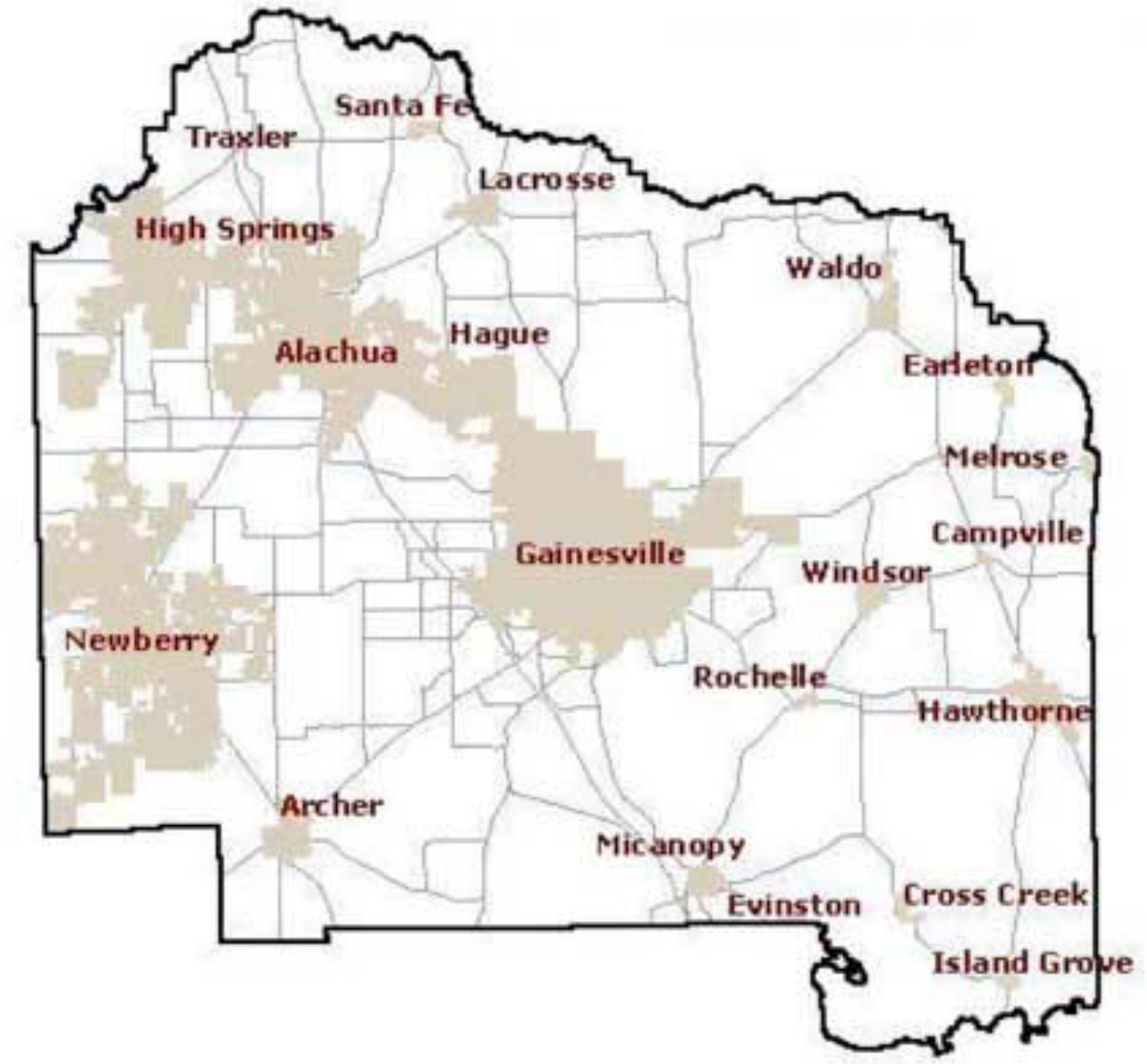
Alachua County Local Mitigation Strategy

2015



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Executive Summary

Alachua County is vulnerable to a variety of hazards that present threats to its communities, businesses and environment. These hazards could be natural, societal or technological and all have the capacity to have significant adverse human, environmental or economic impacts on the community. The Alachua County Local Mitigation Strategy establishes a framework to lessen the vulnerability of Alachua County and its municipalities to these hazards. Alachua County Local Mitigation Strategy addresses projects, policies and programs to reduce the County's vulnerability to the impacts of disasters before and after they happen. The Alachua County Local Mitigation Strategy also outlines actions that are initiated post-disaster to prevent recurring losses from future disasters.

Alachua County Emergency Management [ACEM] is one of many Emergency Management Agencies that conduct multi-hazard mitigation planning. ACEM serves as a liaison for all participating jurisdictions to monitor, coordinate, update and maintain this all-hazard mitigation document in an effort to develop a disaster-resilient and sustainable community. Formal local mitigation planning began in 1998 and is continuing with this 2015 revision to the 2010 Local Mitigation Strategy.

Introduction

Mitigation Framework

The Disaster Mitigation Act of 2000 (Public Law 106-390), which amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act, provides the legal basis for FEMA mitigation planning requirements for State, local and Indian Tribal governments as a condition of mitigation grant assistance. The Disaster Mitigation Act of 2000 requirements emphasize the need for close coordination of State, local, and Indian Tribal mitigation planning and efforts to implement mitigation activities and projects. Mitigation plans are to be based upon an assessment of the likely hazards in a jurisdiction and the vulnerability of that jurisdiction to those hazards. In the development of hazard mitigation plans it is expected that input will be gathered from a wide range of stakeholders who would play a role during implementation of recommended mitigation actions at the Federal, State, regional, and local levels.

LMS Work Group Mission Statement

The Alachua County Local Mitigation Strategy Work Group is committed to implementing effective mitigation strategies to significantly reduce or eliminate loss of life, damage to property, the environment or the local economy due to a natural, societal or technological disaster. These strategies will be expressed in a comprehensive Local Mitigation Strategy (LMS) Plan, to be adopted by Alachua County, participating municipalities, and agencies or institutions. The Local Mitigation Strategy Work Group will rely upon information and resource sharing and the integration of activities among all jurisdictions within Alachua County to develop a coordinated all-hazards interdisciplinary and intergovernmental approach to hazard mitigation.

Mitigation Strategy Goals and Objectives

Goal 1 – Establish an ongoing Local Hazard Mitigation Strategy Planning Process as part of a comprehensive community-based emergency management program to protect public health, life safety, economic vitality, the environment, and property through inter-agency cooperation.

Objective 1.1: Seek participation and LMS Plan adoption by every eligible Local Mitigation Strategy Work Group member agency or jurisdiction.

Objective 1.2: Provide the adopted LMS Plan to the State Hazard Mitigation Office and Federal Emergency Management Agency for review and acceptance.

Objective 1.3: Identify and prioritize projects in the LMS Plan so that participating jurisdictions qualify for hazard mitigation funding and disaster assistance.

Objective 1.4: Provide a process for implementation, ongoing maintenance and periodic updates of the LMS Plan, including the Project Priorities lists and Critical Facilities Inventory.

Objective 1.5: Encourage local jurisdictions to participate in the Community Rating System, National Flood Insurance Program.

Objective 1.6: Foster inter-agency coordination, collaboration, and regional mitigation and prevention activities through open lines of communication, education for elected officials and agency staff, joint-planning efforts, and consistency between various agency(s) emergency preparedness plans, comprehensive plans and other such planning documents.

Goal 2 – Promote disaster resilience for individuals, communities, and businesses through greater self-reliance and public-private partnerships.

Objective 2.1: Foster partnerships with local businesses and Chambers of Commerce to educate the business community and build resilient, disaster-resistant communities (e.g. "Alachua Prepares!" program, Wal-Mart partnership, etc.)

Objective 2.2: Support member agencies of the LMS Work Group in their efforts to increase public awareness and emergency preparedness.

Goal 3 – Engage in hazard mitigation project planning and implementation to protect public health and safety, economic vitality, property, natural and cultural resources, critical facilities and governmental buildings and facilities.

Objective 3.1: Identify, secure and allocate appropriate resources for the mitigation of natural, societal and technological hazards.

Objective 3.2: Develop hazard mitigation proposals for construction and planning projects to protect the county from the effects of ~~civil disturbance, terrorist acts, hazardous materials~~, wildland and urban fire, high winds, storms, flooding, ~~drought,~~ and other hazards.

Objective 3.3: Actively pursue all available funding sources for identified hazard mitigation projects in order to implement these projects and reduce community vulnerability.

Goal 4 – Integrate hazard-mitigation planning into the local Comprehensive Plans and land-use decision-making processes of all jurisdictions in Alachua County.

Objective 4.1: Consider natural and man-made hazards during the land use decision-making process.

Objective 4.2: Provide for mitigation of identified hazards during the development review process.

Objective 4.3: Include hazard mitigation requirements into development approvals and development orders.

County Description

Figure 1. Florida, 1831. Published by A. Finley Philadelphia. J.H. Young Sc. Plan of Tallahassee. Plan of Pensacola. © 1998 – Cartography Associates. This historical cartographic image is part of the David Rumsey Historical Map Collection.

Historic Significance

Originally part of the Spanish Arredondo Grant, Alachua County was created in 1824 as a massive county, extending from the Georgia border to Tampa Bay (Figure 1.). Micanopy was the first inland town in this area established in the early 1800's. Constant partitioning and the Second Seminole War slowed the County's development, but the coming of the Florida Railroad opened up the interior for settlement and trade.

By 1860, Alachua County had over 8,000 inhabitants, and by the end of Reconstruction had a population over 18,000. During the next twenty-five years, the County began to prosper as the citrus and phosphate industries gave it a secure economic base. Gainesville's central location brought two more railroad connections and, with a

population approaching 3,000, the City was one of the state's largest. Archer, High Springs, Melrose, Waldo and Hawthorne were spawned by the railroad expansion and both the citrus and phosphate boom. Although severe freezes in the 1890s blighted some of the prosperity, Alachua County entered the 20th century with a population of 32,000, and a growing economy in the phosphate, cotton and vegetable industries.

By the 1930s, the University of Florida had become the most important staple in the County's economy and helped it weather both the land boom collapse of the mid-1920s and the long depression of the 1930s. During these years before World War II, the County's population remained fairly constant at nearly 40,000, but Gainesville's inhabitants soared to almost 14,000. The postwar era brought Alachua County tremendous population growth and economic expansion.

By the end of the 20th century, the University would enroll 44,000 students, be admitted to the prestigious Association of American Universities, and become one of the major research institutions in the south. By 1970, Alachua County had 104,000 inhabitants with three-fourths of them residing in or around the Gainesville city limits. In the 1980s Gainesville's Duckpond, Southeast and Pleasant Street areas all created historic districts to help preserve their unique residential character and Victorian homes. These preservation efforts encouraged the City of Gainesville's willingness to support significant restoration projects of historic buildings like the Thomas Center, the Hippodrome, and the Seagle and American Legion buildings.

Figure 2. Alachua County and incorporated cities/towns.

Location

Alachua County, Florida, is located in the north central part of the state, 85 miles from the Georgia state line. It is 50 miles from the Gulf of Mexico, and 67 miles from the Atlantic Ocean. Alachua County is bounded by Gilchrist County to the west; Union, Columbia and Bradford Counties to the north; Clay and Putnam Counties to the east, and Marion and Levy Counties to the south (Figure 2).

Land Area and Demographic Data

Alachua County encompasses 977 square miles, which includes approximately 875 square miles of land area. Alachua County has nine municipalities: Gainesville (county seat), Alachua, Archer, Hawthorne, High Springs, Lacrosse, Micanopy, Newberry, and Waldo. The 2014 population estimate of Alachua County by the State Office of Economic and Demographic Research is 250,730 people with approximately 100,380 people within the unincorporated areas. Most of the population can be found within Gainesville including some unincorporated area to the west (Figure 3). The University of Florida enrolls about 47,000 students annually. Appendix A provides a graphical representation of the existing land use patterns in Alachua County and its municipalities. The general land use patterns have not significantly changed in character since the 2009 LMS was prepared. The extent of developed areas has increased during this time frame.

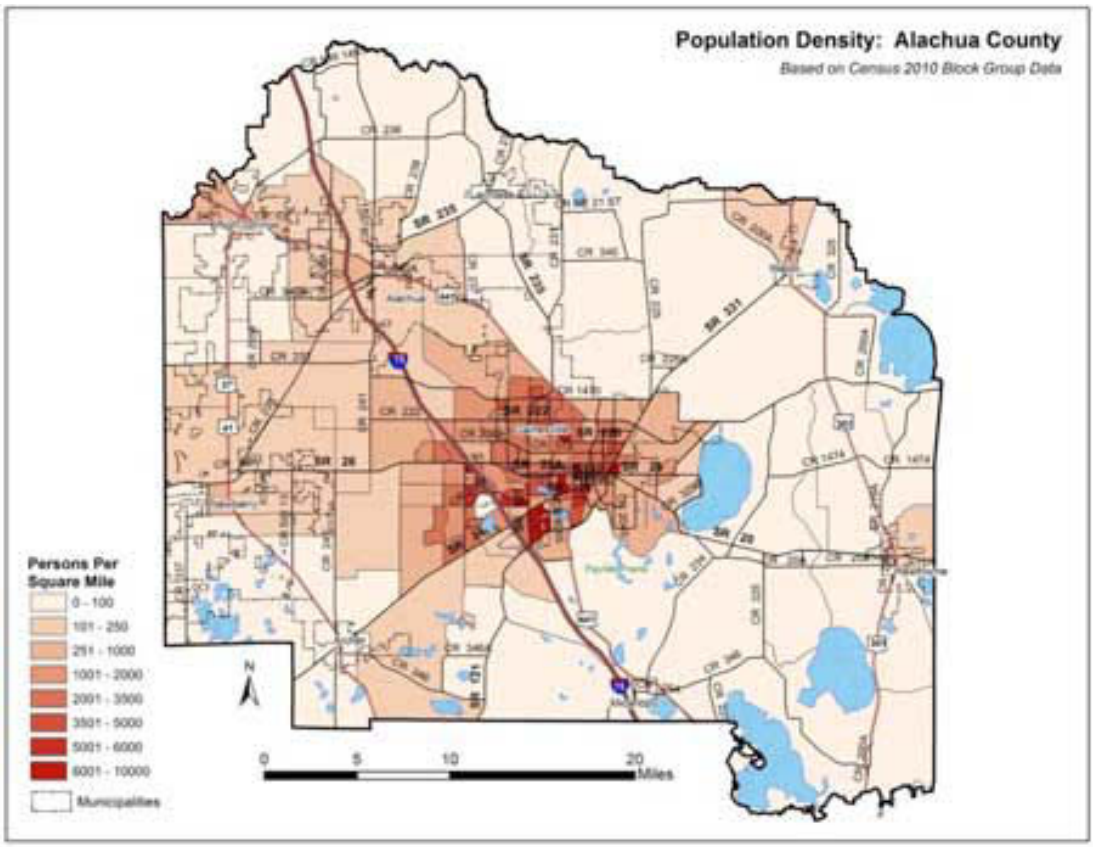


Figure 3. Population density in Alachua County, Florida.

There is a large amount of publicly owned land in Alachua County due to the presence of the University of Florida, State and local conservation land, healthcare facilities and other government institutions. Seven of the top ten employers in the County are public institutions, including the top three: University of Florida, Shands Hospital, and the Alachua County School District (Gainesville Chamber of Commerce 2014). Alachua County serves as the primary regional employment center, accounting for approximately 65% of all employment in the eleven county North Central Florida Region (State of Florida Agency for Workforce Innovation, Labor Market Statistics, "Quarterly Census of Employment and Wages, September, 2008).

Table 1. Summary of demographic data for Alachua County -2010 U.S. Census.

