

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

Irwin County, Georgia



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# Appended Documents:

Irwin County Southern Wildfire Risk Assessment Summary Report (SWRA)

Irwin 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 though 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 Irwin 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 May 16<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:

Irwin County Board of Commissioners
Irwin County EMA
Irwin County Volunteer Fire Departments
Ocilla Fire Department
Georgia Forestry Commission

It was decided to conduct community assessments on high risk communities within the individual fire districts in the county. The various fire departments in the county assessed their districts and reconvened on July 28<sup>th</sup>, 2011 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

#### **Irwin County**



Irwin County, in central Georgia, is the state's forty-first county, created in 1818 from land acquired from Creek Indians in 1814 by the Treaty of Fort Jackson. The county, one of seven created by the state legislature in 1818, once encompassed much more territory. Counties carved from it were Lowndes and Thomas (1825), Worth (1853), Coffee (1854), Berrien (1856), Wilcox (1857), Tift and Turner (1905), and Ben Hill (1906). It was named for Jared Irwin, a governor of Georgia most famous for rescinding the fraudulent Yazoo Act.

Until the Indian treaties were signed, periodic conflict occurred between the whites and Indians. The county was divided into sixteen land districts, each composed of several hundred lots, in

1818. There were some settlers in the area, most of them from other parts of the South, even before the county was formed. Much of the land was virgin pine forest. Many of the original settlers lived first by subsistence farming and hunting and moved later into cattle ranching after establishing their homesteads. Eventually, settlers produced cotton and fruit, as well as cattle, for the market.

The first county seat was developed on a location designated by the state legislature and named Irwinville. It was the seat of government from 1831 until 1907, when the county's voters elected to change the location to the bustling town of Ocilla, ten miles southeast of Irwinville. Ocilla, founded around 1880 and incorporated in 1897, nearly tripled in population soon after it was connected by railroad to Fitzgerald and incorporated in 1897. Today, Ocilla is the only incorporated city in Irwin County. (Irwinville was incorporated from 1857 to 1995.)

From 1820 to 1822 the county's court hearings were held at the home of resident David Williams, and from 1822 through 1839 they were held in a schoolhouse on the property of a Scots settler, Murdock McDuffie. The first official courthouse was built in Irwinville in 1839 and was followed in 1854 and 1883 by newer buildings. It is believed that the business of the county was carried on in these buildings, even after the county seat was relocated, until the current courthouse (the county's fourth official one) was completed in 1910. Major renovations were made to it in 1972.



**Irwin County Courthouse** 

The county's most famous incident occurred during the Civil War (1861-65). Confederate president Jefferson Davis was captured a mile north of Irwinville, by Union forces, in 1865. The spot where he was surrounded is marked in the Jefferson Davis Memorial Historic Site, a thirteen-acre park that features a museum, hiking trail, and picnic facilities.

Irwin County also has an important place in the history of shape-note music. It is the site of the first documented shape-note singing convention in Georgia, the South Georgia Singing Convention, which was founded in 1875 by William Jackson Royal.

Other communities in the county are Abba, Holt, Lax, Mystic (incorporated from 1903 to 1995), Osierfield (incorporated from 1912 to 1995), and Wray.

According to the 2010 U.S. census, the population of Irwin County is 9,538, a decrease from the 2000 population of 9,931.

Elizabeth B. Cooksey, Savannah, Courtesy New Georgia Encyclopedia

#### Wildfire History

Irwin County located in south central Georgia, despite being largely an agricultural area is still almost 48% forested. There are still significant stands of unbroken woodland in the county, particularly along the Alapaha River which spans the western half of the county. Ocilla the county seat is by far the largest population center, but there are many homes and small communities scattered throughout the county. The risks and hazards from the wildland urban interface are fairly general throughout the county even on the edges of the incorporated cities.

Irwin County is protected by the Ocilla Fire Department with a full time station in Ocilla along with five volunteer departments located throughout the county. The Georgia Forestry Commission maintains a county protection unit located three miles east of Ocilla on Hwy 32 to respond to wildfires throughout the county. The cities of Ocilla and Irwinville are serviced by pressurized water systems with hydrants available.

Over the past 54 years, Irwin County has averaged 48 reported wildland fires per year, burning an average of 229 acres per year. Using more recent figures over the past 10 years, this number has decreased to an average of 37 fires per year burning on average 186 acres annually. The occurrence of these fires during this later period shows a slight peak during the winter months while for the most part the number of fires remains fairly steady year round.

Over the past 10 years (FY 2007 thru FY2016), the leading causes of these fires, was debris burning causing 45% of the fires and 50% of the acres burned. The second leading cause was Machine Use causing 20% of the fires and 23% of the acres burned. Over the past six years records show that over 36% of the debris fires originated from residential burning.

