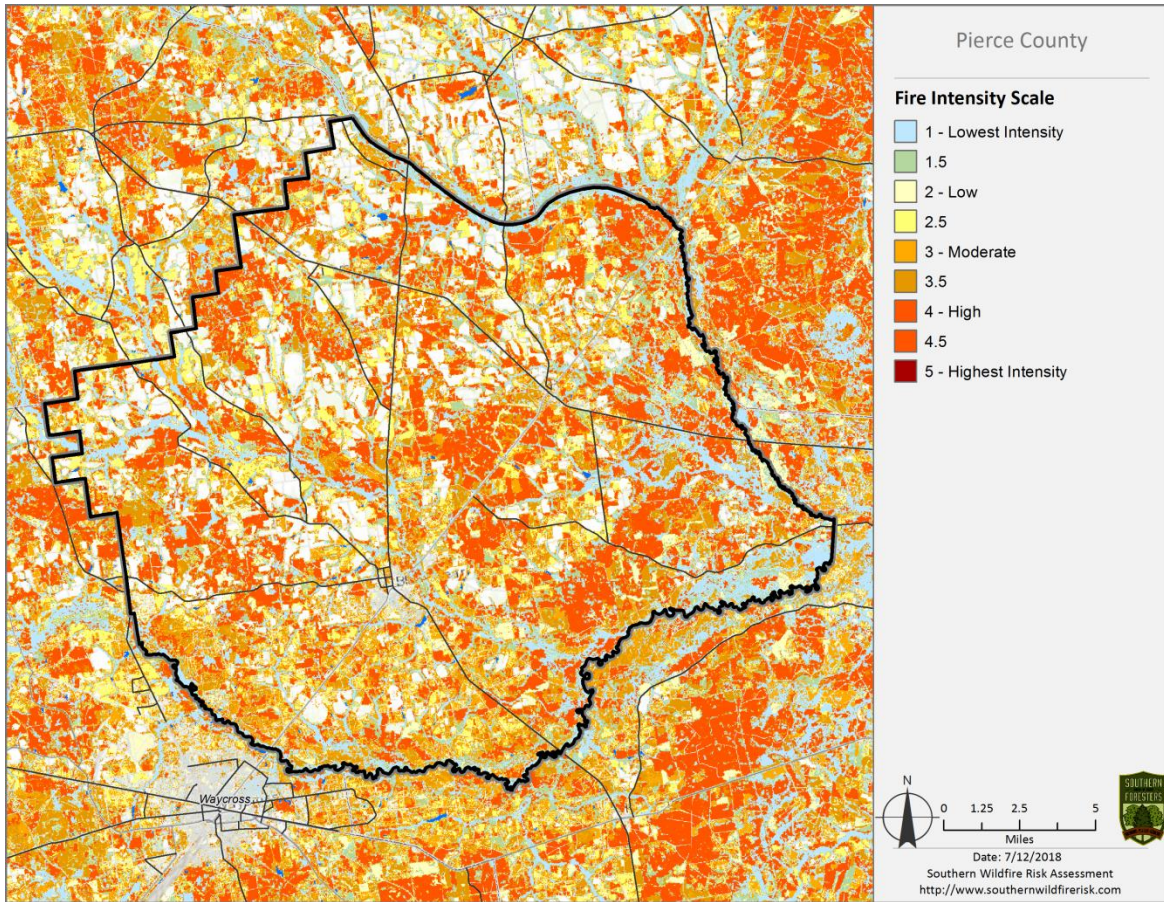
Above: Wildland Urban Interface Risk map    Below: WUI Risk Index - Acres