U.S. Census Bureau

Alachua County, Florida

People QuickFacts	Alachua County	Florida
Population, 2013 estimate	253,451	19,552,860
Population, 2010 (April 1) estimates base	247,336	18,802,690
Population, percent change, April 1, 2010 to July 1, 2013	2.5%	4.0%
Population, 2010	247,336	18,801,310
Persons under 5 years, percent, 2013	5.6%	5.5%
Persons under 18 years, percent, 2013	18.0%	20.6%
Persons 65 years and over, percent, 2013	12.0%	18.7%
Female persons, percent, 2013	51.7%	51.1%
White alone, percent, 2013 (a)	71.0%	78.1%
Black or African American alone, percent, 2013 (a)	20.4%	16.7%
American Indian and Alaska Native alone, percent, 2013 (a)	0.3%	0.5%
Asian alone, percent, 2013 (a)	5.7%	2.7%
Native Hawaiian and Other Pacific Islander alone, percent, 2013 (a)	0.1%	0.1%

Two or More Races, percent, 2013	2.5%	1.9%
Hispanic or Latino, percent, 2013 (b)	8.9%	23.6%
White alone, not Hispanic or Latino, percent, 2013	63.2%	56.4%
Living in same house 1 year & over, percent, 2009-2013	74.2%	83.7%
Foreign born persons, percent, 2009-2013	10.7%	19.4%
Language other than English spoken at home, pct age 5+, 2009-2013	13.8%	27.4%
High school graduate or higher, percent of persons age 25+, 2009-2013	91.2%	86.1%
Bachelor's degree or higher, percent of persons age 25+, 2009-2013	40.5%	26.4%
Veterans, 2009-2013	17,015	1,569,406
Mean travel time to work (minutes), workers age 16+, 2009-2013	19.9	25.9
Housing units, 2013	113,159	9,047,612
Homeownership rate, 2009-2013	54.1%	67.1%
Housing units in multi-unit structures, percent, 2009-2013	37.4%	30.1%
Median value of owner-occupied housing units, 2009-2013	$167,900	$160,200
Households, 2009-2013	96,043	7,158,980
Persons per household, 2009-2013	2.43	2.61
Per capita money income in past 12 months (2013 dollars), 2009-2013	$24,857	$26,236
Median household income, 2009-2013	$42,149	$46,956
Persons below poverty level, percent, 2009-2013	24.9%	16.3%

Business QuickFacts	Alachua County	Florida
Private nonfarm establishments, 2012	5,841	502,414[1]
Private nonfarm employment, 2012	82,791	6,932,382[1]
Private nonfarm employment, percent change, 2011-2012	2.4%	3.0%[1]
Nonemployer establishments, 2012	15,970	1,775,605
Total number of firms, 2007	20,676	2,009,589
Black-owned firms, percent, 2007	7.8%	9.0%
American Indian- and Alaska Native-owned firms, percent, 2007	S	0.5%
Asian-owned firms, percent, 2007	3.8%	3.2%
Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007	S	0.1%
Hispanic-owned firms, percent, 2007	6.7%	22.4%
Women-owned firms, percent, 2007	31.6%	28.9%
Manufacturers' shipments, 2007 ($1000)	D	104,832,907
Merchant wholesaler sales, 2007 ($1000)	D	221,641,518
Retail sales, 2007 ($1000)	3,152,244	262,341,127
Retail sales per capita, 2007	$13,124	$14,353
Accommodation and food services sales, 2007 ($1000)	493,980	41,922,059
Building permits, 2012	589	64,810

Geography QuickFacts	Alachua County	Florida
Land area in square miles, 2010	875.02	53,624.76
Persons per square mile, 2010	282.7	350.6
FIPS Code	001	12
Metropolitan or Micropolitan Statistical Area	Gainesville, FL Metro Area	

Source: ***http://quickfacts.census.gov/qfd***

Climate

Alachua County lies in the northern central part of Florida where maritime influences are somewhat less than along coastlines at the same latitude. As the map below shows, Alachua County is located in the Southeast region of the country, which includes the states of Alabama, Georgia, North Carolina, South Carolina and Tennessee.

In January, the Southeast is cool and mild. Most of the precipitation falls from frontal systems that develop in the northern and central United States and move southerly. Snow in the Southeast is typically further north and inland.

In July, however, the Southeast is hot, humid and typically receives significant rainfall. The rainfall comes from thunderstorms, which develop from the warm, humid conditions.

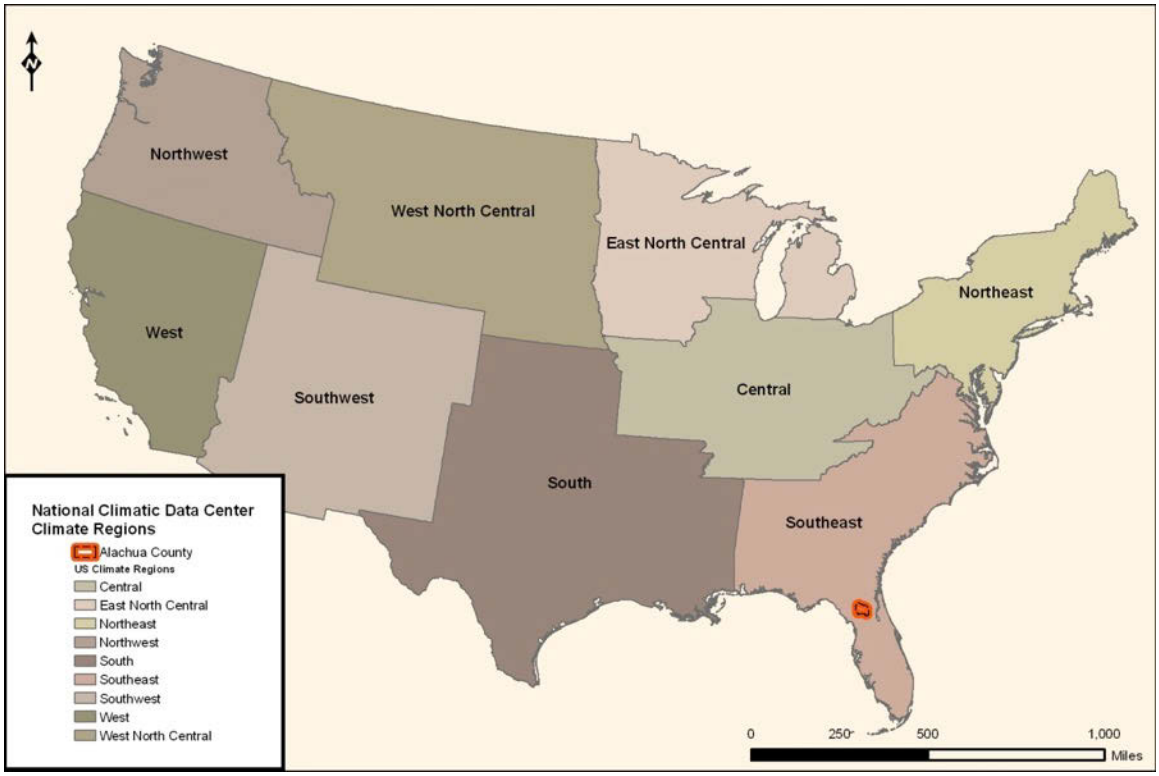


Figure 4. National climate regions.

Record low: 10 degrees F on January 21, 1985.

Record High: 103 degrees F on June 4-5, 1985

Average date of first freeze: December 7.

Earliest freeze on record: November 1, 1993.

Greatest number of consecutive days when the temperature was 20 degrees or below: December 24 and 25, 1989.

Greatest number of consecutive days when the temperature was at or below 32 degrees: December 16-24, 1960

The average temperature is 68.4 degrees.

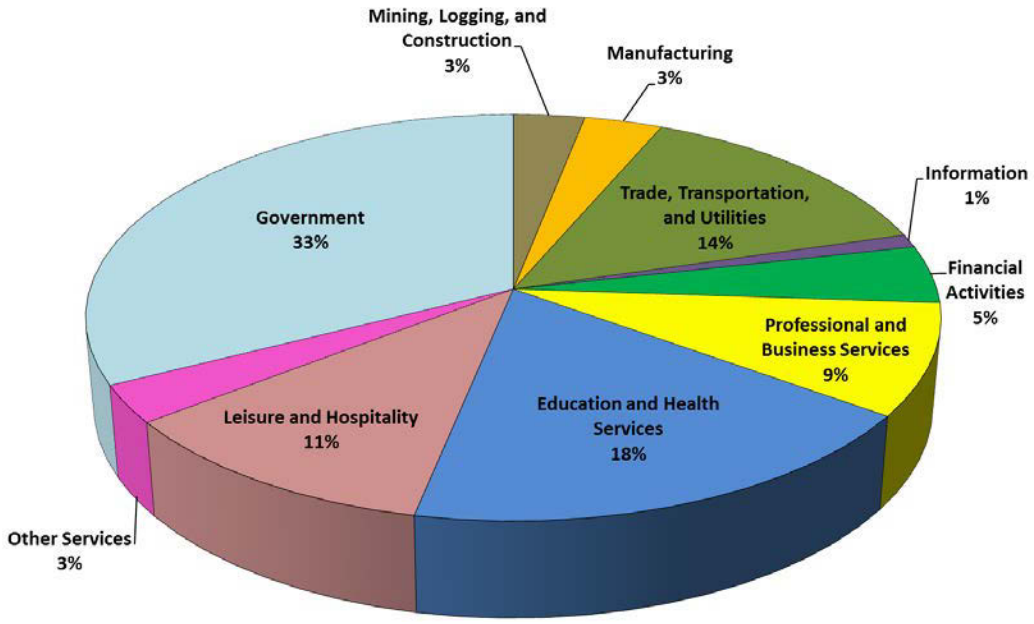
The average precipitation is 51.8 inches per year.

The average wind speed is 6.7 miles per hour and the average relative humidity is 77 percent.

Economy

The economy of Alachua County is heavily oriented toward the education and health care industries. The figure below represents employment by industry within Alachua County. Almost 50 percent of the community's employment is derived from education, health care and state and local government activities. The lowest segment of the community's employment, information systems, accounts for one percent of Alachua's economy (Figure 5).

Figure 5. Employment by Industry, Alachua County



Source: U.S. Bureau of Labor Statistics, October 2014 Employment Data

Major Employers in Alachua County

Corporation	Industry	Number of Employees (Approx.)
University of Florida	Education	27,870
UF Health Care	Healthcare	12,000
Alachua County School Board	Education	4,200
Veterans Affairs Medical Center	Healthcare	3,500
City of Gainesville	Government	2,270
Publix Supermarkets	Retail	2,160
North Florida Regional Medical Center	Healthcare	2,100
Gator Dining Services	Food Services	1,200
Nationwide Insurance Company	Insurance	950
Wal-Mart Stores	Retail	910
Alachua County Sheriff's Office	Government	860
Alachua County	Government	780
Santa Fe College	Education	750
Wal-Mart Distribution Center	Retail	520
Dollar General Distribution Center	Retail	500
RTI Surgical	Medical Manufacturing	500

Source: Gainesville Chamber of Commerce

http://www.gainesvillechamber.com/economic-development/site-selection/gainesville-overview/major-employers/

Planning Process and Plan Maintenance

This section addresses

Emergency Management Accreditation Program (EMAP) Standard (2013)

Hazard Mitigation | Participation | 4.4.2

Hazard Mitigation | Planning Process | 4.4.5

Planning Process

The Alachua County Local Mitigation Strategy was significantly revised in 2009 by a multi-jurisdiction, multi-agency work group coordinated by Alachua County Emergency Management. The LMS Work Group is composed of representatives of local, regional, and state entities. This 2015 update to the LMS represents another significant update and review of the mitigation efforts in Alachua County. This 2015 update was developed by Alachua County Emergency Management and coordinated with the 2015 LMS Work Group. The membership of the 2015 LMS Work Group is listed in Appendix K. The LMS Work Group is composed of representatives from Alachua County; the municipalities of Alachua, Archer, Gainesville, Hawthorne, High Springs, La Crosse, Micanopy, Newberry, and Waldo; regional and state agencies such as Suwannee and St. Johns River Water Management Districts and the Florida Department of Transportation, non-governmental organizations such as Alachua Conservation Trust, educational organizations, and the Alachua County Library District. LMS Work Group members are kept informed of Work Group meetings, revisions to the LMS, information concerning mitigation, notices of funding availability, and similar information through direct contact either in person or by telephone and email. New stakeholders are invited to join the LMS Work Group as they are identified.

Public comment on the revised LMS was invited using the Alachua County Emergency Management webpage and social media, the Alachua County Communications Office outreach network and social media, as well as legal ads posted for all LMS Work Group meetings. As required by the LMS Work Group bylaws, all meetings of the LMS Work Group are open to the public and are noticed in the Gainesville Sun [a newspaper of general circulation in Alachua County] and on the Alachua County Emergency Management website. See Appendix K for LMS Work Group and Project Ranking Task Force meeting agendas, meeting minutes, social media postings, email notices and press releases.

Plan Maintenance

Alachua County Emergency Management is responsible for the development, monitoring, evaluation, review, maintenance and update of the Alachua County Local Mitigation Strategy. A current copy of the LMS is on the Alachua County Emergency Management website and is available for public review and comment at any time. Generally the LMS is reviewed, evaluated and updated in three timeframes:

the required five-year update, an annual review and progress report, and as needed to address the impacts or consequences of an incident.

The Alachua County LMS will be reviewed and updated as required by Title 44, Part 201 of the Code of Federal Regulations [five-year update]. During the required 5-year update to the LMS, the LMS will be reviewed and evaluated to determine changes in local conditions that may affect mitigation strategies, changes in review criteria or statutory requirements that require action, and needed adjustments to the goals of the LMS. The five-year update is developed by Alachua County Emergency Management and coordinated with the LMS Work Group. The five-year update to the LMS has historically been a major overhaul of the document and a significant review of the hazard mitigation efforts in Alachua County. Substantive changes to the LMS – such as those made during a five-year update- are ultimately ratified by the governing bodies of the local governments and the appropriate representatives of other participating entities.

As part of the required annual reporting process to the Florida Division of Emergency Management and to support the National Flood Insurance Program Community Rating System, an annual review of the LMS is conducted and the results provided in an annual report. This annual report is typically generated by Alachua County Emergency Management and then finalized in coordination with the LMS Work Group. The annual report summarizes the progress towards meeting the goals of the LMS and the mitigation activities that have occurred during the preceding year. During the preparation of this annual report each participating will be asked to summarize their mitigation activities during the preceding year and the extent to which their activities have achieved the goals of the LMS. The annual report will also identify any needed modifications, amendments, or maintenance needed to keep the LMS current.

During this annual review process, the LMS will be amended as needed to reflect new mitigation projects and proposals, summarize completed mitigation projects, and evaluate the effectiveness of mitigation efforts once tested. Appendix D. *Overview of Completed Mitigation Projects,* will be amended as needed to reflect completed projects. When incidents or events occur that test these projects the relative effectiveness of these projects will be assessed. Typically new mitigation project proposals are solicited from the members of the LMS Work Group annually. The mitigation projects are then reviewed and ranked by the Ranking Task Force. An amended Project List is then approved by the LMS Work Group, typically at the last meeting of the calendar year when Work Group officers are selected for the coming year.

The LMS will be amended and updated as needed to appropriately respond to the consequences of a disaster or incident that may present opportunities for mitigation activities, the potential consequences of an identified hazard, or to further the hazard mitigation efforts of Alachua County, its municipalities, and other stakeholders. Any changes to the Alachua County LMS that may be outside of the five-year update are coordinated with, reviewed, and approved by the LMS Work Group as the representatives of the member local governments and other stakeholders. During post-incident damage assessments and recovery activities, potential hazard mitigation opportunities will be

identified and hazard mitigation projects will be developed by the LMS Work Group for their respective jurisdictions. If the extent of the incident is such that the Post Disaster Redevelopment Plan is activated, hazard mitigation projects will be developed and vetted as a cooperative effort of the LMS Work Group and the Redevelopment Task Force.

The general public is encouraged to engage the LMS planning process in particular and hazard awareness and mitigation in general at any time. As noted in the Mitigation Strategy section of this document, all levels of government attempt to engage the public in disaster awareness, preparation, and mitigation effort throughout the year on a nearly continuous basis.

Hazard Analysis

This section addresses

Emergency Management Accreditation Program (EMAP) Standard (2013)

Hazard Identification, Risk Assessment, Consequence Analysis | Hazard Identification | 4.3.1

Hazard Mitigation | Hazard Identification | 4.4.5

Alachua County is vulnerable- to varying degrees- to a wide array of hazards and the impact from incidents that affect the community, businesses, and environment. The following hazard analysis is used to determine the hazards that pose the greatest threats to Alachua County and is developed from historical data. The hazards that have historically and that are likely to continue to pose the greatest threats to Alachua County are inland flooding and wind damage associated with severe storm events, and wildfire.

Hazard Summary

Hazard	Probability	Consequence	Frequency
Tropical Cyclone			
Minor Storm	Moderate	Moderate	3-5 years
Major Storm	Low	Major	100 years
Flooding			
Localized	High	Minor to Moderate	2-3 years
Widespread	Moderate	Major	10 years
Wildland Fire	High	Moderate	Annual – multiple fires See Table 4
Severe Weather			
Thunderstorms	High	Moderate	Annual
Tornadoes	Moderate	Low to Moderate	3-5 years

Probability: High= near certainty, 80-100% likelihood of occurring

Moderate= likely to happen, 20-80% likelihood of occurring

Low= not likely to happen, less than 20% likelihood of occurring

Consequence: Major= widespread damage to or destruction of community assets/critical facilities [utilities, roadways, buildings] and private structures.