Irwin County wildfire information for the last complete fiscal year 2017 (July 1, 2016 thru June 30, 2017). This table also includes five year averages.

| County = Irwin                                | Cause  | Fires | Acres  | Fires<br>5 Yr<br>Avg | Acres<br>5 Yr<br>Avg |
|---|--|-------|--------|----------------------|----------------------|
| Campfire                                      | Campfire   | 2     | 7.30   | 1.00                 | 2.16                 |
| Children                                      | Children   | 0     | 0.00   | 0.60                 | 0.60                 |
| Debris: Ag Fields, Pastures,<br>Orchards, Etc | Debris: Ag Fields, Pastures,<br>Orchards, Etc    | 2     | 13.44  | 1.40                 | 6.98                 |
| Debris: Construction Land<br>Clearing         | Debris: Construction Land Clearing               | 1     | 1.89   | 0.60                 | 0.87                 |
| Debris: Escaped Prescribed Burn               | Debris: Escaped Prescribed Burn                  | 2     | 11.94  | 1.40                 | 5.33                 |
| Debris: Household Garbage                     | Debris: Household Garbage                        | 1     | 2.90   | 0.20                 | 0.58                 |
| Debris: Other                                 | Debris: Other                                    | 1     | 0.02   | 0.80                 | 6.00                 |
| Debris: Residential,<br>Leafpiles, Yard, Etc  | Debris: Residential, Leafpiles, Yard, Etc        | 8     | 21.10  | 3.60                 | 30.90                |
| Debris: Site Prep - Forestry<br>Related       | Debris: Site Prep - Forestry Related             | 6     | 21.37  | 2.40                 | 7.25                 |
| Incendiary                                    | Incendiary                                       | 0     | 0.00   | 0.20                 | 0.01                 |
| <u>Lightning</u>                              | Lightning  | 2     | 30.82  | 0.80                 | 7.61                 |
| Machine Use                                   | Machine Use                                      | 7     | 2.67   | 2.80                 | 1.87                 |
| Miscellaneous: Cutting/Welding/Grinding       | Miscellaneous:<br>Cutting/Welding/Grinding       | 0     | 0.00   | 0.20                 | 0.20                 |
| Miscellaneous: Power lines/Electric fences    | Miscellaneous: Power lines/Electric fences       | 1     | 7.90   | 1.00                 | 4.86                 |
| Miscellaneous: Spontaneous Heating/Combustion | Miscellaneous: Spontaneous<br>Heating/Combustion | 1     | 3.20   | 0.20                 | 0.64                 |
| Miscellaneous: Structure/Vehicle Fires        | Miscellaneous: Structure/Vehicle<br>Fires        | 1     | 30.90  | 0.40                 | 6.54                 |
| <u>Undetermined</u>                           | Undetermined                                     | 3     | 2.51   | 3.80                 | 16.98                |
| Totals for County: Irwin<br>Year: 2017        |  | 38    | 157.96 | 21.40                | 99.37                |

# Acreage Burned /Number of Fires For Irwin County For FY 2007-2016

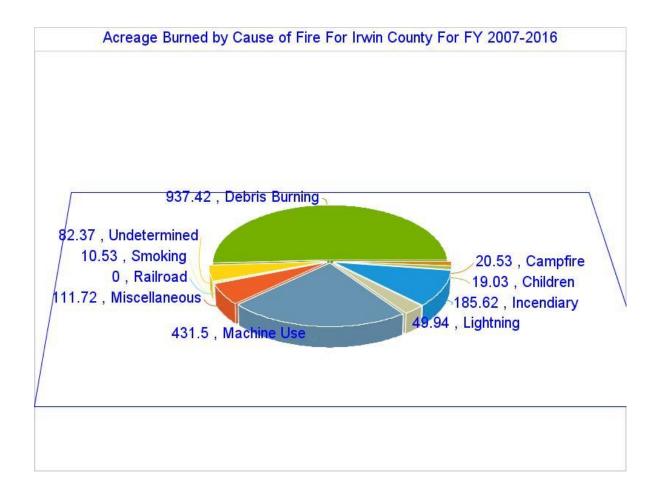
| Year | Acreage Burned | Number of Fires | Average<br>Size | Statewide<br>Average Size |
|------|----------------|-----------------|-----------------|---------------------------|
| 2007 | 511.32         | 81              | 6.31            | 18.64                     |
| 2008 | 249.53         | 51              | 4.89            | 4.56                      |
| 2009 | 156.54         | 40              | 3.91            | 3.90                      |
| 2010 | 67.74          | 19              | 3.57            | 3.93                      |
| 2011 | 405.81         | 85              | 4.77            | 17.56                     |
| 2012 | 134.44         | 33              | 4.07            | 5.08                      |
| 2013 | 87.82          | 24              | 3.66            | 4.53                      |
| 2014 | 155.90         | 12              | 12.99           | 5.02                      |
| 2015 | 51.99          | 21              | 2.48            | 4.42                      |
| 2016 | 43.20          | 12              | 3.60            | 6.29                      |

| Acreage Burned /Number of Fires by Fire Cause |
|---|
| For Irwin County                              |
| For EV 2007 2016                              |