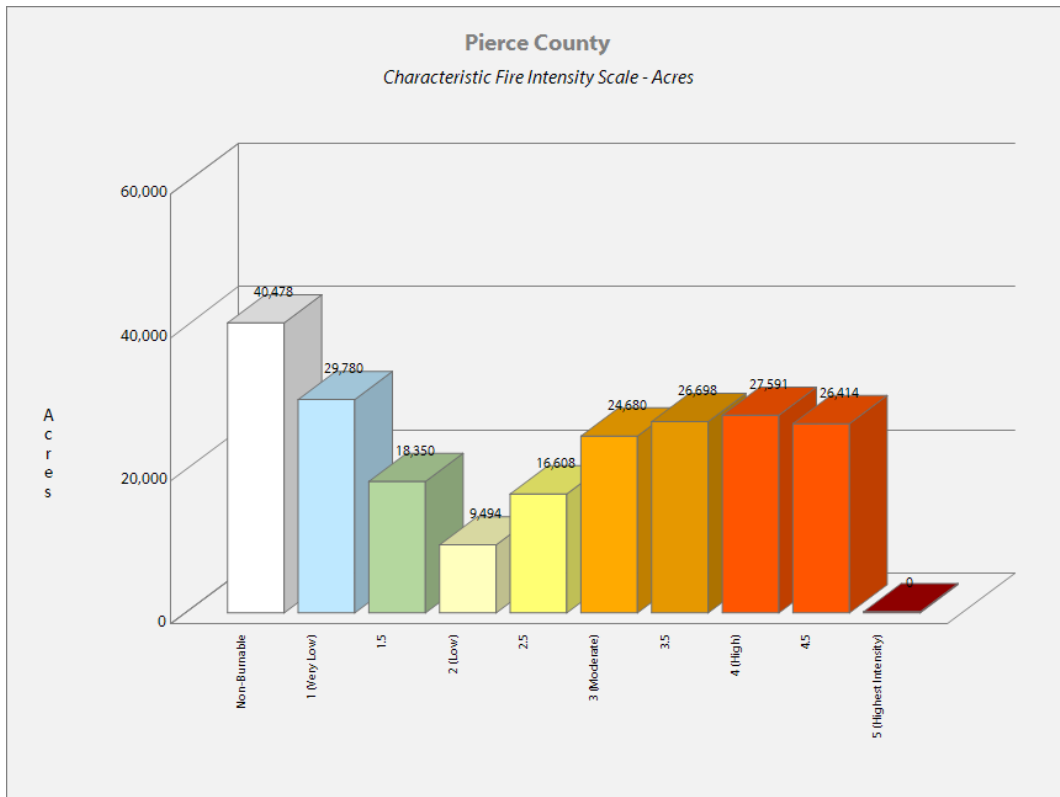


Above: Burn Probability map Below: Flame Length map

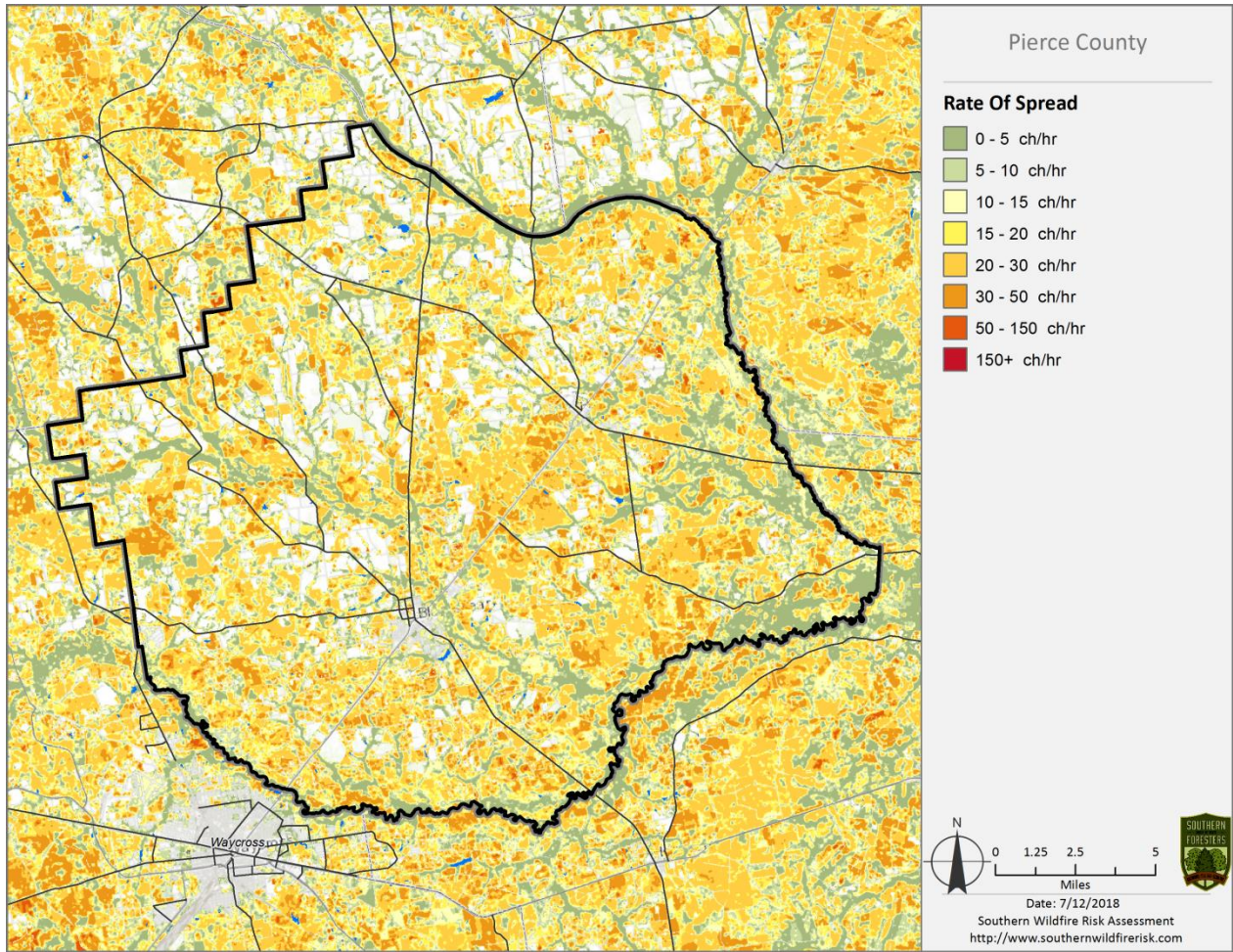