Moderate= damage to specific areas, older structures, modular or mobile homes, or low lying areas. Limited damage to community assets/critical facilities.

Low= damage to very limited areas. Little damage to community assets/critical facilities.

Tropical Cyclones [Hurricanes, Tropical Storms]

A tropical cyclone is a rotating, organized system of clouds and thunderstorms that originates over tropical or subtropical waters and has a closed low-level circulation. Tropical cyclones rotate counterclockwise in the Northern Hemisphere. Tropical cyclones are classified as follows:

- **Tropical Depression:** A tropical cyclone with maximum sustained winds of 38 mph (33 knots) or less.
- **Tropical Storm:** A tropical cyclone with maximum sustained winds of 39 to 73 mph (34 to 63 knots).
- **Hurricane:** A tropical cyclone with maximum sustained winds of 74 mph (64 knots) or higher. In the western North Pacific, hurricanes are called typhoons; similar storms in the Indian Ocean and South Pacific Ocean are called cyclones.
- **Major Hurricane:** A tropical cyclone with maximum sustained winds of 111 mph (96 knots) or higher, corresponding to a Category 3, 4 or 5 on the Saffir-Simpson Hurricane Wind Scale

Alachua County is located approximately sixty miles from both the Atlantic Ocean and Gulf of Mexico Coasts. Therefore it is subject to the effects of tropical cyclones and it is likely that tropical cyclones could affect Alachua County in any given year. Hurricane winds and other hazards associated with strong tropical systems have reached our area. The storm of record for Alachua County was the Storm of 1896 which was a strong Category 3 storm when it passed through northwestern Alachua County. As this storm was the most powerful storm documented to have affected Alachua County it can be assumed that such a storm could occur again in Alachua County. Hurricanes Frances and Jean in 2004 were tropical storms when they passed through Alachua County. Combined the two storms caused an estimated $75 million in damage. By comparison, were a major hurricane to pass through Alachua County – such as the 1896 Storm – the damage would be much more extensive. A HAZUS software estimate of structural damage [based upon 2014 values] for a 100-year return interval storm – like the 1896 Storm- is on the order of $300 million.

The exact extent of damaging inland winds is dependent upon the strength and forward speed of each specific storm, in addition to damage that may occur from tornadoes and inland flooding. Since 1970 flooding has been the leading cause of tropical cyclonic deaths in the nation. Residents living in structurally unsound housing, manufactured housing, and low-lying areas face the greatest threat. However, the entire population of Alachua County is vulnerable to tropical cyclone weather events. Extensive damage to infrastructure, public and private property can be anticipated. Primary hazards from this type of event include tornadoes, fresh water flooding from heavy rainfall, and extensive wind damage. Figure 6 indicates the tracks of tropical cyclones over north Florida for an approximately 140-year period.

During the 2010-2015 time period two tropical systems affected Alachua County: TS Debbie in 2012 and TS Andrea in 2013 .

TS Debbie was primarily a rain event in Alachua County and caused flooding in the Santa Fe River basin. Gainesville received its second-highest daily rain total of 6.95 inches on June 24, 2012. Several structures along the Santa Fe River near High Springs in northwestern Alachua County were affected by flood waters and several roadways in the area were closed. However, no widespread damage to structures was reported during this event.

The NWS Storm Events Database lists Tropical Storm Andrea as affecting Alachua County on June 6, 2013. During this storm it was noted that trees were blown down and blocked NE 12th Street near 31st Avenue in Gainesville. At 12:35 pm, a road was closed due to flooding at SW Depot Ave in the 700 block, located in Gainesville. The highest rainfall amount in Alachua was measured by a Community Collaborative Rain, Hail and Snow Network [CoCoRaHS] observer located 7 miles W of Micanopy which was 1.87 inches. The highest wind gust measured by the Gainesville Regional Airport ASOS was 28 knots from the SE on June 6th at 3:28 pm.

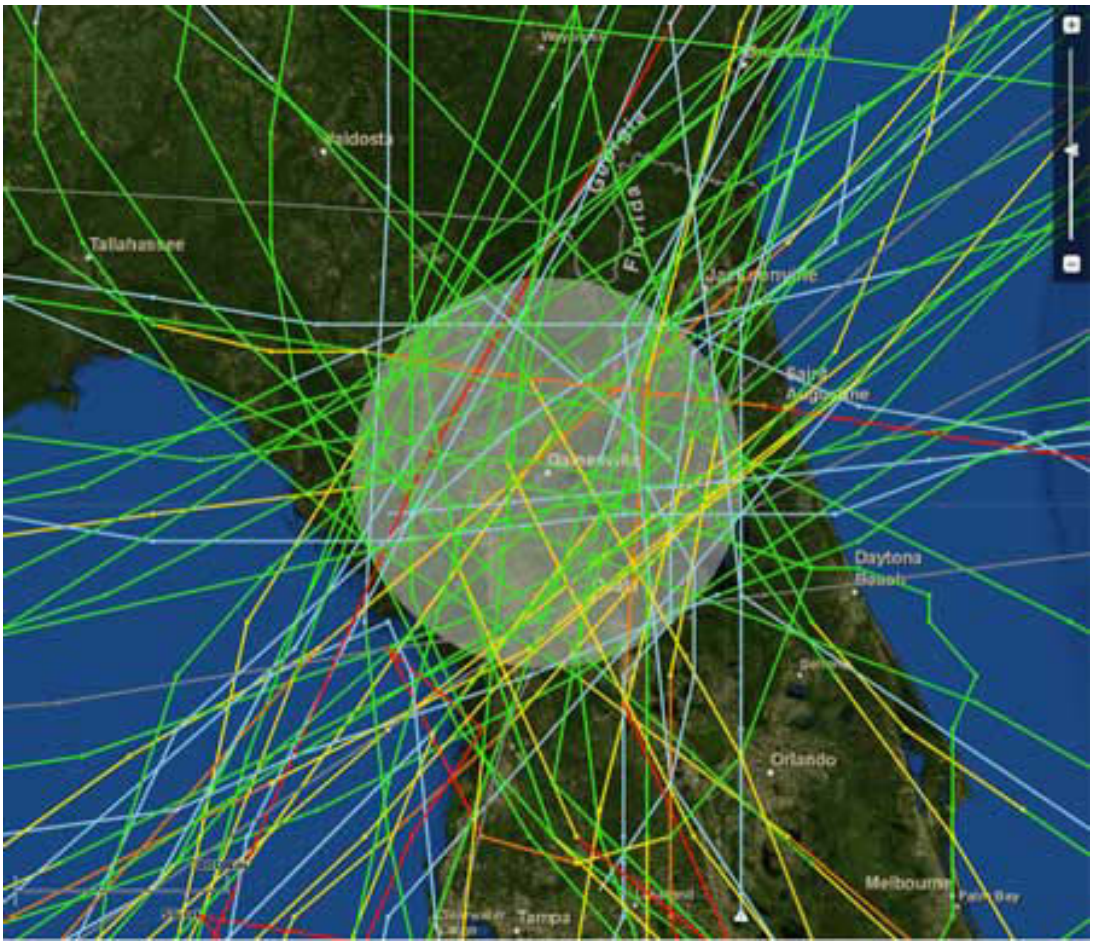


Figure 6. Hurricane and Tropical Storm Tracks 1867 to 2008. Source: NOAA, Historical Hurricane Tracks.

Floods

A flood is defined as an overflow of water that submerges land which is usually dry. Floodplain is an area of land adjacent to a river or stream that stretches from the banks of its channel to the base of the enclosing valley walls and experiences flooding during periods of high discharge. Alachua County also has areas of floodplain that are associated with closed basins that have no outfall to other external bodies of water such as a stream or river. In these closed basins the primary cause of flooding is direct rainfall rather than riverine flooding.

There are areas of the county which are part of river watersheds that are vulnerable to flooding from rising water. These areas include the extreme southeast portion of the county along the shores of Newnans, Orange and Lochloosa Lakes; portions of Gainesville along Hogtown Creek; and the Santa Fe River floodplain. Flooding within the floodplain of the Santa Fe River did occur in 2012 associated with Tropical Storm Debbie. At this time historical peak river levels were established for three Alachua County stage locations on the Santa Fe River in 2012: gauge near I-75 in O'Leno State Park 55.12' (flood stage 43'), gauge in O'Leno State Park 52.46', and gauge at US 441 Bridge 46.10' (flood stage 35'). [See *Historical River Level Elevations* table in Appendix M]

The impacts from this flooding event were limited to properties and structures immediately along the Santa Fe River and roadways in the area which were made impassable by flood waters. Some of the affected structures have been constructed or retro-fitted such that the vulnerability to flooding has been reduced. The Santa Fe River floodplain is routinely inundated during annual rainy seasons and significant rain events.

A large percentage of the eastern half of Alachua County lies in the 100-year floodplain [See Figure 7]. However, much of this area in eastern Alachua County currently in silvicultural and agricultural uses, or is publically owned such as Payne's Prairie State Park and so contains limited structural development. Currently the population concentrations and developed areas in eastern Alachua County are generally associated with the communities of Cross Creek, Island Grove, Hawthorne, Melrose, Waldo, and the eastern section of Gainesville.

The other flooding threat involves storm water runoff that occurs in many locations. Stormwater runoff can be exacerbated by an increase in impervious surfaces associated with development in areas subject to flooding. Please see Appendix L: Alachua County Stormwater Management Master Plan for a detailed discussion of the documented flooding problem areas in unincorporated Alachua County. This study provides a prioritized list of flooding problem areas, a characterization of the vulnerability of these areas to flooding, and descriptions of these areas including estimates of peak stage conditions in design storm events as well as suggested remedies for each area. Five flood mitigation projects for this LMS update were developed from this stormwater master plan and included in the prioritized list of projects in Appendix G. This stormwater master plan documents the last significant flooding events which occurred in Alachua County in 2004 and 2005. No flooding comparable to the 2004-05 events has occurred in Alachua County since that time, however it is expected similar flood impacts can and will occur again in these areas if the conditions are not mitigated.

In addition to providing flood insurance and reducing flood damages through floodplain management regulations, the National Flood Insurance Program (NFIP) identifies and maps Alachua County's floodplains. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed for floodplain management programs and to actuarially rate new construction for flood insurance. Lack of flood insurance could result in large uninsured losses in those areas. The nine municipalities in Alachua County, as well as Alachua County, all currently participate in the NFIP. [Table 3.]

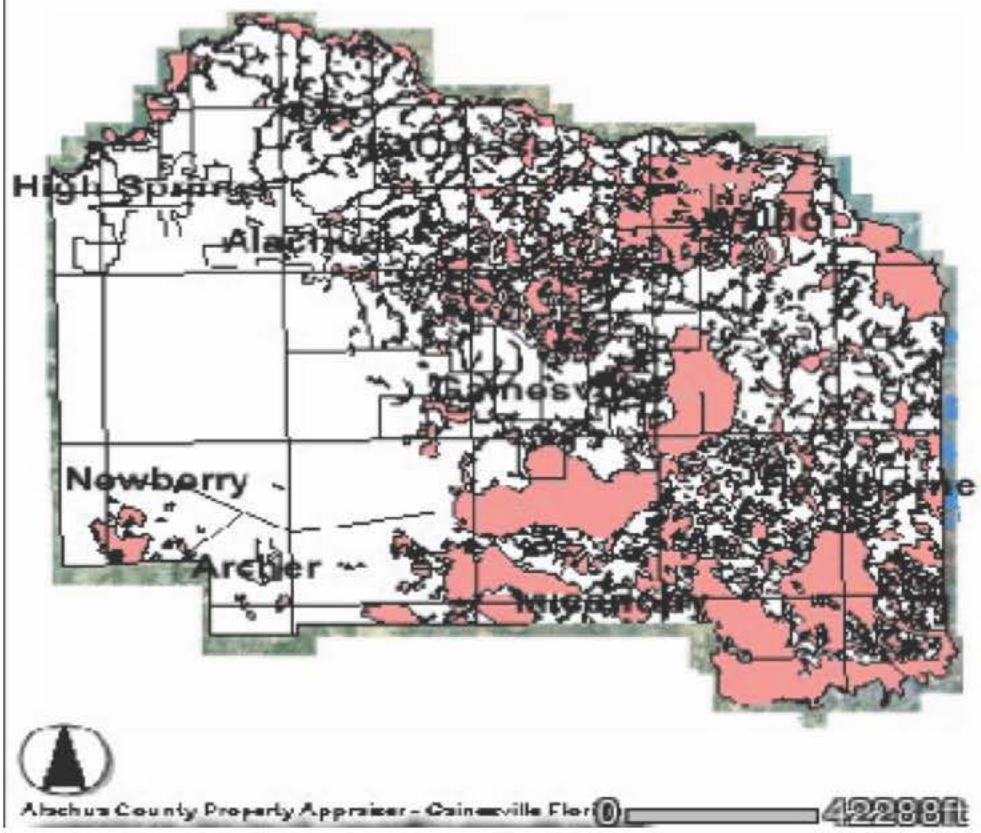


Figure 7. Flood hazard areas

Table 4. Alachua County Communities Participating in National Flood Insurance Program

NFIP #	Community Name	Joined NFIP	Current FIRM Date
120001	***Alachua County CRS Class 6**	09/28/84	06/16/06
120664	City of Alachua	06/09/94	06/16/06
120670	City of Archer	06/09/94	06/16/06
125107	***City of Gainesville CRS Class 7**	10/01/71	06/16/06
120669	City of High Springs	03/24/94	06/16/06
120626	Town of La Crosse	12/13/11	06/16/06
120344	Town of Micanopy	06/16/06	06/16/06
120679	City of Newberry	02/03/00	06/16/06
120003	City of Waldo	11/04/88	06/16/06
120682	City of Hawthorne	07/29/10	06/16/06

Source: National Flood Insurance Program Community Status Book

The National Flood Insurance Program's Community Rating System (CRS) is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance. As a class six (6) community, policy holders in unincorporated Alachua County qualify for up to a 20% premium discount. As noted in the adopted Alachua County Local Mitigation Strategy, Alachua County's Comprehensive Plan and Unified Land Development Code regulate and restrict development in floodplains. As a class seven (7) community, policy holders in the incorporated limits of the City of Gainesville qualify for up to a 15% premium discount.

There are currently two identified repetitive flood loss properties in unincorporated Alachua County: one in northwestern Alachua County adjacent to the Santa Fe River and one in eastern Alachua County adjacent to Newnan's Lake. Both properties are residential. Structures on these properties were built prior to either Gainesville or Alachua County entering the National Flood Insurance Program. Annually as part of the Community Rating System recertification process these property owners are sent

information about the National Flood Insurance Program, flood safety, and property protection. As flooding impacts to these properties have been limited and infrequent neither of these property owners have expressed interest in selling their properties or retrofitting structures.

Wildland fires (Brush fires, Wildfires, and Forest Fires)

A wildland fire is a fire occurring on wildland that is not meeting management objectives and therefore would require a suppression response to avoid damage to natural areas or property and threats to life safety. Florida's typical 'fire season' is January through May. Since 1998, more than 15,000 Florida wildfires have burned over one million acres and destroyed more than 750 structures across the state. The most at risk portions of Alachua County are the urban interface and rural areas where wildland fuels are present. In addition to the potential for structural damage, wildland fires can also cause significant loses and destruction for timber interests in Alachua County. Table 4. provides a summary of wildland fires that occurred in Alachua County during the 2010-2014 time frame. The primary losses attributable to these wildfires were agricultural and timber resources. In any given year it is likely that wildfires will occur somewhere in Alachua County. In extended dry periods – such as occurred in 1998 after a strong El Nino event – wildland fire is a near certainty. It is during these extended dry periods when the largest wildland fires and the most extreme fire behavior occur such as the 1998 fire season when every county in Florida experienced one or more large fires or fire complexes.

The wildland urban interface is generally described as those areas where development meets wildland areas ["where the eaves meet the trees"]. This wildland urban interface area with community features at risk generally surrounds the municipalities in Alachua County where development has occurred. The community features in the WUI include residential and non-residential land uses; infrastructure and critical facilities such as electrical, water, and waste water facilities; and other structures. The most at risk area for structural loss due to wildfire is the wildland urban interface [WUI]. The wildland urban interface area risk maps do not generally capture timber and other natural resources that may be at risk from wildland fire. There are approximately 160,000 acres in the WUI of Alachua County that are at risk of at least moderate impacts up to major impacts from wildland fire – as indicated on page 12 of Appendix C, *Southern Wildfire Risk Assessment Report- Alachua County Wildland Urban Interface Risk* .