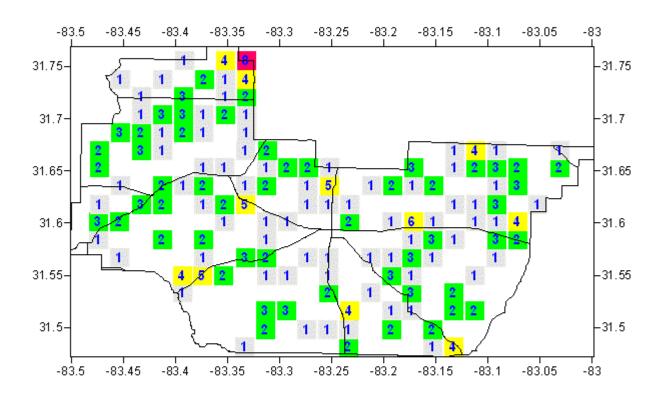
| Fire Cause     | Acreage<br>Burned | Number of Fires |  |  |
|----------------|-------------------|-----------------|--|--|
| Campfire       | 20.53             | 7               |  |  |
| Children       | 19.03             | 10              |  |  |
| Debris Burning | 937.42            | 167             |  |  |
| Incendiary     | 185.62            | 28              |  |  |
| Lightning      | 49.94             | 12              |  |  |
| Machine Use    | 431.50            | 74              |  |  |
| Miscellaneous  | 111.72            | 56              |  |  |
| Railroad       | 0.00              | 0               |  |  |
| Smoking        | 10.53             | 3               |  |  |
| Undetermined   | 82.37             | 16              |  |  |
| Total          | 1,848.66          | 373             |  |  |

Number of Fires by Cause for Irwin County for FY 2007 to 2016

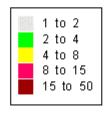
| Year | Campfire |   | Debris<br>Burning | Incendiary |   | Machine<br>Use | Miscellaneous |   | Smoking |
|------|----------|---|-------------------|------------|---|----------------|---------------|---|---------|
| 2007 | 1        | 0 | 36                | 14         | 0 | 14             | 14            | 0 | 2       |
| 2008 | 0        | 0 | 16                | 7          | 1 | 17             | 5             | 4 | 1       |
| 2009 | 0        | 0 | 18                | 2          | 0 | 6              | 14            | 0 | 0       |
| 2010 | 0        | 0 | 10                | 0          | 1 | 4              | 4             | 0 | 0       |
| 2011 | 3        | 3 | 39                | 4          | 6 | 19             | 10            | 1 | 0       |
| 2012 | 0        | 4 | 17                | 0          | 2 | 7              | 3             | 0 | 0       |
| 2013 | 2        | 1 | 11                | 0          | 2 | 1              | 7             | 0 | 0       |
| 2014 | 0        | 0 | 7                 | 0          | 0 | 2              | 3             | 0 | 0       |
| 2015 | 1        | 1 | 6                 | 0          | 0 | 3              | 10            | 0 | 0       |
| 2016 | 0        | 1 | 7                 | 1          | 0 | 1              | 2             | 0 | 0       |