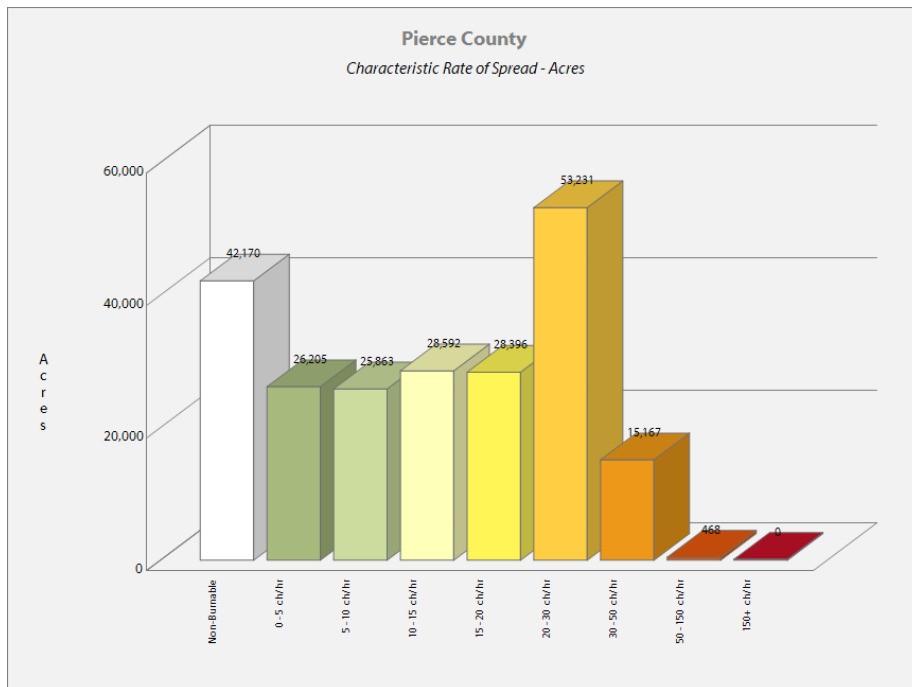
Above: Fire Intensity Scale map    Below: Fire Intensity Scale Acres