The wildland fires of at least 25 acres in size to affect Alachua County during the 2010-2015 timeframe were as follows:

Boat Ramp Fire	**3/15/10**	**230 acres**
Marsh Road Fire/0635	**10/30/10**	**55 acres**
Campville #1 Fire	**12/16/10**	**25 acres**
Burnt Island Fire	**12/21/10**	**2,616 acres**
Orange Lake Fire	**1/16/11**	**305 acres**
Wilson Fire	**1/28/11**	**25 acres**
CR 225 Fire	**1/29/11**	**30 acres**
Pine Plantation Fire	**2/ 1/11**	**25 acres**
81st Street Fire	**2/14/11**	**35 acres**
325 Park Fire	**6/ 7/11**	**29 acres**
S.E. 162 Fire	**6/19/11**	**123 acres**
Payne's Prairie Fire	**8/ 6/11**	**243 acres**
Boardwalk Fire	**1/28/12**	**62 acres**

Data courtesy of Florida Forest Service.

Figure 8. is a graphical representation of the wildland urban interface areas in Alachua County that are susceptible to wildland fire and that have community features that would be at risk during a wildfire. Appendix C is a summary report of the wildland fire hazards in Alachua County from the Southern Wildfire Risk Assessment.

Table 4. Wildland Fire Summary, Alachua County, 2010-2014. Information courtesy of Florida Forest Service.

		2010	2011	2012	2013	2014
Lightning	Fires	3	46	9	1	1
	Acres	13	686	10	1	1
Campfires	Fires	2	2	3	0	3
	Acres	9	1	3	0	4
Smoking	Fires	0	0	0	1	0
	Acres	0	0	0	1	0
Debris Burning	Fires	22	25	15	7	5
	Acres	80	160	37	7	71
Incendiary	Fires	6	9	3	3	0
	Acres	368	18	1	24	0
Equipment	Fires	12	4	1	0	0
	Acres	21	12	5	0	0
Railroad	Fires	0	0	0	0	0
	Acres	0	0	0	0	0
Children	Fires	2	1	4	0	0
	Acres	4	4	1	0	0
Unknown	Fires	23	34	22	8	5
	Acres	2774	456	2187	33	26
Miscellaneous	Fires	5	14	9	3	2
	Acres	4	127	8	2	1
Total	**Fires**	**75**	**135**	**66**	**23**	**16**
	Acres	**3273**	**1464**	**2252**	**68**	**103**

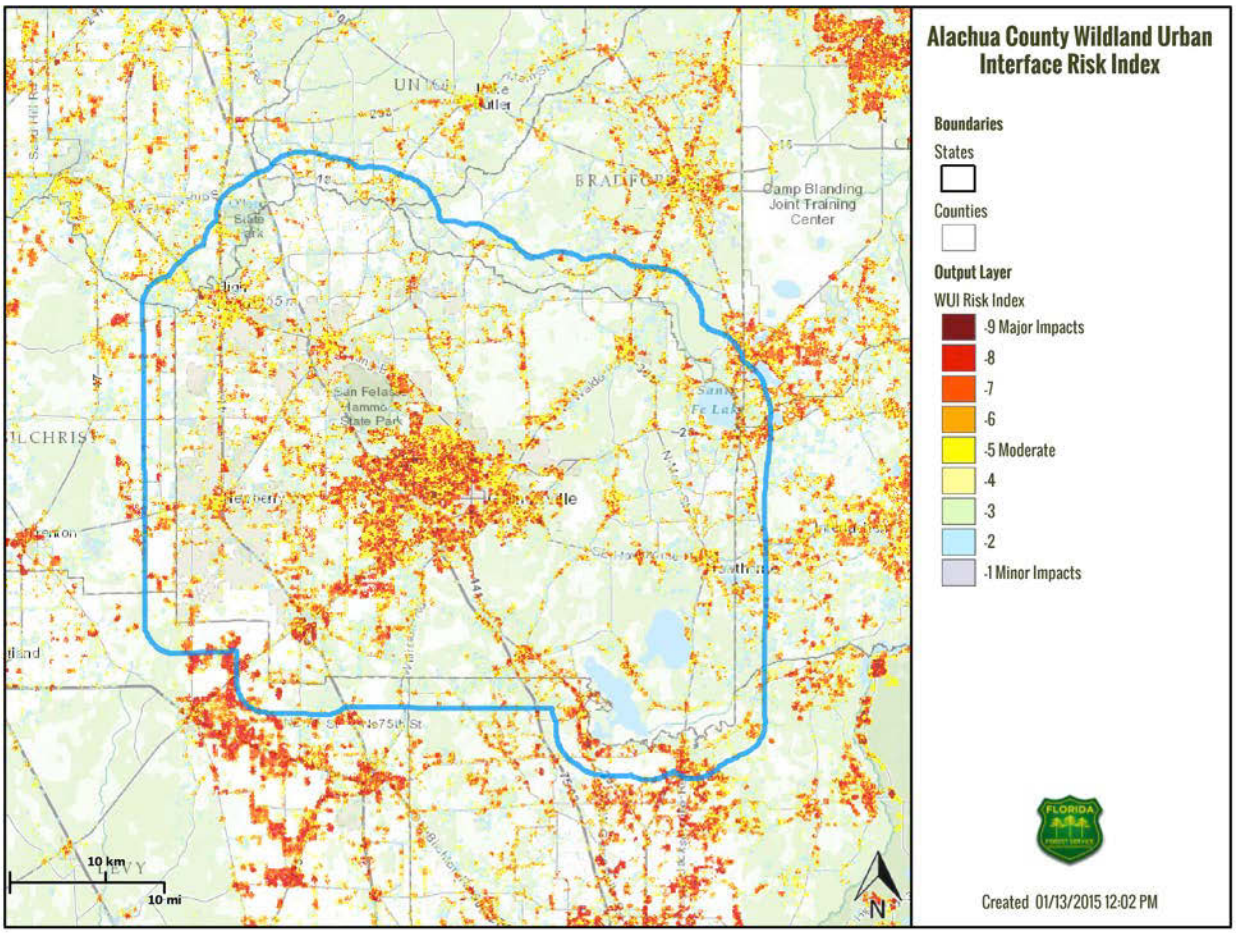


Figure 8. Alachua County Wildland Urban Interface Risk Index.

Thunderstorms and Tornadoes

Severe Thunderstorms. The National Weather Service classifies a storm as severe if it produces hail at least three-fourths of an inch in diameter, winds of 58 mph or greater, or tornadoes. The entire County is vulnerable to the damaging winds, flood-producing rain, lightning, hail and tornadoes these storms can produce. Between April 2010 and August 2014 Alachua County experienced 82 severe thunderstorm weather events [NWS, Previous Occurrence of Weather Related Hazard Events]. NOAA has estimated that during the period of 2003 to 2012 north central Florida experienced –on average- 22 severe weather days per year and 17 severe thunderstorm days per year. It is reasonable to assume that similar severe thunderstorm events and similar impacts as noted below can be expected in future years. While the impacts of severe thunderstorms have been limited in scope and area during the last five years, the potential for these weather events to cause much more significant damage and harm remains. Severe thunderstorms can produce strong winds, rain, lightning, hail, and tornados as noted below. [R5,6,7,8]

Severe Thunderstorm Winds. From January 1, 2010 and December 31, 2015 there were 52 days with thunderstorm winds of at least 40 knots. During this time there were 13 incidents on these wind days where property damage occurred. The incidents are as follows:

April 25, 2015 – Estimated gust of 50 knots. A person was trapped in a home when a tree fell onto the structure along Southeast 73rd Terrace. The cost of damage was estimated at $2000.

April 30, 2010 - Estimated gust of 61 knots. Trees were blown down across the parking lot at 5830 NW 39th Avenue in Gainesville. Two telephone connection boxes were also damaged. The cost of damage was estimated at $3000. The Gainesville Sun reported that a woman was trapped inside her home due to trees that were blown down on it. The cost of damage was estimated at $5000. No injuries were reported. Estimated gust of 52 knots. The Gainesville Sun reported a car port was destroyed in the Brittany Estates area off of Waldo Road. The cost of damage was estimated to be $1000. A measured gust of 57 knots flipped a Cessna plane at the Gainesville Regional Airport. No injuries were reported. The ASOS at the airport measured a wind gust of 57 mph at the time of damage. The cost of damage was estimated to be $1000. An estimated gust of 61 knots was reported to have caused widespread damage at County Road 325 and Southeast 143 Street. Six large trees were either uprooted or snapped along a quarter mile path. All board fences along the path were blown over and power lines were blown down. The cost of damage was estimated at $8000.

July 28, 2010 - Estimated gust of 45 knots. A tree fell through a roof at 1012 Northwest 51st Terrace, Gainesville. The cost of damage was estimated to be $ 3000.

March 24, 2013 - Estimated gust of 45 knots. A tree was blown down on a home which resulted in a minor injury to the home homeowner. The time of damage was based on radar. Damage was estimated at $5000 for inclusion in Storm Data. Estimated gust of 45 knots. Trees were blown down at SE County Road 2082 and County Road 234. One tree hit a bridge on County Road 234 and the road was closed until the bridge was inspected and considered safe for travel. Damage was estimated at $3000 for event inclusion in Storm Data.

August 22, 2014 - Estimated gust of 45 knots. Trees were blown down along County Road 225, north of Gainesville. Damage was estimated at $1000 for the event to be included in Storm Data.

April 19, 2015 - Estimated gust of 40 knots. Wind damage impacted a home and damaged the outdoor canopy. The cost of damage was unknown. The canopy was the only damage in the area. No tree damage was reported. Damage was estimated at $2000 for the event to be included in NWS Storm Data.

May 31, 2015 - Estimated Gust of 40 knots. A tree was blown down and blocked the road at 1504 NW 61st Terrace. The cost of damage was unknown but it was estimated at $500 for the event to be included in NWS Storm Data.

June 30, 2015 - Estimated gust 45 knots. Two trees were blown down in Gainesville. The time of damage was based on radar. Cost of damage was estimated at $1000 for inclusion in NWS Storm Data.

July 2, 2015 - Estimated gust of 45 knots. A tree was blown down on a home at NW 3rd Avenue and NW 17th Street. The cost of damage was unknown, but it was estimated for Storm Data. Estimated gust of 45 knots. Power lines were blown down at 108 NE 9th Street. The cost of damage was unknown, but it was estimated at $500 for inclusion in Storm Data.

July 17, 2015 - Estimated gust of 45 knots. A tree was blown down onto a porch on NE 20th Street. The cost of damage was unknown but estimated at $1000 for Storm Data inclusion.

July 20, 2015 - Estimated gust of 40 knots. A tree was blown down onto a power line in High Springs. The cost of damage was unknown but estimated at $500 for inclusion in Storm Data.

August 13, 2015 – Estimated gust of 45 knots. A tree was blown down near the intersection of County Roads 346 and 225. The cost of damage was estimated at $500 for inclusion in Storm Data.

September 12, 2015 – Estimated gust of 45 knots. A large tree was blown down near 222nd Street and 165th Avenue. The cost of damage was estimated at $500 for inclusion in Storm Data.

Lightning. According to the National Lightning Detection Network, Alachua County experienced 12 – 20 lightning flashes per square mile per year for the years 2005 to 2014. The NWS Storm Events Database documented four lightning events in the 2010-2015 time period in which damage was reported: January 25, 2011, lightning struck a home on SW 282nd Street in Archer and started a fire which destroyed the home. The cost of property loss was estimated to be $200,000 based on an average of home prices in the area. July 10, 2012, a lightning strike caused fire damage at a business on NW 13th Street in Gainesville. The time of the fire was based on radar and lightning data. The cost of damage was unknown and was estimated at $1000 for inclusion in Storm Data. May 15, 2014, lightning struck a large boat which caused a fire. Significant damage occurred to the boat. The cost of damage was unknown, but it was estimated at $10,000 so the event could be included in Storm Data. This estimated value is likely inaccurate. June 8, 2014, one person was injured by a lightning strike at 2706 NW 245th Drive in Newberry. Lightning can also be responsible igniting wildland fires as noted in the wildland fire profile above and the WUI Risk Assessment in Appendix B. All of Alachua County is vulnerable to lightning and it can be expected that with the frequent thunderstorms experienced in Alachua County that lightning impacts will continue.

Hail. During the 2010-2015 time period the NWS documented 19 occurrences of hail of at least 0.75 inches in diameter. There were four reports of hail of at least 1.5 inches in diameter:

April 30, 2010 – 1.00 diameter hail fell near Lake Santa Fe in northeastern Alachua County.
May 21, 2010 – 1.00 diameter hail was reported along Southeast Hawthorne Road.
July 15, 2010 – 1.00 inch diameter hail was reported along U.S. Highway 301.
March 31, 2011 – 1.00 inch diameter hail fell near Lake Santa Fe in Northeastern Alachua County. Broadcast media relayed a public report of 1.5 inch -ping pong ball size- hail about 3 miles north of the City of Alachua. 1.00 inch - quarter size - hail was reported to the post office in LaCrosse.
June 13, 2011 – 1.00 inch hail was reported along Interstate 75 near the High Springs U.S. Highway 441 exit. Quarter size hail was reported along Old Bellamy Road, south of O'Leno State Park.
June 15, 2011 - Quarter size hail lasted for about 20 minutes near LaCrosse. 1.75 inch diameter -golf ball size- hail was reported SSW of Worthington Springs.
July 26, 2011 - A deputy reported golf ball size hail – 1.75 inch diameter - at 23300 W Newberry Road.
March 14, 2012 – 1.25 inch -half dollar to quarter size- hail was reported at Interstate 75 and 39th Avenue near Gainesville. Quarter size hail was reported between Archer Road and Gainesville. Quarter size hail was reported at Archer Road and SW 158th Street.
August 22, 2014 – 1.00 inch hail was reported on Archer Road, just west of Interstate 75.

June 1, 2015 – 1.75 inch hail was reported near Hague in northwest Alachua County.

Tornadoes. A tornado is defined by the National Weather Service as a violently rotating column of air touching the ground, usually attached to the base of a thunderstorm. The state which has the highest number of tornadoes per unit area is Florida, although most of the tornadoes in Florida are weak tornadoes of EF0 or EF1 intensity. A number of Florida's tornadoes occur along the edge of hurricanes that strike the state. In Florida, the greatest numbers of tornadoes occur in June, July and August. These storms are normally small [EF0-EF1], short-lived events that produce minor damage. However, some of the state's deadliest tornadoes have occurred in summer months. During periods of El Niño, an increase in winter and spring tornadoes can be expected. Unlike the rest of the nation, strong to violent tornadoes are just as likely to occur in Florida after midnight as they are in the afternoon. Additionally, tropical cyclones increase the occurrence of tornadoes. NOAA has estimated that during the period of 2003 to 2012 north central Florida experienced –on average- 2 tornado days per year. During the years 1957 to 2012 Alachua County experienced 42 documented tornados of the F0 to F2 range according to the Tornado History Project [based upon NWS Storm Prediction Center historical data.] Alachua County experienced one documented tornado during the 2010-15 timeframe on March 24, 2012 which did limited damage. The National Weather Service determined that an EF0 tornado caused wind damage (max winds around 75 mph) across the west side of Gainesville. A carport was damaged and numerous trees were blown down along 196th Terrace Ave. Two homes were also damaged along the path. At least 3 dozen trees were snapped off along a portion of the path as well. The cost of damage was estimated to be $8,000. Based upon this data is could be assumed that all Alachua County could continue to experience, and be vulnerable to, tornados in the EF0 to EF1 range.

Details of past occurrence and likely risks associated with these three hazards can be found in Appendices D: Wildland Urban Interface Risk Assessment, Appendix L: Previous Occurrence of Weather Related Hazard Events, and Appendix M: Alachua County Stormwater Management Master Plan. The hazard analyses of these three hazards are subsumed into the updated hazard analysis in the Alachua County Comprehensive Emergency Management Plan that lists all the hazards likely to affect Alachua County. The remaining hazards noted in the CEMP hazard analysis – while necessary to list for the purposes of response and preparedness efforts- are not the focus of mitigation efforts in this mitigation plan.

Mitigation Strategy

This section addresses

Emergency Management Accreditation Program (EMAP) Standard (2013)

Hazard Mitigation | Strategies, Project Ranking | 4.4.5

Regulatory and Planning Framework

Section 201.6 (c)(3) of 44 CFR requires that the local mitigation strategy plan "…shall include a mitigation strategy that provides the county-wide blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools. The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards."