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

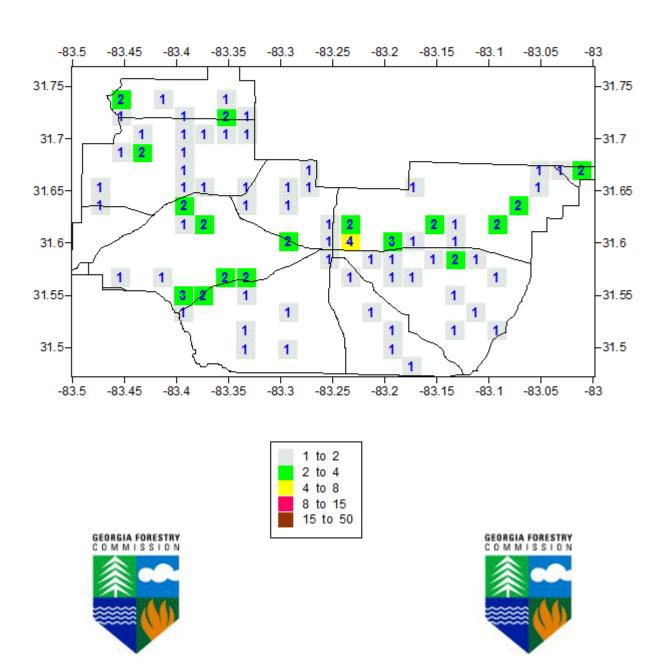




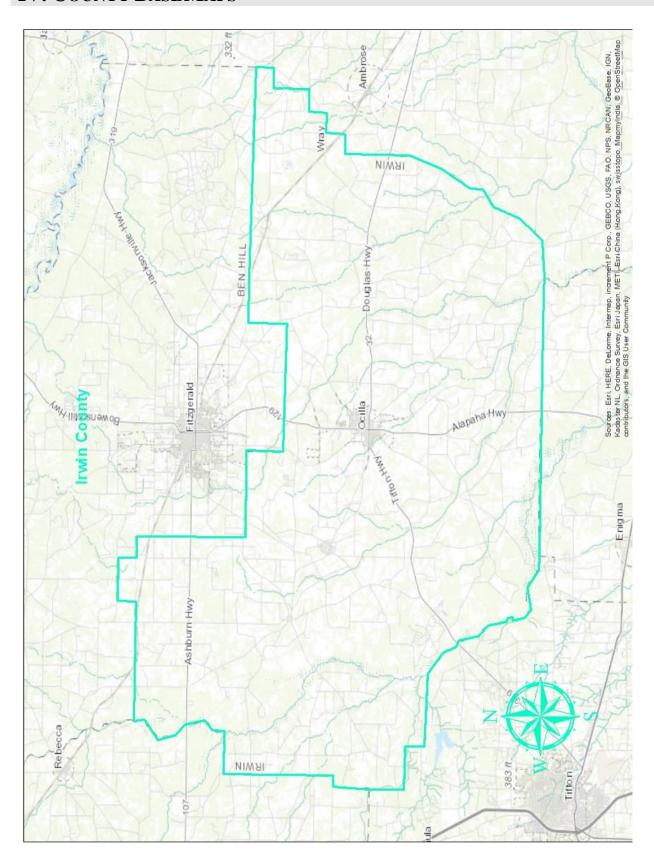


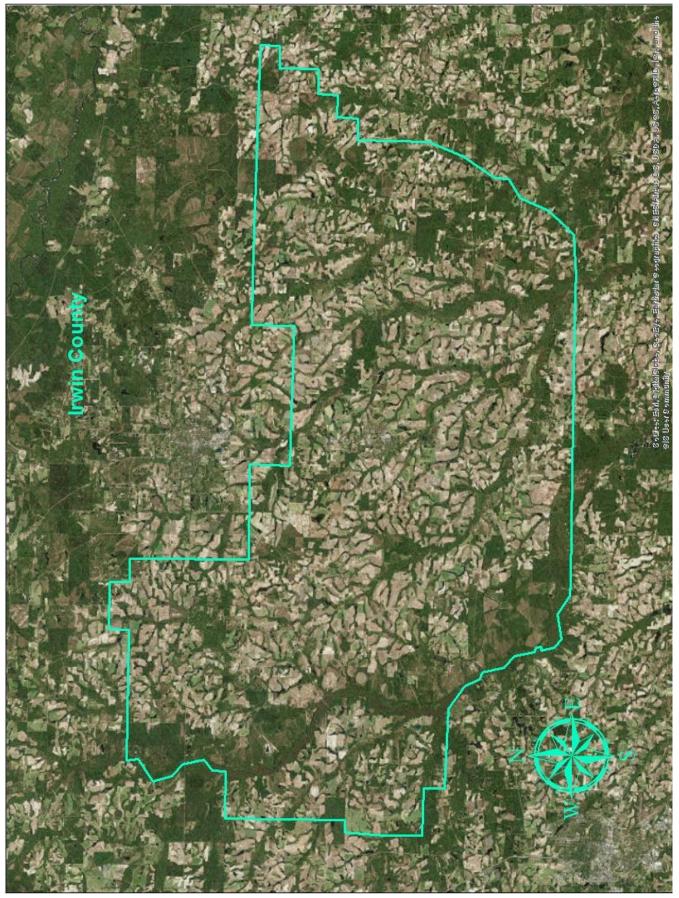


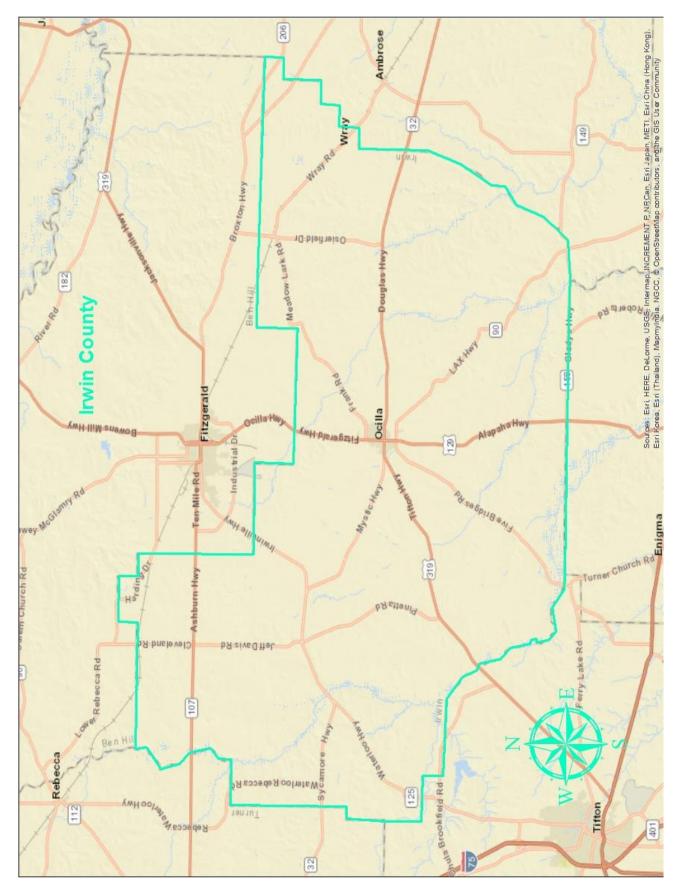
# Fire Occurrence Map for Irwin County for Fiscal Year 2012-2016