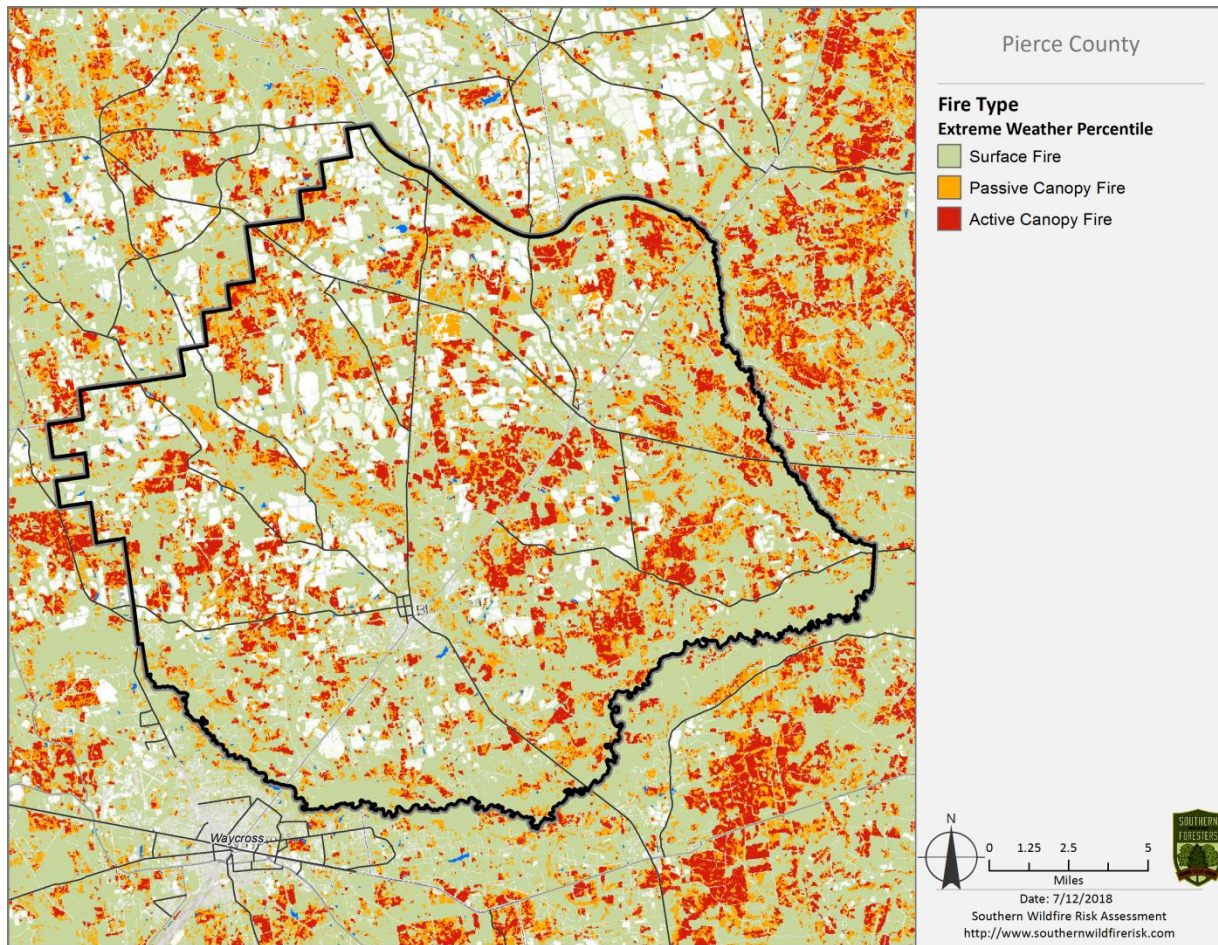






Above: Rate of Spread map    Below: Rate of Spread Acres





**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.



**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.



## VII. PRIORITIZED MITIGATION RECOMMENDATIONS

### Executive Summary

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

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

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

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 Pierce 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 Hazards	Utility services	Work with GA Power and EMC's to encourage new underground service to rural homes. Adopt standards for safety zone around propane distribution tanks.
4. Driveway Access	Right of Way Clearance	Maintain vertical and horizontal clearance for emergency equipment. See that adequate lengths of culverts are installed to allow emergency vehicle access.
5. Road Access	Identify needed road improvements	As roads are upgraded, widen to minimum standards with at least 50 foot diameter cul de sacs or turn arounds.
6. Codes and Ordinances	Examine existing codes and ordinances.  International Wildland Urban Interface Code IWUIC	Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns  Review the need for subdivision and development ordinances for public safety concerns.  Adopt and enforce uniform addressing ordinance.
7. Law Enforcement	Traffic control	Work with local law enforcement to better control non-essential traffic during fire emergencies.

<b>Proposed Community Wildland Fuel Reduction Priorities</b>		
Treatment Area	Treatment Types	Treatment Method(s)
1. Adjacent WUI Lands	Reduce hazardous fuels	Encourage prescribed burning for private landowners and industrial timberlands particularly adjacent to residential areas.  Seek grant for mowing or prescribed burning in WUI areas.
2. Railroad Corridors	Reduce hazardous fuels	Encourage railroads to better maintain their ROW eliminating brush and grass through herbicide and mowing. Maintain firebreaks along ROW adjacent to residential areas.
3. Existing Fire Lines	Reduce hazardous fuels	Clean and re-harrow existing lines.
<b>Proposed Improved Community Wildland Fire Response Priorities</b>		