Alachua County LMS Work Group has developed goals (as listed in Section 1) with the intent of reducing the County's vulnerability to identified hazards discussed in the Hazards Analysis. Other planning documents and regulatory frameworks created at the local, regional, and state levels of government also help support an overall hazard mitigation strategy. The comprehensive plans, master plans, land development regulations, codes and ordinances of the political entities in Alachua County would be amended under the provisions of Florida Statutes to incorporate hazard mitigation goals and activities.

Comprehensive Plans, Development Regulations and Building Codes. The comprehensive plans and development regulations adopted and implemented by Alachua County and its municipalities are designed to reduce the effects of natural hazards on new buildings, existing buildings in some cases, and infrastructure. For example, the potential for flooding of structures has been reduced in that through its Comprehensive Plan policies Alachua County does not allow the creation of new building parcels in wetlands or floodplains and requires that wetlands and floodplains be set aside in permanent conservation/preservation areas prior to final development approval. Alachua County development regulations also require that non-conforming buildings –other than single-family dwellings- that have suffered substantial damage in excess of two-thirds of their fair market value be restored in conformity with applicable regulations. Single family dwellings cannot be structurally altered in excess of fifty percent of the fair market value unless done so in compliance with current regulations.

Alachua County and the City of Gainesville require a minimum of one foot freeboard from a known base flood elevation for structures built in a flood zone on parcels of record that preceded the current land development regulations. Alachua County adopted a floodplain management ordinance and began participating in the National Flood Insurance Program (NFIP) in 1982. Alachua County's floodplain regulations have been modified to be consistent with the Florida Building Code and the

State's model ordinance which satisfies the regulatory requirements of the National Flood Insurance Program. Floodplain management is achieved primarily by ensuring the application of the Flood Hazard Reduction Standards set forth in Chapter 406, Article 7 of the Alachua County Unified Land Development Code (ULDC). The Ordinance and the ULDC meets the requirements of the NFIP Program for community participation as set forth in Title 44 Code of Federal Regulations, Sections 59 and 60.

Alachua County's Unified Land Development Code requires new developments to apply for a Letter of Map Revisions (LOMR) due to fill before final project plats are recorded. The LOMR process then removes the burden from individual homeowners of having to apply for a LOMA (Letter of Map Amendment) for their particular parcel. This process also establishes the base flood elevations for structures to be built above in these areas thereby reducing the potential for structural flooding.

All jurisdictions in Alachua County are required to comply with and do enforce at least the minimum requirements of the Florida Building Code regarding building within flood hazard areas. Alachua County Growth Management Department currently provides building plan review and inspection services for the municipalities of Archer, Hawthorne, Lacrosse, and Micanopy. The remaining municipalities of City of Alachua, Gainesville, High Springs, Newberry, and Waldo oversee building code compliance in their jurisdictions.

The following is a summary of the comprehensive plan and land development code provisions of Alachua County and the municipalities in Alachua County, and the activities of the Alachua County Library and Public School Districts – as participating entities in the Alachua County LMS - that are relevant to hazard avoidance or mitigation, floodplain regulation, or the LMS:

Alachua County. Alachua County's Comprehensive Plan contains a general strategy to minimize the conversion of land from rural to urban uses by among other things incorporating hazard-resilient land planning into the land use decision-making process [FLUE General Strategy 1]; provides for clustering in rural subdivisions to avoid natural hazards [FLUE]; provisions to include hazard mitigation into stormwater management system design, public education about floodplain protection, and avoidance of actions that would change or obstruct floodways [Stormwater Element Obj 7.1 and policies]; provisions for mapping of flood and fire prone areas [COSE Policy 2.1.1]; provisions for public education concerning flood and fire hazard mitigation [COSE Policy 2.2.2]; provisions to maintain the natural function of flood plains and flood ways [COSE Obj 4.8 and Policies]; provisions for wildfire hazard mitigation [COSE Obj 5.6 and Policies]; provisions to implement hazard mitigation plans such as the LMS [ICE Policy 1.1.10]; provisions for capital improvement projects for public facilities that mitigate hazards as ranked in the LMS Project List [CIE Policy 1.5.2]; provisions for the protection of natural drainage features through floodplain management [Stormwater Element Goal 1]; establishes levels of service that require all new building lots to include adequate buildable area above the 100-year floodplain and all new habitable structures must be constructed outside the floodplain and prohibits adverse impacts to the 100-year floodplain [Stormwater Element Policy 3.1.1]; designation of wetlands, surface waters and floodplains as conservation areas [COSE Policy 3.1.1]; provisions for the protection of the natural functions of floodplains and floodways and other areas of 100-year flood elevation [COSE Obj 4.8 and policies]; provisions that floodplains be designated as open space in development plans [COSE Obj 5.2 and policies].

The Alachua County Unified Land Development Code provides for the protection and maintenance of the natural

functions of floodplains, floodways, and all other natural areas having hydrological characteristics of the one hundred (100)-year flood elevation, establishes minimum requirements to safeguard the public health, safety, and general welfare, and minimizes public and private losses due to flooding through regulation of development in flood hazard areas [ULDC Chapter 406, Article 7]; recommends the inclusion of Firewise design principles in landscape plans [ULDC Chapter 407, Article 4].

City of Alachua . The City of Alachua's Comprehensive Plan establishes goals, objectives, and policies to reduce the impact of development upon flood prone areas. Policy 1.12.e of the Conservation & Open Space Element (COSE) state that the City shall protect the natural function of flood plains, and that flood plain regulations shall be based upon the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM.) Policy 1.12.f of the COSE states that the City shall work with FEMA, the Suwannee River Water Management District (SRWMD), the Florida Department of Environmental Protection (DEP), and Alachua County to regulate development within special flood hazard areas susceptible to the one percent annual chance flood. In addition Policy 1.12.f states the City will require development to occupy only the non-floodplain portion of a site when feasible; preserve the natural function of the floodplain; require the minimum Finished Floor Elevation (FFE) to be at least one foot above the established Base Flood Elevation (BFE); an prohibit the storage of hazardous materials or waste within the floodplain. The City of Alachua has incorporated several proposed flood abatement projects into its 5-year Capital Improvements schedule and completed several of these projects as noted in Appendix D. Overview of Completed Mitigation Projects.

Section 6.9.4 of the City's Land Development Regulations (LDRs) provides for the regulation of structures built within flood prone areas. Flood prone areas are mapped and referenced to the Flood Insurance Rate Map, as may be amended from time to time, and all supporting data and revisions.

New construction or substantial improvements must be constructed using methods and practices that minimize flood damage. The City's LDRs require structures to be built outside of flood prone areas when other alternatives for the location of the structure exist on the site. When no other alternatives exist, any structure built within the 100-year floodplain must be elevated a minimum of one foot above the BFE. When a structure is proposed in a flood prone area and the BFE is undetermined, the City's LDRs require the structure to be elevated 5 feet above the highest adjacent natural grade.

Any encroachments, including fill, new construction, or substantial improvements in a flood prone area must be certified by a professional engineer demonstrating that the encroachments shall not result in an increase in flood levels during the occurrence of the base flood discharge.

Town of Archer. Archer's Comprehensive Plan provides for the restriction of development in areas subject to flooding and the regulation of flood prone areas to maintain the flood storage and flood carrying capacity of floodplains. Flood prone areas are mapped and referenced to the Flood Insurance Rate Map. Plan policies require coordination with the Suwannee River Water Management District on all proposed development in the basins of all priority water bodies. The plan establishes level of service standards for stormwater management systems for pre- and post-development runoff and design storm events. Plan policies require residential construction to be elevated 1 foot above the 100-year storm elevation. Code provisions include requirements that uses vulnerable to floods be protected from flooding, regulate activities that would change or diminish the flood storage capacity of function of floodplains and floodways, and provisions for compliance with the NFIP.

City of Gainesville The City of Gainesville's Comprehensive Plan provides for the protection of wetlands and wetland function through avoidance, minimization, and then mitigation of detrimental impacts. [COSE Obj 1.1, Policy 1.1.1]; require buffers and setbacks from creeks, lakes and wetlands [COSE Policy 1.1.2]; provide for coordination with various entities to develop basin stormwater management plans [COSE Policy 1.1.5]; provides for the preservation of wetland function and acreage in designated basins [COSE Obj 2.1, Policy 2.1.1]; adopts the 100-year critical duration storm event as the stormwater management Level of Service Standard [SME policy 1.1.1]; provides for specific basin stormwater management projects – Depot Avenue, Sweetwater Branch, Hatchet Creek-Lake Forest Creek, NW 22nd Street, SW 35th Terrace [SME Policy 1.2.2]; the provisions of adequate stormwater management systems to meet projected needs by maintaining or reducing the elevation of the 10-year flood channel and the 100-year floodplain as established by the most recent FIRM or local study using FEMA-approved methods [SME Obj 1.3 and associated policies]; provides for maintenance of the stormwater management systems to reduce or eliminate structural flooding, street flooding, enhance water quality, and to enhance environmental quality.

The City of Gainesville's Code provides specific implementation of the Comprehensive Plan objectives and policies. The City's code establishes a floodplain management district for the purposes of preventing or minimizing future flood damage; managing activities or development which may increase flood damage or erosion potential; managing the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of floodplains; minimizing damage to public and private facilities and utilities; maintaining a stable tax base by providing for the sound use and development of flood hazard areas; minimizing the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and meeting the requirements of the National Flood Insurance Program for community participation.

City of Hawthorne. The City of Hawthorne significantly amended its land development code in 2012 to comply with the provisions of the NFIP Program for community participation as set forth in Title 44 Code of Federal Regulations, Sections 59 and 60. Among other things these amendments provided for adoption of flood hazard maps for the community, provide for procedures and criteria for development in flood hazard areas, and adopt local administrative amendments to the Florida Building Code.

City of High Springs. The High Springs Comprehensive Plan provides for the elevation of structure one foot above the 100-year flood elevation, restrict development within flood prone areas, require regulation of development at and below the riverine 100-year flood elevation, the preservation of the flood storage capacity and natural functions of the floodplains and floodways, mapping of flood prone areas, and participation in the NFIP. City Code contains provisions to prevent or limit activities that will alter floodplains such that the capacity of those floodplains is diminished or the areal extent of the floodplain. Code provides for avoidance and minimization of impacts to floodplains and floodways. Requirements that new construction or substantial improvements to structures be built one foot above the base flood elevation.

Town of La Crosse. Comprehensive Plan provisions to participate in the NFIP and require that construction be done outside of flood prone areas. For parcels of record that are all floodplain then buildings must be built two feet above grade. Require maintenance of floodplain function – such as flood storage capacity. The plan establishes level of service standards for stormwater management systems for pre- and post-development

runoff and design storm events. Plan policies require residential construction to be elevated 1 foot above the 100-year storm elevation. Floodplain areas mapped, referenced to FIRM.

Town of Micanopy. Comprehensive Plan policies to require residential landowners whose property lies within of the 100- year floodplain to construct outside the floodplain, maintain a floodplain ordinance to reduce floodplain uses to agricultural, forest, and wildlife management and such other uses that are not likely to be severely disrupted by flooding, and participation in the National Flood Insurance Program along with regulation of development and the installation of utilities in flood hazard areas in conformance with NFIP requirements. Plan provisions for transferring development rights from wetlands and flood plains to upland areas. Requirements to elevate buildings 1-foot above 100-year flood elevations. Plan policies to protect the natural function of floodplains, recognizing the role of flood patterns in maintaining water quality and quantity. Flood plain regulations are to be based on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM).

City of Newberry. Newberry's Comprehensive Plan provides for the location of development outside of floodplains and wetlands, establishes stormwater management standards for quantity and quality, prohibits the alteration or interruption of natural drainage flow, the preservation of floodplain and wetland function, clustering of development onto the non-flood prone areas of parcels or the elevation of structures if an entire parcel is flood prone. Newberry's Land Development Code [Flood Management Ordinance]provides for the use of appropriate construction practices in order to prevent or minimize future flood damage; the management of activities or other development which may increase flood damage or erosion potential; limitations on the alteration of flood hazard areas, watercourses, and shorelines to minimize the impact of development on the natural and beneficial functions of the floodplain; minimize the need for future expenditure of public funds for flood control projects and response to and recovery from flood events; and meet the requirements of the National Flood Insurance Program for community participation.

Town of Waldo. Plan provisions to require clustering of buildings outside of floodplain, provisions to participate in the NFIP, and require that construction be done outside of flood prone areas. For parcels of record that are all floodplain then buildings must be built two feet above adjacent grade. Prohibits structures in wetlands except for water dependent uses [docks, etc.]. Plan policies require coordination with the Suwannee River Water Management District on all proposed development in the basins of all priority water bodies. The plan establishes level of service standards for stormwater management systems for pre- and post-development runoff and design storm events.

Alachua County Library District. The Alachua County Library District has no authority or responsibility for land use decisions. The Library District buildings and facilities are located within municipal boundaries or urbanized areas in the case of unincorporated Alachua County locations. These facilities are located upon small parcels of land, typically with significant parcel coverage by buildings and impervious surfaces.

Alachua County Public School District. The school Board of Alachua County and Alachua County have structured an interlocal agreement that provides for coordination of land use and school capacity. Along with this agreement the Alachua County Comprehensive Plan contains a Public School Facilities Element which generally provides for the accommodation of anticipated public school enrollment. Objective 3.6 of this Element provides for development standards for schools and school sites. Policy 3.6.1 provides specific requirements for school site development, one of which is consistency with the applicable policies of the Conservation and Open Space

Element [COSE] of the Alachua County Comprehensive Plan. As noted above the requirements of the COSE provide for stormwater management and floodplain function in particular.

Alachua County provides building permitting services [plan review, permitting, and inspection] for the municipalities of Hawthorne, Micanopy, Lacrosse and Archer. Through this process the provisions of the Florida Building code [such as those concerning flood abatement, or structural flood proofing] are enforced. Taken on the whole, all of these requirements when implemented will help advance the goals of the LMS and insure continued compliance with the National Flood Insurance Program.

Local government comprehensive plans are required to be periodically reviewed and assessed. Section 163.3191, FS requires that every seven years local government review their comprehensive plans to determine if they adequately reflect state requirements and are "encouraged to comprehensively evaluate and, as necessary, update comprehensive plans to reflect changes in local conditions". This Evaluation and Appraisal Report [EAR] process affords all local governments in Alachua County the means to incorporate current hazard mitigation strategies and activities into their local community planning efforts. Beyond the EAR process, local governments can amend their comprehensive plans as needed on a semi-annual basis to reflect and react to changing conditions within their jurisdictions. Most local governments in Florida annually amend their 5-Year Capital Improvement Program as part of the Capital Improvements Element of their comprehensive plans. Specific mitigation projects that involved capital expenditures and that are funded in whole or part by local governments in Alachua County have typically been incorporated into the local government's Capital Improvements Plan as part of their adopted comprehensive plan and capital projects programs.

The documents and activities noted below provide support to and furtherance of the 2015 Alachua County Local Mitigation Strategy:

Community Development:

- Alachua County Comprehensive Plan (County)
- Municipal Comprehensive Plans (Cities)
- University of Florida Master Plan
- Alachua County Comprehensive Emergency Management Plan (County/Cities)
- Unified Land Development Regulations (County and Cities)
- Debris Management Plan (County and Cities)
- National Flood Insurance Program (County-wide)
- Community Rating System (County and Gainesville)

Protecting Public Health and Safety:

- Florida Statute Chapter 252 (County)
- Floodplain Ordinance (Cities and County)
- Adopted Comprehensive Plans (Cities and County)
- Dept. of Environmental Protection Regulations (Cities and County)
- County and City Debris Management Plan
- Alachua County Emergency Management Hurricane Standard Operating Procedure (County-wide)

- Alachua County Emergency Management EOC Activation SOP (County)
- UF Natural Disaster Plan (UF)
- Disaster Housing Plan (Cities and County)
- Solid Waste Plans and Regulations (Cities and County)
- Fire Prevention Codes and Regulations (County-Wide)
- Florida Building Code (Cities and County)
- Community Health Improvement Plan
- Alachua County Flood Warning and Response Playbook [under development 2015]

Building and Retrofitting to Minimize Potential Property Damage:

- Alachua County Unified Land Development Code
- Post Disaster Redevelopment Plan (County)
- County Floodplain Ordinance
- Florida Building Code (county-wide)
- University of Florida Design and Construction Standards

Fostering Economic Activities within the County:

- Alachua County Comprehensive Plan, Economic Development Element

Educating to Promote Community Awareness:

- Florida Statute Chapter 252 [county-wide]
- Hazard Awareness and public outreach activities (County-wide)

Protecting Natural Resources and the Environment:

- Alachua County Floodplain Management Ordinance
- Alachua County Comprehensive Plan Conservation and Open Space Element
- Hazardous Materials Cost Recovery Ordinance (County-wide)

Managing Stormwater to Protect Community Resources:

- Alachua County Water Quality Ordinance
- Alachua County Stormwater Management Plan
- St. Johns River Water Management District Regulations (all jurisdictions southeastern Alachua County)
- Suwannee River Water Management Regulations (all jurisdictions northern and western Alachua County)

Coordinating Local and State Government Activities During a Disaster:

- Statewide Mutual Aid Agreement, FL Statute 252, Chapter 23
- Alachua County Comprehensive Emergency Management Plan
- Emergency Support Functions SOP

Mitigation Strategies

Code of Federal Regulations Title 44 Section 201.6 requires the county local mitigation strategy to "analyze a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure."