# IV. COUNTY BASEMAPS







## V. COMMUNITY WILDFIRE RISKASSESSMENT

#### The Wildland-Urban Interface

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

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

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

#### Wildland Urban Interface Hazards

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

#### **Hazardous Materials**

• Common chemicals used around the home may be a direct hazard to firefighters from a flammability, explosion potential and/or vapors or off gassing. Such chemicals include paint, varnish and other flammable liquids, fertilizer, pesticides, cleansers, aerosol cans, fireworks, batteries and ammunition. In addition, some common household products such as plastics may give off very toxic fumes when they burn. Stay out of smoke form 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. Underground natural gas lines are extremely hazardous to firefighters.

#### **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 2011 by the Irwin County Fire Departments returned a number of communities in the high range. The risk assessment instrument used to evaluate wildfire hazards to Irwin 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 Irwin County:

- Unpaved roads and private driveways
- Narrow roads without drivable shoulders
- Lack of uniform address signs
- Minimal defensible space around structures
- Homes with wooden siding
- Unmarked septic tanks in yards
- Lack of pressurized or non-pressurized water systems available
- Large, adjacent areas of forest or wildlands
- Heavy fuel buildup in adjacent wildlands
- Undeveloped lots comprising half the total lots in many rural communities.
- High occurrence of wildfires in the several locations
- Lack of homeowner or community organizations

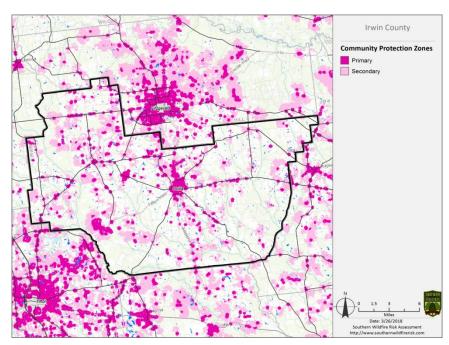
## **Summary of Irwin County Assessments**

| Community/area              | Community<br>Access | Surrounding Vegetation | Building<br>Construction | Fire<br>Protection | Utilities | Add.<br>Factors | Score | Hazard<br>Rating |
|-----------------------------|---------------------|------------------------|--------------------------|--------------------|-----------|-----------------|-------|------------------|
| Ocilla<br>Greenbrier/Aron   |                     |                        |                          |                    |           |                 |       |                  |
| St.                         | 14                  | 35                     | 20                       | 2                  | 6         | 12              | 71    | Moderate         |
| Waterloo                    | 10                  | 20                     | 15                       | 18                 | 5         | 15              | 83    | High             |
| Irwinville<br>Pleasure Lake | 18                  | 35                     | 17                       | 15                 | 5         | 27              | 117   | Very High        |
| Tucker/Lax                  | 15                  | 20                     | 20                       | 20                 | 5         | 19              | 99    | High             |
| Riverbend                   | 11                  | 20                     | 20                       | 17                 | 5         | 11              | 84    | High             |
| Holt                        | 12                  | 20                     | 15                       | 20                 | 5         | 12              | 84    | High             |