1. Water Sources	Helicopter Dip Spots and Dry Hydrants	Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants.  GFC to locate and pre-clear additional helicopter dip locations.
2. Fire Stations	Equipment	Wildland hand tools. Lightweight Wildland PPE Gear.
3. Road Names	Road Signage	Improved Road Signage at Crossroads. "Dead End" or "No Outlet" Tags on Road Signs
4. 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 Pierce County Residents</p>
<p>Set up and conduct a workshop for homeowners that teach the principles of making homes and properties safe from wildfire. Topics for discussion include defensible space, landscaping, building construction, etc. Workshop will be scheduled for evenings or weekends when most homeowners are available and advertised through local media outlets. Target local schools, community groups and local senior centers.</p> <p>Distribute materials promoting firewise practices and planning through local community and governmental meetings.</p>
<p>2. Conduct “Firewise” Workshop for Community Leaders</p>
<p>Arrange for GFC Firewise program to work with local community leaders and governmental officials on the importance of “Firewise Planning” in developing ordinances and codes as the county as the need arises. Identify “Communities at Risk” within the county for possible firewise community recognition.</p>
<p>3. Spring Clean-up Event (National Wildfire Preparedness Day – 1<sup>st</sup> Saturday in May annually)</p>
<p>Conduct clean-up event every spring involving the Georgia Forestry Commission, Pierce 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"> <li>• Clean flammable vegetative material from roofs and gutters</li> <li>• Trim shrubs and vines to 30 feet away from structures</li> <li>• Trim overhanging limbs</li> <li>• Clean hazardous or flammable debris from adjacent properties</li> </ul> <p>Celebrate the work with a community cookout, with Community officials, GFC and Pierce 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"> <li>• Be Firewise Around Your Home</li> <li>• Firewise Guide to Landscape and Construction</li> <li>• Firewise Communities USA brochures</li> <li>• Ready Set Go materials</li> <li>• Fire Adapted Community information</li> </ul>