The following summary outlines actions that have been and could be conducted to reduce the community's vulnerability to the identified hazards that are relevant to LMS activities in Alachua County: inland flooding, wind events, and wildfire. Many of the identified mitigation strategies and actions concern the protection of critical facilities or natural resources from natural or manmade hazards. The remaining identified hazards – hazardous materials/transportation facilities, nuclear power plants, civil disturbance, mass immigration, extreme temperatures, drought, sinkholes/land subsidence, terrorism, biological events, disease/pandemic outbreak, and special events- do not readily lend themselves to mitigation activities of the sort that would be considered in a Local Mitigation Strategy. Should a practical, achievable activity be identified to mitigate one of these hazards, then the LMS Work Group can act accordingly.

Wind Protection. The retrofit of critical structures for wind protection –typically by covering or reinforcing window and door openings in structures- has been an on-going process. Several critical facilities have been retrofitted for wind protection such as fire stations, Alachua County Fire Rescue Headquarters, and the Alachua County Sheriff's Office Administration Building.

The protection of new buildings and existing buildings from wind damage is being accomplished through implementation of building code requirements. Buildings must be designed and constructed to comply with wind load specifications. Doing so reduces the effects of wind hazards on the buildings in the community, makes for less damage to structures and displacement of the population during wind events.

Wildfire. The Alachua County Wildfire Mitigation Program [which relied upon development review, regulation, fuel management, and public outreach/education] was no longer funded after FY 2010-11. Current wildfire mitigation efforts in Alachua County are primarily a public outreach/education program of Florida Forest Service through their statewide wildfire mitigation efforts. The City of Gainesville has proposed an LMS mitigation project to develop a wildfire mitigation effort aimed at the urban fringe areas of Gainesville.

Flooding and Stormwater Management. Alachua County has identified various problem areas throughout the county that frequently flood and cause structural damage or accessibility issues. Appendix L is a complete listing of these flood areas, accompanying support information, and suggested remedies. This information can also be found at

http://www.alachuacounty.us/Depts/PW/engineering/stormwaterManagementProgram/SWMasterPlan/Pages/Flooding%20Problem%20Area%20Assessment%20and%20Improvement%20Concepts.aspx

Several water bodies within the county have been identified as being "impaired" or having water quality deficiencies based on State and Federal regulatory criteria or water quality standards. These problem or impaired areas have been documented and investigated. But due to the lack of dedicated funding, corrective actions have not been implemented. Recognizing the significance of the flooding and the need to protect natural water bodies, Alachua County included specific guidelines in the 2001-2020 Comprehensive Plan (adopted 2005) to better manage stormwater. Those guidelines resulted in the implementation of a Stormwater Management Program (SMP).

Two main requirements of the SMP are listed in the Comp Plan 1) the SMP must have a Dedicated Funding Source; 2) the SMP must be comprehensive and address all of the County's stormwater management issues.

Provisions for a Dedicated Funding Source are a critical element to the success of the SMP. Therefore, one of the main goals of the SMP is to specify the funding source, initiate its operation and insure that it is dedicated to the goals of the program.

The development of a comprehensive stormwater management plan sets in place a system that will address all aspects of stormwater management within the county. Having this all-encompassing SMP gives citizens confidence in the County's desire and ability to correct flooding and water quality deficiencies. A major goal of the SMP is to comprehensively address necessary capital improvements and continued maintenance and administration of the program. Capital improvements will correct existing deficiencies in flooding and water quality. Maintenance will be bolstered to ensure existing and new systems perform as designed. Administration of the program is necessary for leadership, coordination and direction of the program. These three elements of the program form a comprehensive approach to proactive management of stormwater.

A key component of developing an effective SMP is preparing a Stormwater Master Plan. Master planning provides an opportunity to assess the state of stormwater management on a County-wide basis for unincorporated areas. The focus of the plan will be to identify management needs and costs to address flooding problems, water quality deficiencies, maintenance of drainage systems, and compliance with regulatory requirements. Through the Stormwater Master Planning efforts, costs associated with meeting the goals of a comprehensive program will be refined to allow the most appropriate funding options to be evaluated. When these flood abatement projects are refined and funding sources are identified, the projects would then be included in the Alachua County Comprehensive Plan Five-Year Schedule of Capital Improvements when the timing is appropriate.

The County and the City of Gainesville coordinate with the Suwannee River and the St. Johns River Water Management Districts and FEMA to identify and delineate flood risk areas through the Risk Mapping and Assessment Planning process (RiskMAP). The Alachua County and the City of Gainesville

share ongoing studies and plans to refine FEMA flood maps. The County and the City of Gainesville conduct and coordinate special flooding studies as well to improve the management of water quantity or water quality.

Education and Outreach. Various public information programs at the local, regional, state, and national level have been initiated to inform the community of the various hazards that they may face and options for preparing for and mitigating against the effects of these hazards. Examples of these programs are structural fire prevention programs; wildfire mitigation programs such as *Firewise Communities, the Ready, Set, Go!* Program, and the *Fire Adapted Communities* program; hurricane awareness programs; water conservation programs [drought incidents]; and hazardous materials awareness programs.

The jurisdictions in Alachua County take advantage of local special events throughout the year to distribute hazard awareness, mitigation, and preparedness materials. For example, in September of 2015 Alachua County Emergency Management sponsored the *Alachua Prepares!* Festival as part of National Preparedness Month [September] activities. Multiple public and private sector entities participated in this event representing many sections of the community and levels of government. Alachua County Emergency Management also uses social media and its web site to promote public awareness of hazard mitigation and preparedness activities.

Mitigation Projects and Initiatives**.** Specific mitigation projects are listed in Appendix G, Priority Ranked Projects, and Appendix H, Project Initiatives List. The list of Priority Ranked Projects is for the purpose of determining which projects would be funded should post-disaster hazard mitigation funding become available. The list of Priority Ranked Projects is a new list from the 2010 LMS and reflects mitigation projects targeted to the hazards most likely to affect Alachua County as noted in the hazards analysis. Several of the proposed projects from the 2010 LMS were for response efforts and not mitigation. These projects were deleted.

The Project Initiatives List is to recognize those projects that may have merit for hazard mitigation that do not have complete information so that they may be considered for the Priority Ranked Projects list or that do not necessarily need to be on the Priority Ranked Project list as determined by the sponsoring entity. Several projects from the 2010 Project List were move to the Initiatives list for this reason.

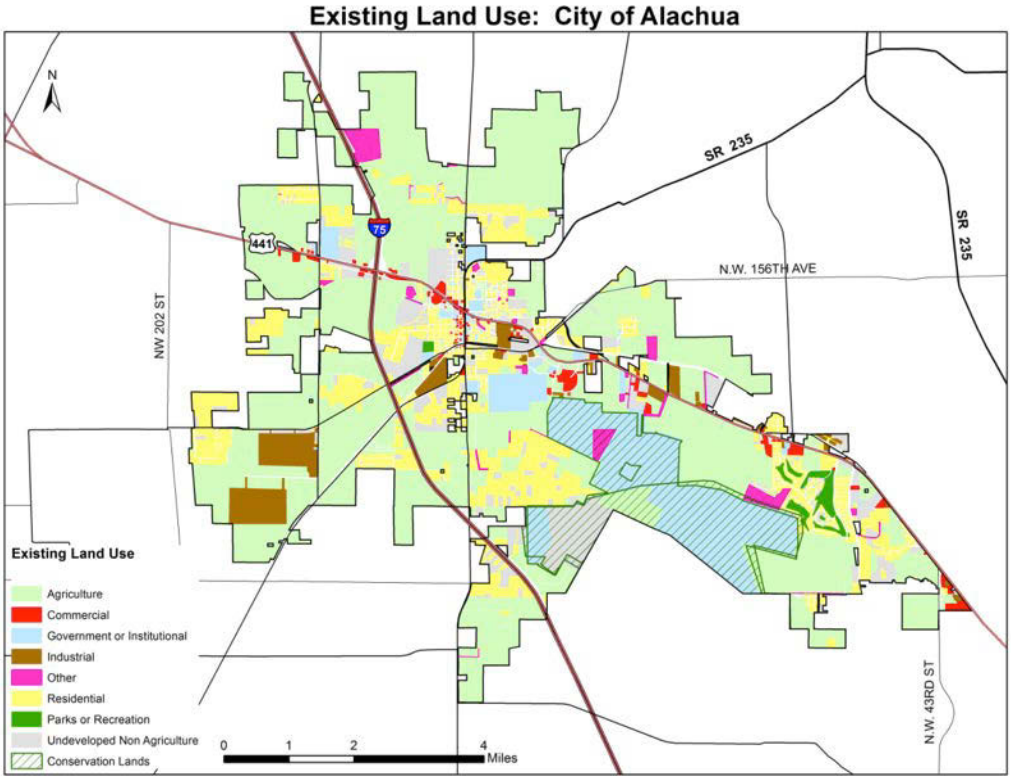
New mitigation proposals will be solicited from the LMS Work Group and other entities at least annually. The proposals will be reviewed and prioritized by the Project Ranking Task Force [using the procedures and criteria listed on the Project Score Guide, Appendix J] and then considered for inclusion by the LMS Work Group on either the Priority Ranked Project List or the Project Initiatives List.

Appendices

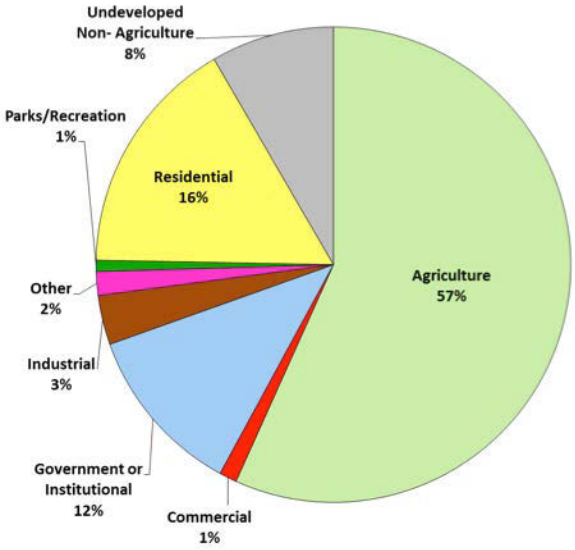
Appendix A: Alachua County Generalized Existing Land Use by Jurisdiction, 2014

The following pages contain existing land use data for Alachua County is derived from parcel-based property usage information obtained from the Alachua County Property Appraiser's office. Property use classifications have been grouped into generalized existing land use categories for purposes of this inventory.

CITY OF ALACHUA

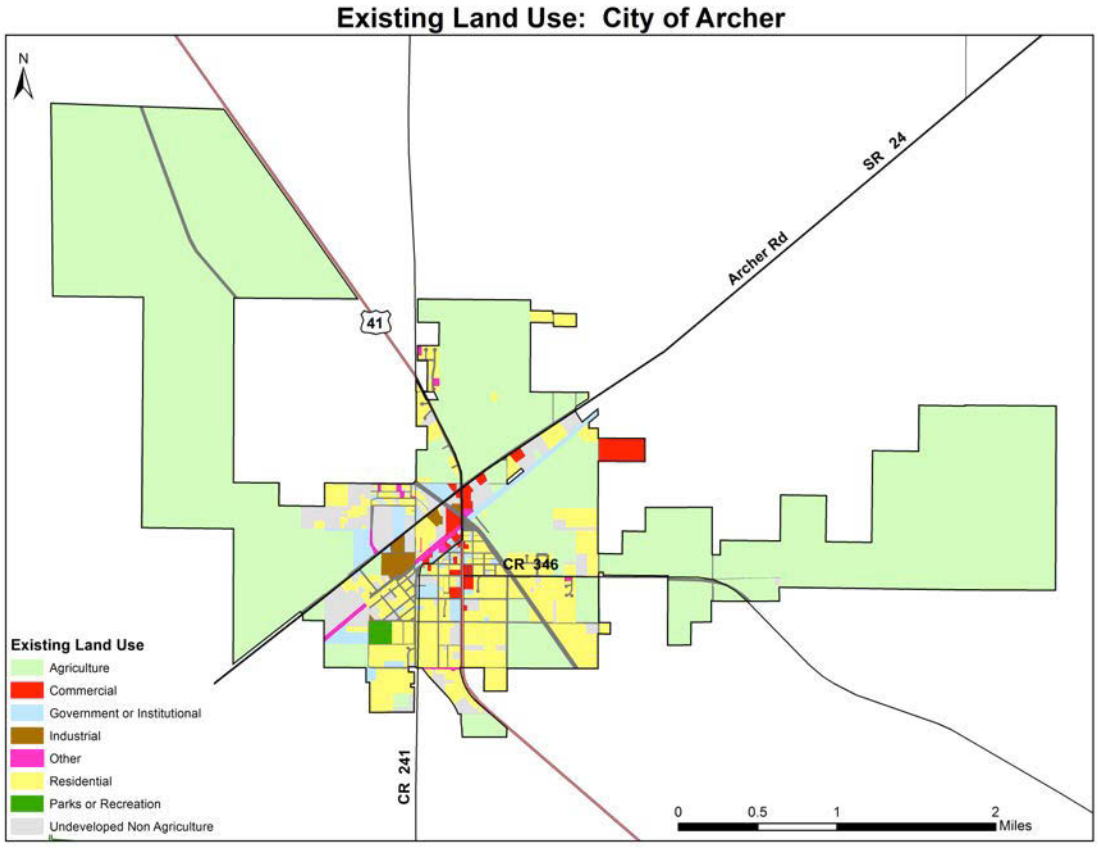


City of Alachua Existing Land Use Data

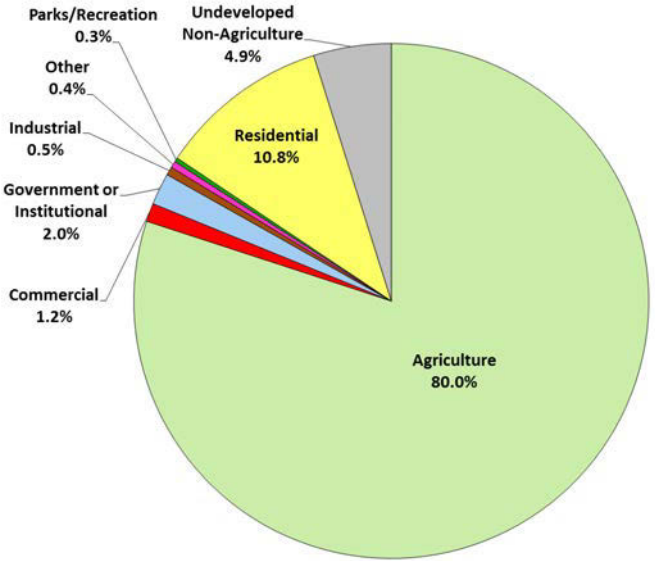


Category	Acreage
Agriculture	12,309
Commercial	259
Government or Institutional	2,523
Industrial	728
Other	352
Parks/Recreation	165
Residential	3,538
Undeveloped Non Agriculture	1,820
TOTAL	21,694