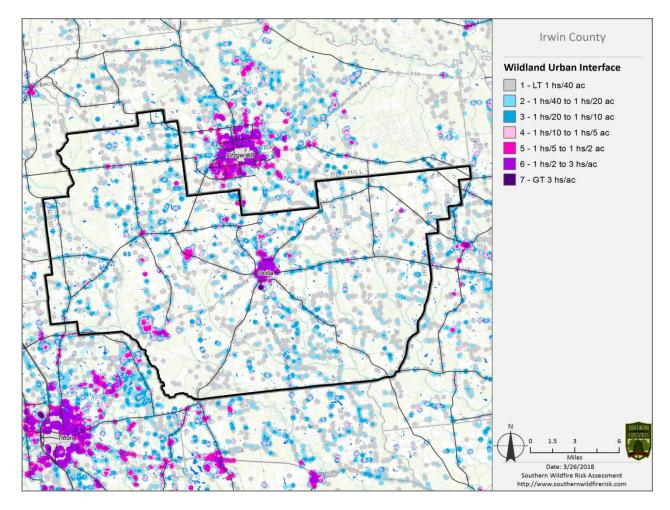
#### VI. SOUTHERN WILDFIRE RISK ASSESSMENT & RISK HAZARD MAPS

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

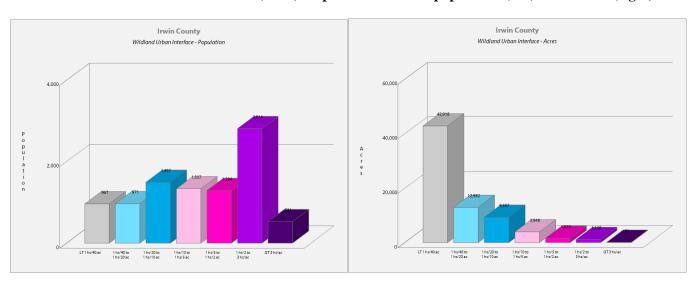
- Identify areas that are most prone to wildfire
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning
- Provide the information necessary to justify resource, budget and funding requests
- Allow agencies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

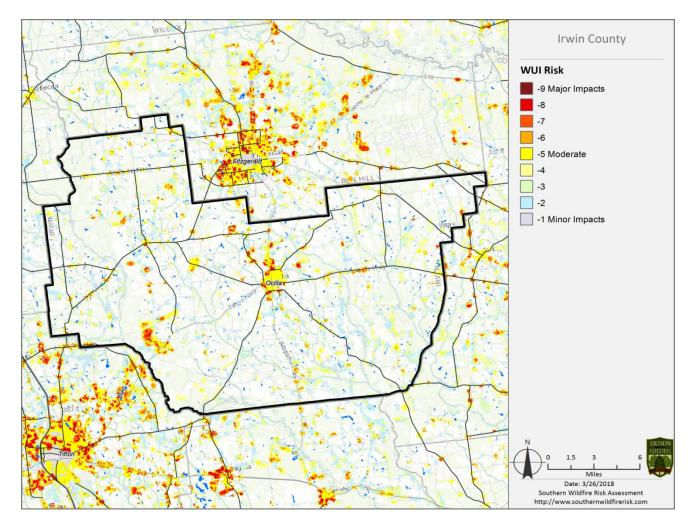


Community Protection Zones map from the Irwin County SWRA

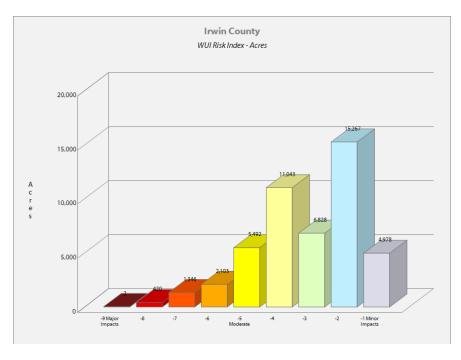


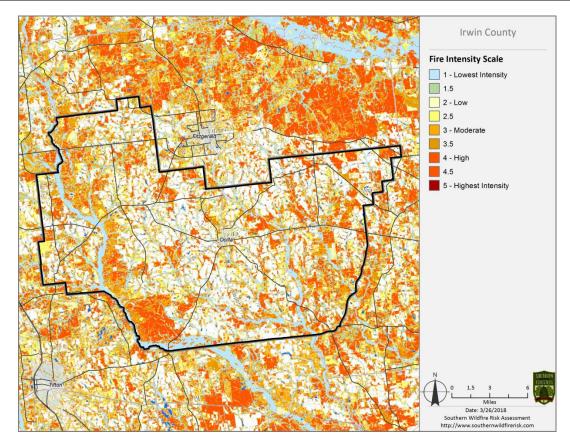
Above: Wildland Urban Interface (WUI) map Below: WUI population (left) WUI Acres (right)