5. Wildfire Protection Display

Create and exhibit a display for the general public at local events such as the Pecan Festival. Display can be independent or combined with the Georgia Forestry Commission display.

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

6. Media

Invite the local news media to community “Firewise” functions for news coverage and regularly submit press releases documenting wildfire risk improvements in Pierce County. Utilize TV, Radio, Cable, and Social Media to reach new audiences.



**Prescribed burning is a best management practice to reduce fuel. 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 mowers and mastication equipment, such as pictured above, can be very effective in reducing understory fuels in areas where prescribed fire may not be a practical management practice. Private contractors can provide this service. This practice is very effective where homes border 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
<b>Hazardous Fuels and Structural Ignitability Reduction</b>	
Pierce County WUI Fire Council	Create this informal team or council comprised of residents, GFC officials, Pierce County Fire Department officials, a representative from the city and county governments along with EMA Director for Pierce 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"> <li>1 Defensible Space and Firewise Landscaping</li> <li>2 Debris Burning Safety</li> <li>3 Firewise information for homeowners</li> <li>4 Prescribed burning benefits</li> </ol>
Communications objectives	<ol style="list-style-type: none"> <li>1 Create public awareness for fire danger and defensible space issues</li> <li>2 Identify most significant human cause fire issues</li> <li>3 Enlist public support to help prevent these causes</li> <li>4 Encourage people to employ fire prevention and defensible spaces in their communities.</li> </ol>
Target Audiences	<ol style="list-style-type: none"> <li>1 Homeowners</li> <li>2 Forest Landowners and users</li> <li>3 Civic Groups</li> <li>4 School Groups</li> </ol>
Methods	<ol style="list-style-type: none"> <li>1 News Releases</li> <li>2 Radio and TV PSA's for area stations and cable access channels</li> <li>3 Personal Contacts and social media</li> <li>4 Key messages and prevention tips</li> <li>5 Visuals such as signs, brochures and posters</li> </ol>



Spring Clean-up Day (National Wildfire Preparedness Day – 1 <sup>st</sup> Saturday in May annually)	
Event Coordinator	Coordinate day’s events and schedule, catering for cookout, guest attendance, and moderate activities the day of the day of the event.
Event Treasurer	Collect funds from residents to cover food, equipment rentals, and supplies.
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, Pierce 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 governments.
4. Spring Cleanup Day National Wildfire Preparedness 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 Pierce 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 Pierce 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 Pierce 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](http://www.firewise.org)
- Georgia Forestry Commission [www.georgiafirewise.org](http://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](http://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](http://www.interfacesouth.org)
- Information on codes and standards for emergency services including wildfire can be found at [www.nfpa.org](http://www.nfpa.org)
- Information on FEMA Assistance to Firefighters Grants (AFG) can be found at [www.firegrantsupport.com](http://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](http://www.SouthernWildfireRisk.com)
- Fire Adapted Communities [www.fireadapted.org](http://www.fireadapted.org)
- Ready, Set, Go [www.wildlandfirersg.org](http://www.wildlandfirersg.org)
- National Wildfire Preparedness Day [www.wildfireprepdays.org](http://www.wildfireprepdays.org)

### **Appended Documents:**

Pierce County Southern Wildfire Risk Assessment Summary Report (SWRA).

Pierce County Wildfire assessment scoresheets.

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

GEORGIA FORESTRY  
COMMISSION



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