CITY OF ARCHER



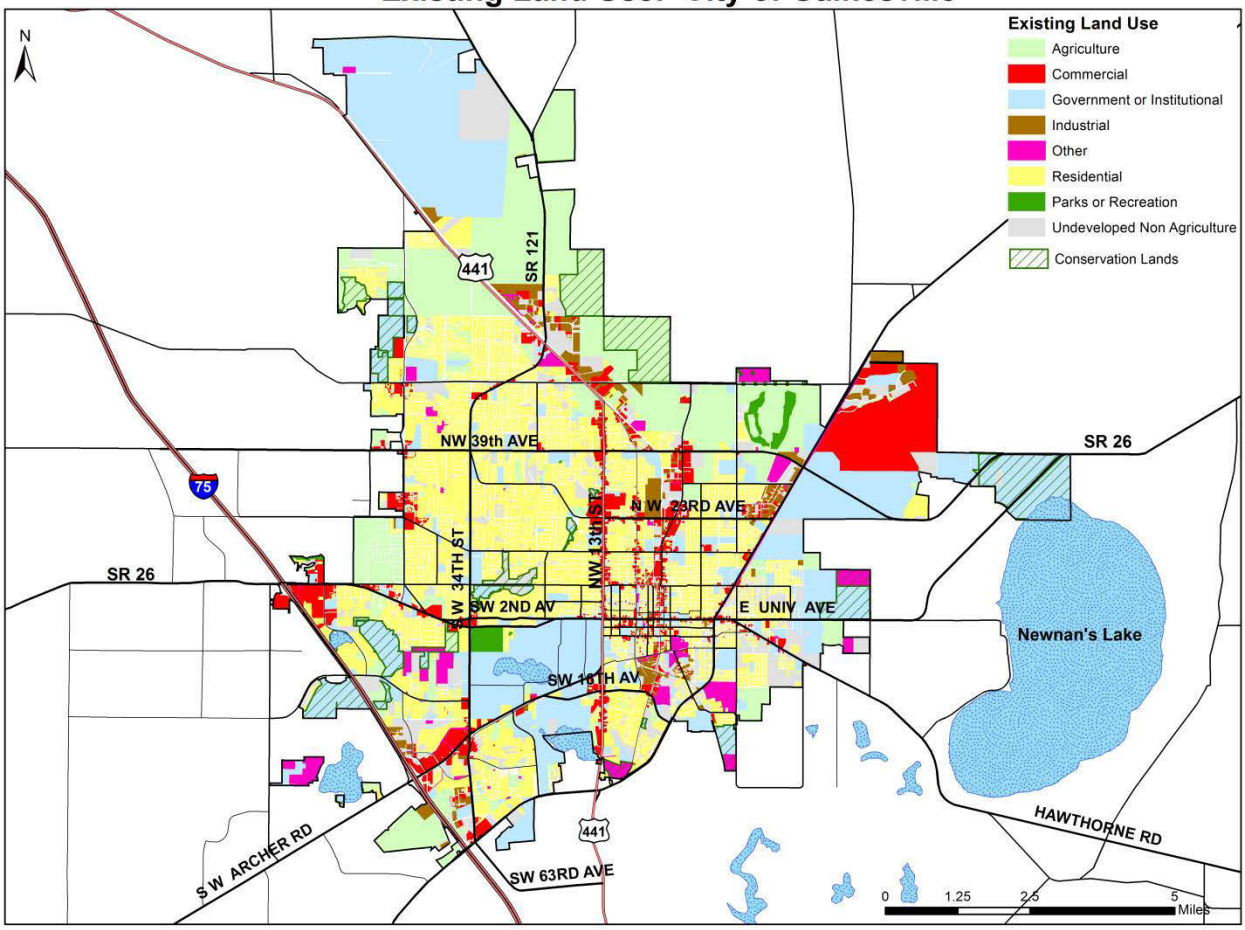
City of Archer Existing Land Use Data



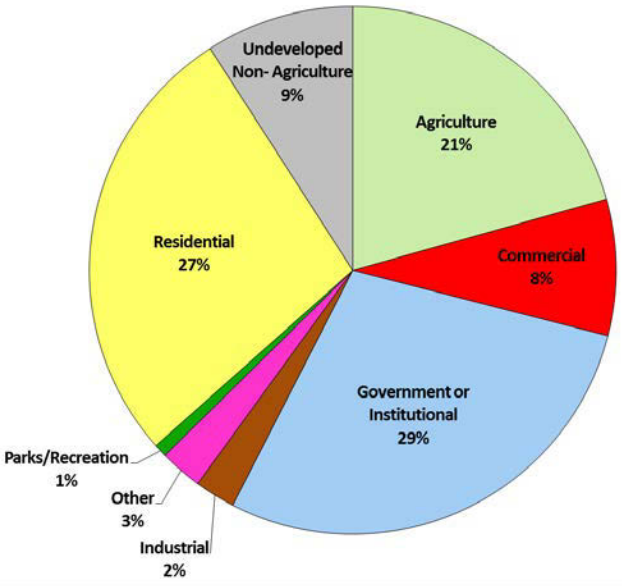
Category	Acreage
Agriculture	3,051
Commercial	44
Government or Institutional	76
Industrial	20
Other	16
Parks/Recreation	10
Residential	410
Undeveloped Non Agriculture	186
TOTAL	3,813

CITY OF GAINESVILLE

Existing Land Use: City of Gainesville

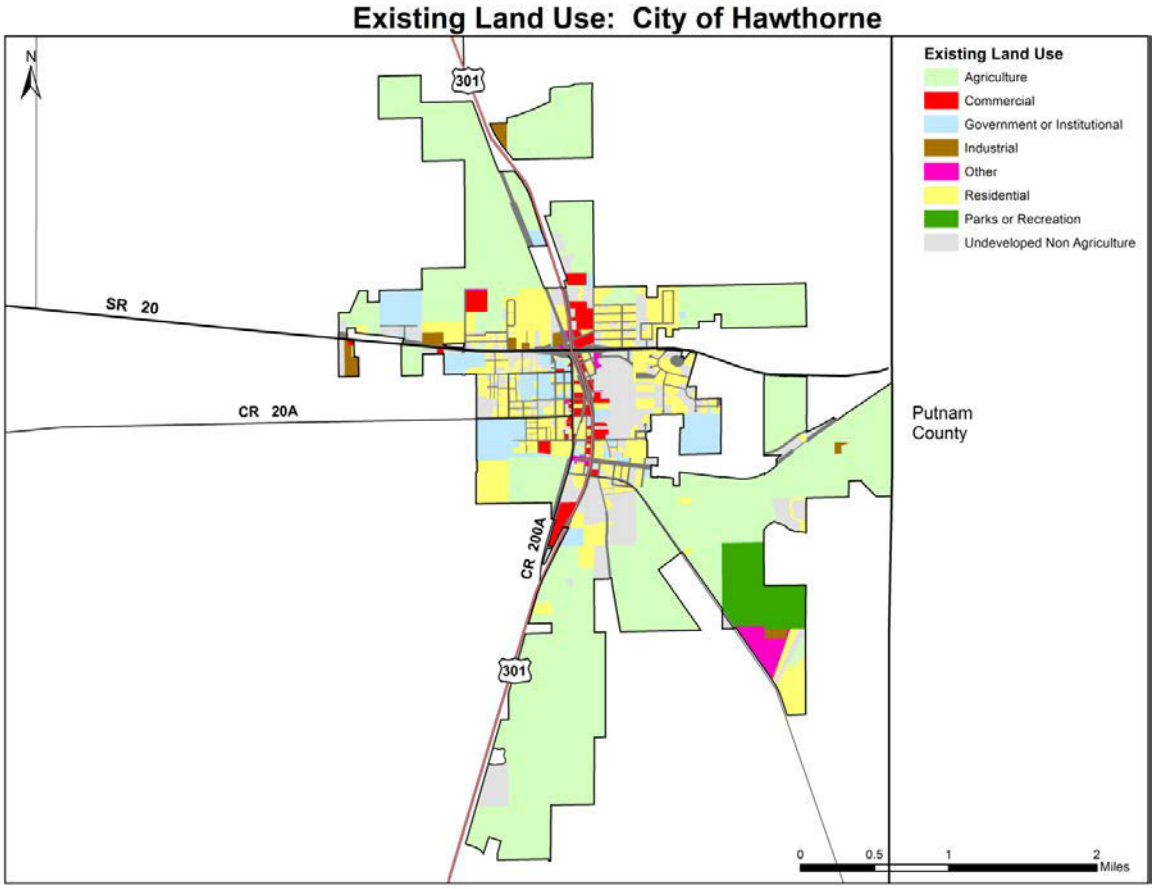


City of Gainesville Existing Land Use Data

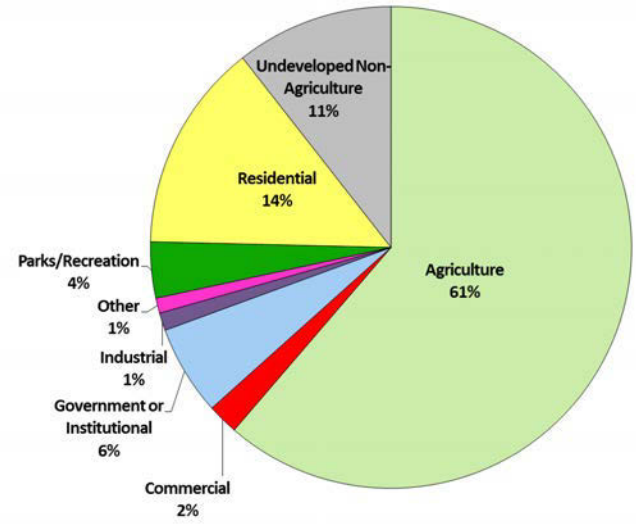


Category	Acreage
Agriculture	7,294
Commercial	2,939
Government or Institutional	10,073
Industrial	877
Other	925
Parks/Recreation	282
Residential	9,693
Undeveloped Non Agriculture	3,213
TOTAL	35,296

CITY OF HAWTHORNE

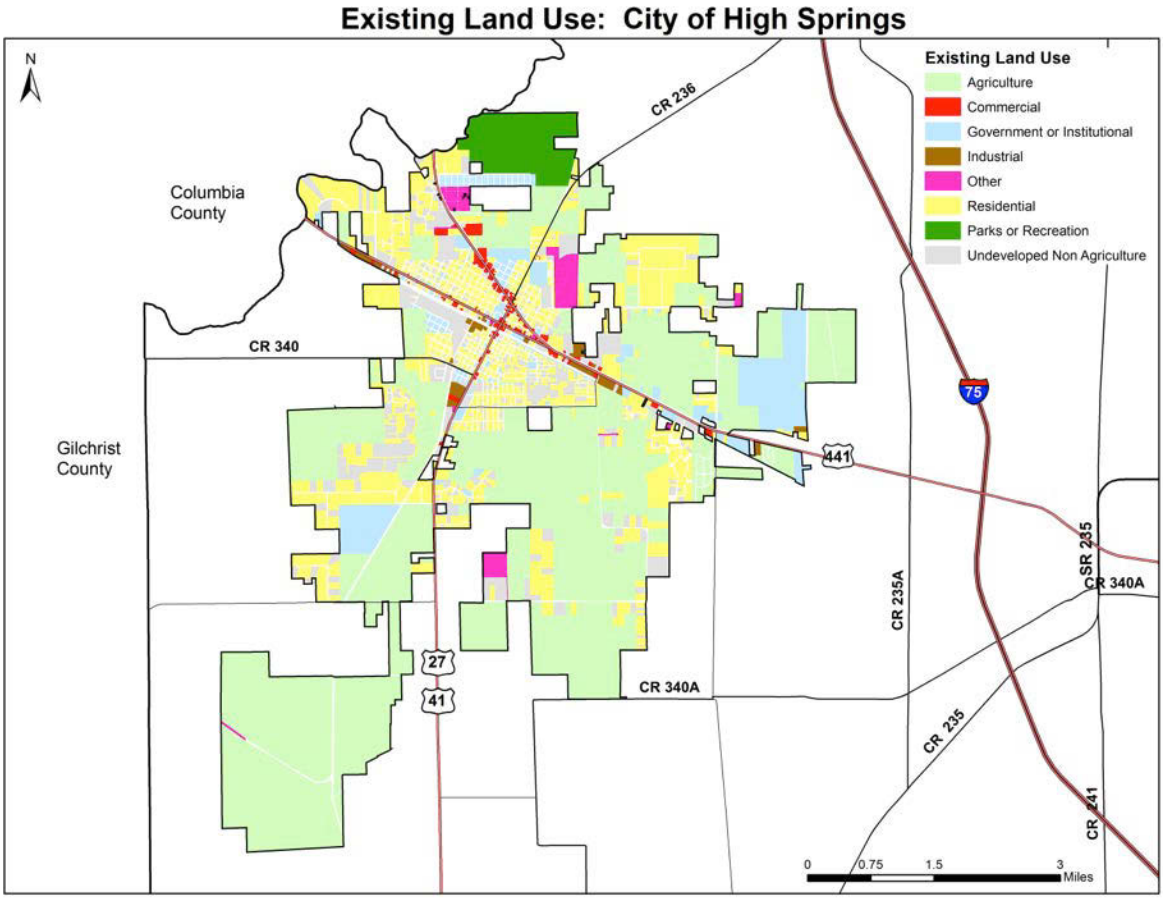


City of Hawthorne Existing Land Use Data

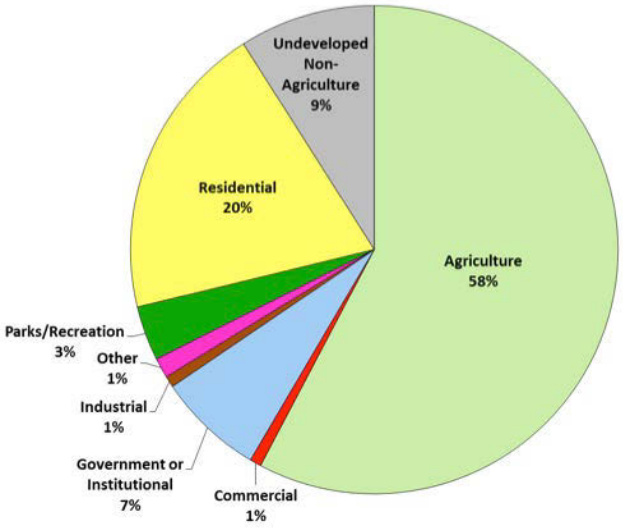


Category	Acreage
Agriculture	1,860
Commercial	63
Government or Institutional	183
Industrial	36
Other	31
Parks/Recreation	114
Residential	426
Undeveloped Non Agriculture	321
TOTAL	3,034

CITY OF HIGH SPRINGS

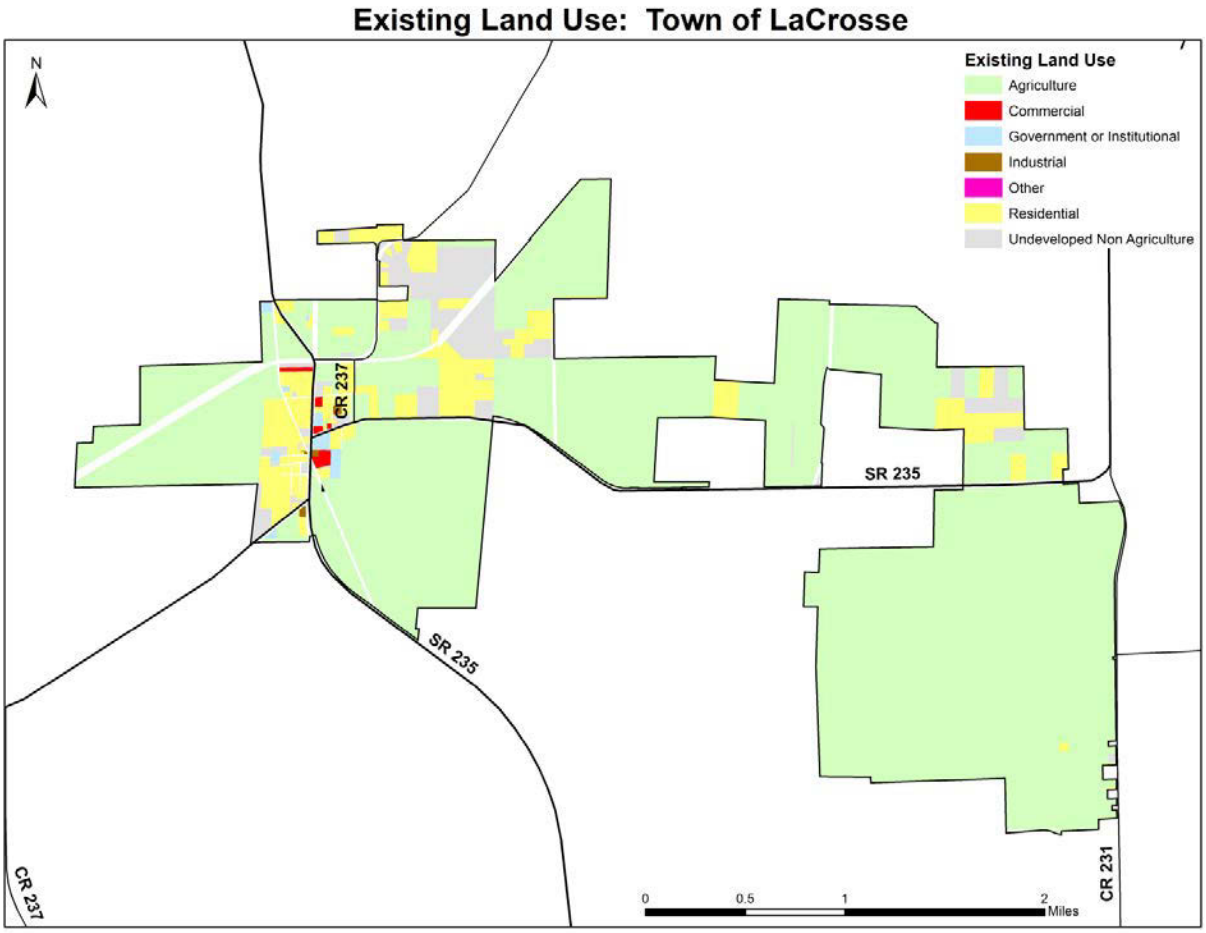


City of High Springs Existing Land Use Data

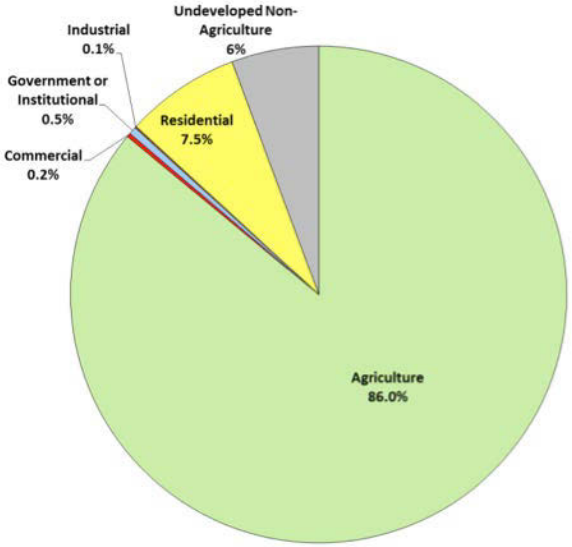


Category	Acreage
Agriculture	7,335
Commercial	96
Government or Institutional	895
Industrial	94
Other	170
Parks/Recreation	458
Residential	2,512
Undeveloped Non Agriculture	1,146
TOTAL	12,706