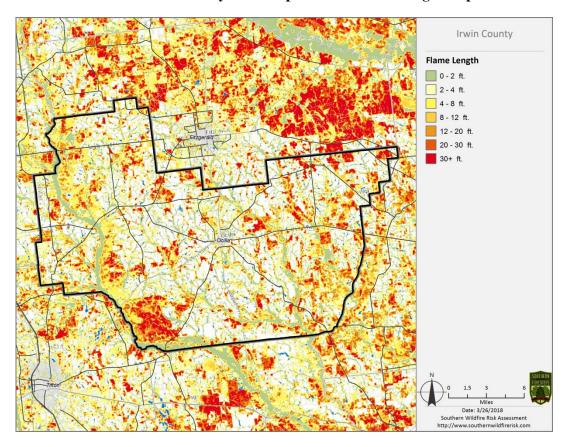


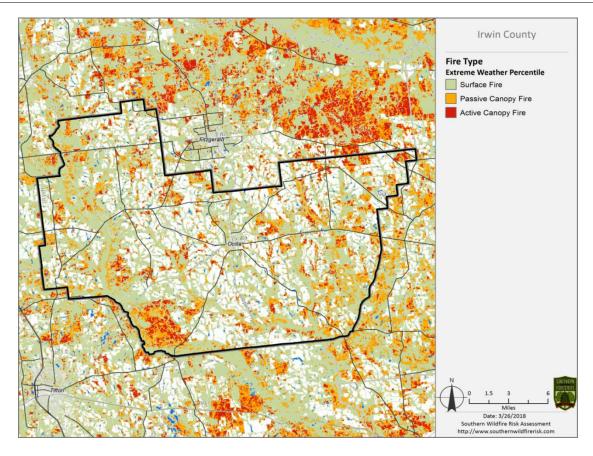
Above: Wildland Urban Interface (WUI) Risk map Below: WUI Risk Index Acres



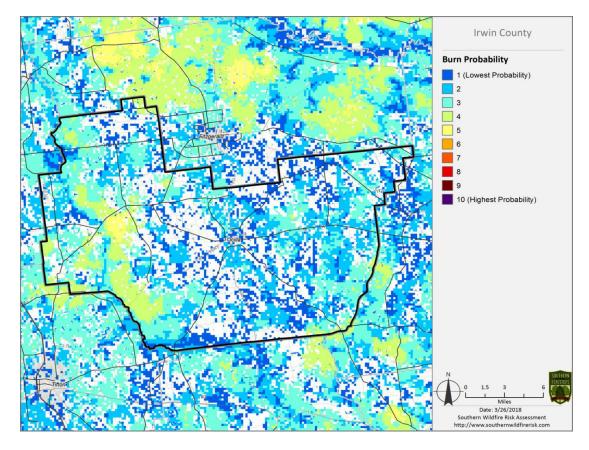


Above: Fire intensity Scale map Below: Flame Length map





Above: Fire Type map Below: Burn Probability map



## VII. PRIORITIZED MITIGATION RECOMMENDATIONS

#### **Executive Summary**

As South Georgia continues to see increased growth from other areas seeking less crowded and warmer climes, new development will occur more frequently on forest and wildland areas. Irwin County will have an opportunity to significantly influence the wildland fire safety of new developments. It is important that new development be planned and constructed to provide for public safety in the event of a wildland fire emergency.

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

In 2012 the International Code Council developed the International Wildland Urban Interface Code (IWUIC). This code is endorsed by the National Fire Protection Association (NFPA) and in 2014 was adopted by the Georgia Legislature for counties to use in developing building and zoning codes. When new developments are built in the Wildland/Urban Interface, a number of public safety challenges may be created for the local fire services: (1) the water supply in the immediate areas may be inadequate for fire suppression; (2) if the Development is in an outlying area, there may be a longer response time for emergency services; (3) in a wildfire emergency, the access road(s) may need to simultaneously support evacuation of residents and the arrival of emergency vehicles; and (4) when wildland fire disasters strike, many structures may be involved simultaneously, quickly exceeding the capability of even the best equipped fire departments.

The following recommendations were developed by the Irwin 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-feet 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. 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.  |  |  |
| 4. 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.   |  |  |
| 5. Codes and Ordinances   | Examine existing codes and ordinances.  Utilize the International Wildland Urban Interface Code (IWUIC) | Amend and enforce existing building codes as they relate to skirting, propane tank locations, public nuisances (trash/debris on property), Property address marking standards and other relevant concerns.  Review the need for subdivision and development ordinances for public safety concerns.  Enforce uniform addressing ordinance. |  |  |

| <b>Proposed Community Wi</b> | ldland Fuel Reduction Pri    | orities  |
|------------------------------|------------------------------|--|
| Treatment Area               | Treatment Types              | Treatment Method(s)  |
| 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. Existing Fire Lines       | Reduce hazardous fuels       | Clean and re-harrow existing lines.  |
| 2. Laisting The Lines        | Reduce hazardous rueis       | Fuel reduction practices in WUI areas near structures.   |
| Proposed Improved Com        | munity Wildland Fire Res     | ponse Priorities   |
| 1. Water Sources             | Dry Hydrants & Dip<br>Sites  | Inspect, maintain and improve access to existing dry hydrants. Add signage along road to mark the hydrants.  Need improved drafting equipment and turbo draft pumps and hose.  GFC to locate and pre-clear additional helicopter dip sites for fire emergencies. |
| 2. Fire Stations             | Equipment                    | Wildland hand tools. Lightweight Wildland PPE Gear.  |
| 3. Water Handling            | Tankers                      | Investigate need for tanker for headquarters station.  |
| 4. Road Names                | Road Signage                 | Improved Road Signage at Crossroads. "Dead End" or "No Outlet" Tags on Road Signs.   |
| 5. Personnel                 | Training                     | Obtain Wildland Fire Suppression training for Fire Personnel. Ready Set Go training.   |
| **Actions to be taken by hom | neowners and community stake | cholders   |

#### **Proposed Education and Outreach Priorities**

#### 1. Conduct "How to Have a Firewise Home" Workshop for Irwin County Residents

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.

Distribute materials promoting firewise practices and planning through local community and governmental meetings.

#### 2. Conduct "Firewise" Workshop for Community Leaders

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 such as Pleasure Lake.

### 3. Spring Clean-up Event (National Wildfire preparedness Day 1<sup>st</sup> Saturday in May annually)

Conduct clean-up event every spring involving the Georgia Forestry Commission, Irwin 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:

- Clean flammable vegetative material from roofs and gutters
- Trim shrubs and vines to 30 feet away from structures
- Trim overhanging limbs
- Clean hazardous or flammable debris from adjacent properties

Celebrate the work with a community cookout, with Community officials, GFC and Irwin County Fire Departments discussing and commending the work accomplished.

#### 4. Informational Packets

Develop and distribute informational packets to be distributed by building permit office, realtors and insurance agents. Included in the packets are the following:

- Be Firewise Around Your Home
- Firewise Guide to Landscape and Construction
- Firewise Communities USA materials
- Ready Set go materials
- Fire Adapted Community information

#### 5. Wildfire Protection Display

Create and exhibit a display for the general public at local events. 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 Irwin County. Utilize radio and social media to reach new audiences.





Above left: A Georgia Forestry Commission brushcutter reducing fuel in a pine stand. Above right: a Front mounted drum type mulcher/mower removing understory vegetation and ladder fuels. This type of fuel reduction work in WUI is practical when prescribed fire is not possible.



Prescribed burning is a best management practice to reduce hazardous fuel buildup. The Georgia Forestry Commission can assist by developing a prescribed burning plan, installation of firebreaks, and can provide equipment standby and burning assistance when personnel are available.

Forestry consultants and contractors can also provide this service.

# VIII. ACTION PLAN

# **Roles and Responsibilities**

The following roles and responsibilities have been developed to implement the action plan:

| Role                              | Responsibility   |
|-----------------------------------|--|
| Hazardous Fuels and Structural Ig | gnitability Reduction  |
| Irwin County WUI Fire<br>Council  | Create this informal team or council comprised of residents, GFC officials, Irwin County Fire Department officials, a representative from the city and county governments along with the county EMA Director. 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          | 1 Defensible Space and Firewise Landscaping  |
|                                   | 2 Debris Burning Safety  |
|                                   | 3 Firewise information for homeowners  |
|                                   | 4 Prescribed burning benefits  |
| Communications objectives         | <ol> <li>Create public awareness for fire danger and defensible space issues</li> <li>Identify most significant human cause fire issues</li> <li>Enlist public support to help prevent these causes</li> <li>Encourage people to employ fire prevention and defensible spaces in their communities.</li> </ol>   |
| Target Audiences                  | <ul> <li>1 Homeowners and Homeowner Associations</li> <li>2 Forest Landowners and users</li> <li>3 Civic Groups</li> <li>4 School Groups</li> </ul>  |
| Methods                           | <ol> <li>News Releases</li> <li>Radio and TV PSA's for area stations and cable access channels</li> <li>Personal Contacts and social media</li> <li>Key messages and prevention tips</li> <li>Visuals such as signs, brochures and posters</li> </ol>  |

| Spring Clean-up Day – National Wildfire Prevention Day (1st Saturday in May annually) |   |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Event Coordinator   | 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, Irwin County Fire Departments and Emergency Management Agency. Procure needed equipment and supplies. In cooperation with 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:

| roject   | Estimated Cost | Potential Funding Source(s)   |
|--|----------------|---|
| 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  | Varies         | Community Business Donations.   |
| National Wildfire Preparedness Day   |                | State Farm grants.  |
| 5. Fuel Reduction Activities   | \$35/acre      | FEMA & USFS Grants.   |

#### **Assessment Strategy**

To accurately assess progress and effectiveness for the action plan, the Irwin 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 Irwin 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 Irwin 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 allrisk structures through creating defensible space, structural protection through the application of ignition resistant construction and limited hazardous fuel reduction to protect life and property.
- 3. With a completed registered plan (addendum to the State Plan) counties can apply for pre-mitigation funding. They will also be eligible for HMGP funding if the county is declared under a wildfire disaster.

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

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

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

#### X. GLOSSARY

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

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

CWPP – The Community Wildfire Protection Plan.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### XI. SOURCES OF INFORMATION

Publications/Brochures/Websites:

- FIREWISE materials can be ordered at www.firewise.org
- Georgia Forestry Commission <u>www.georgiafirewise.org</u>
- 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 <u>www.wildlandfirersg.org</u>
- National Wildfire Preparedness Day www.wildfireprepday.org

#### **Appended Documents:**

Irwin County Southern Wildfire Risk Assessment Summary Report (SWRA) Irwin 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 5645 Riggins Mill Rd. Dry Branch, GA 31020

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