TOWN OF LACROSSE

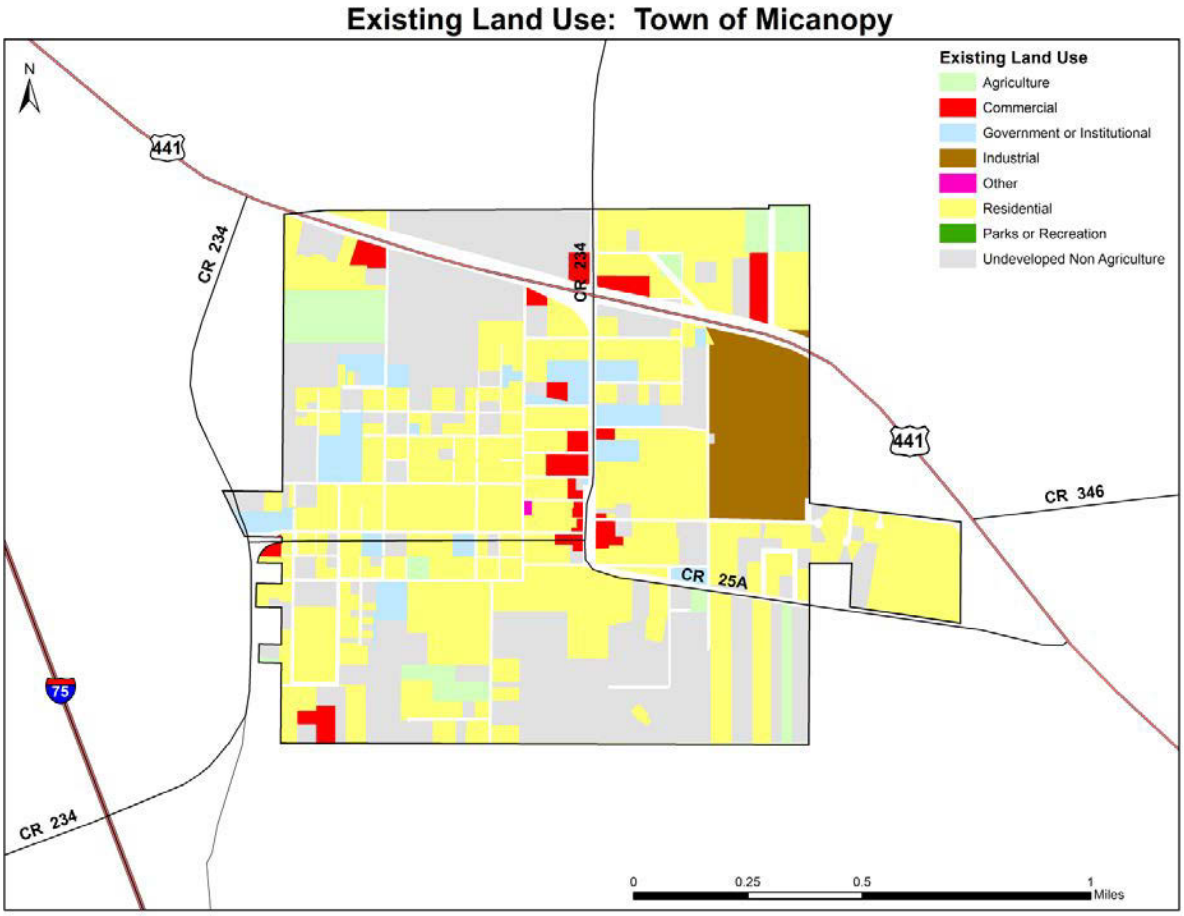


Town of LaCrosse Existing Land Use Data

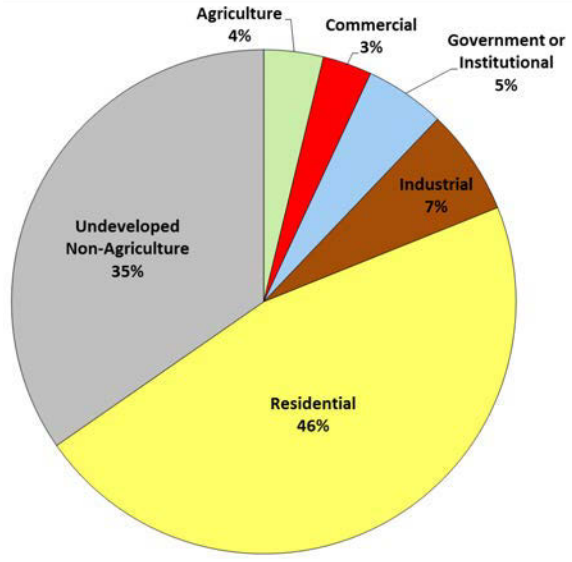


Category	Acreage
Agriculture	2,417
Commercial	7
Government or Institutional	14
Industrial	3
Other	0
Parks/Recreation	0
Residential	210
Undeveloped Non Agriculture	160
TOTAL	2,811

TOWN OF MICANOPY

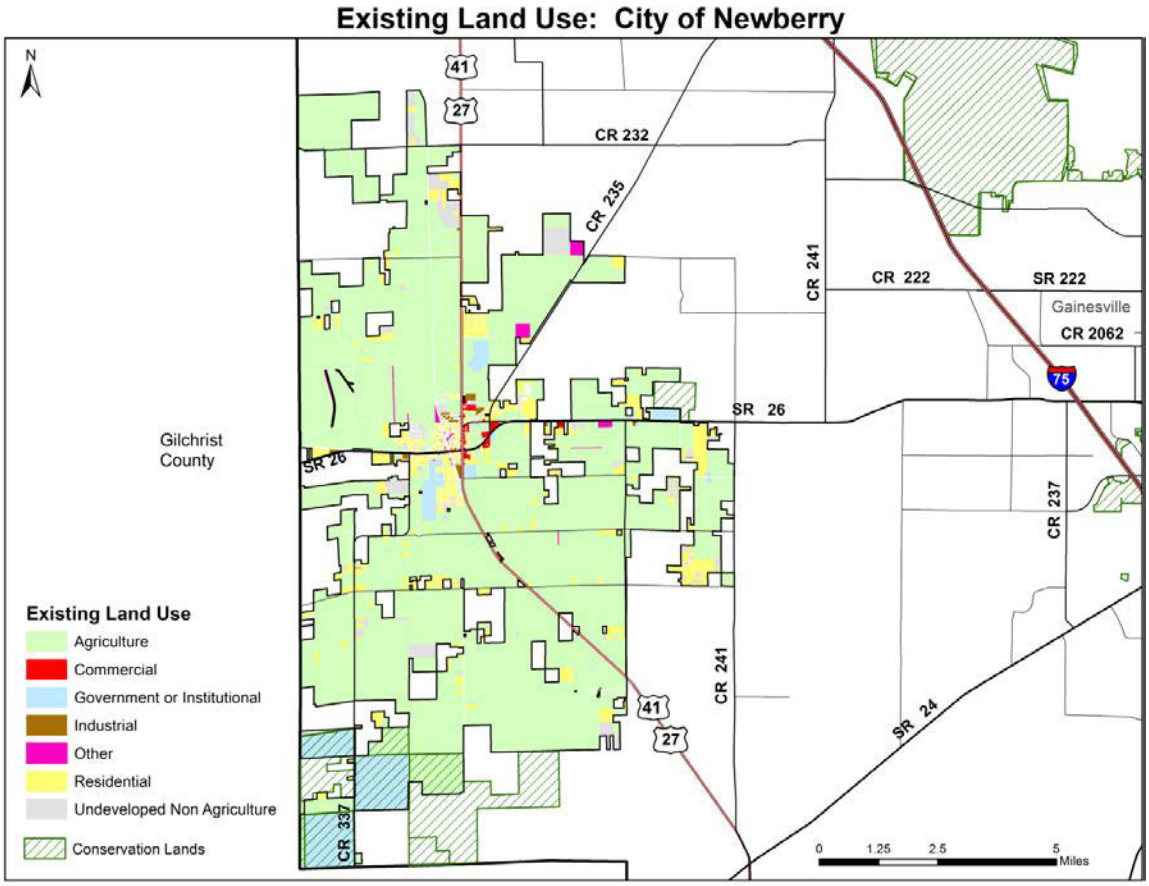


Town of Micanopy Existing Land Use Data

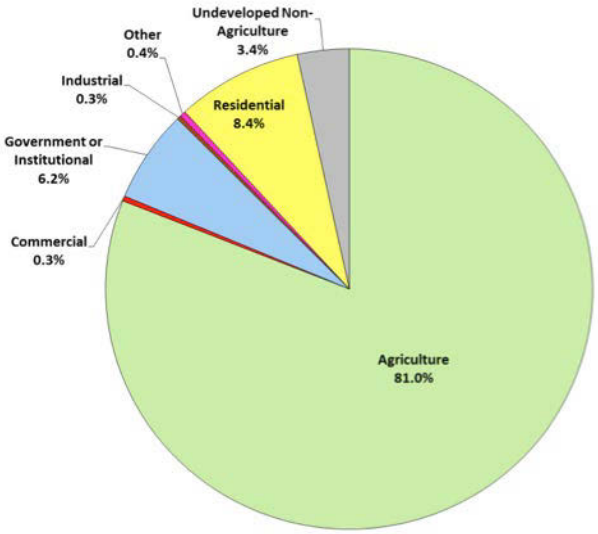


Category	Acreage
Agriculture	23
Commercial	19
Government or Institutional	31
Industrial	41
Other	0
Parks/Recreation	0
Residential	280
Undeveloped Non Agriculture	209
TOTAL	603

CITY OF NEWBERRY

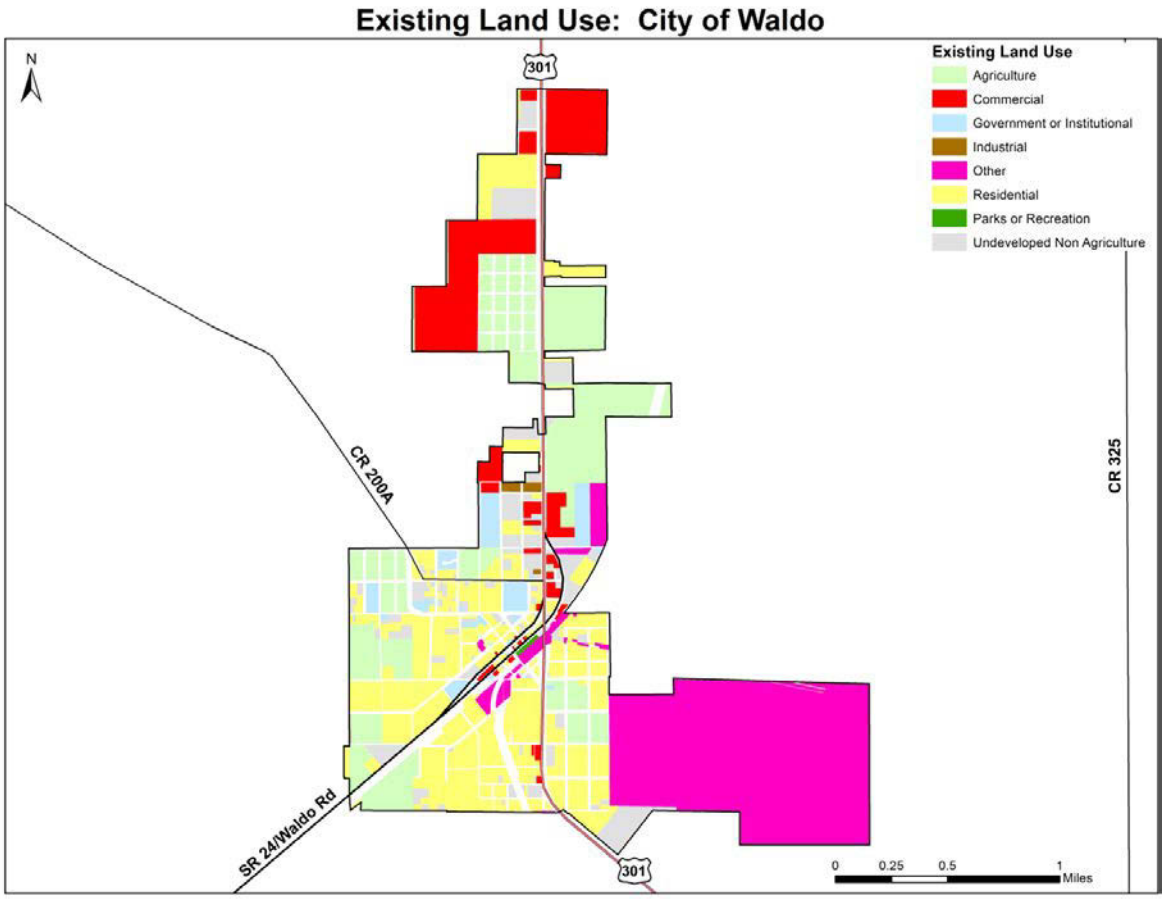


City of Newberry Existing Land Use Data

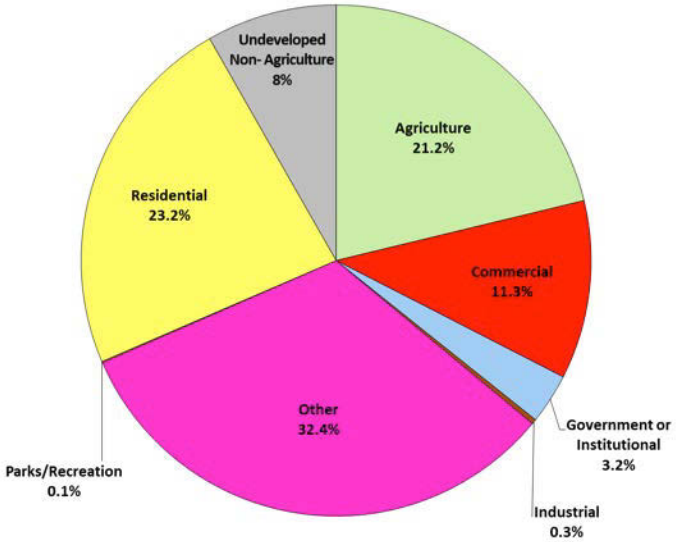


Category	Acreage
Agriculture	25,933
Commercial	105
Government or Institutional	1,992
Industrial	82
Other	130
Residential	2,676
Undeveloped Non Agriculture	1,101
TOTAL	32,019

CITY OF WALDO

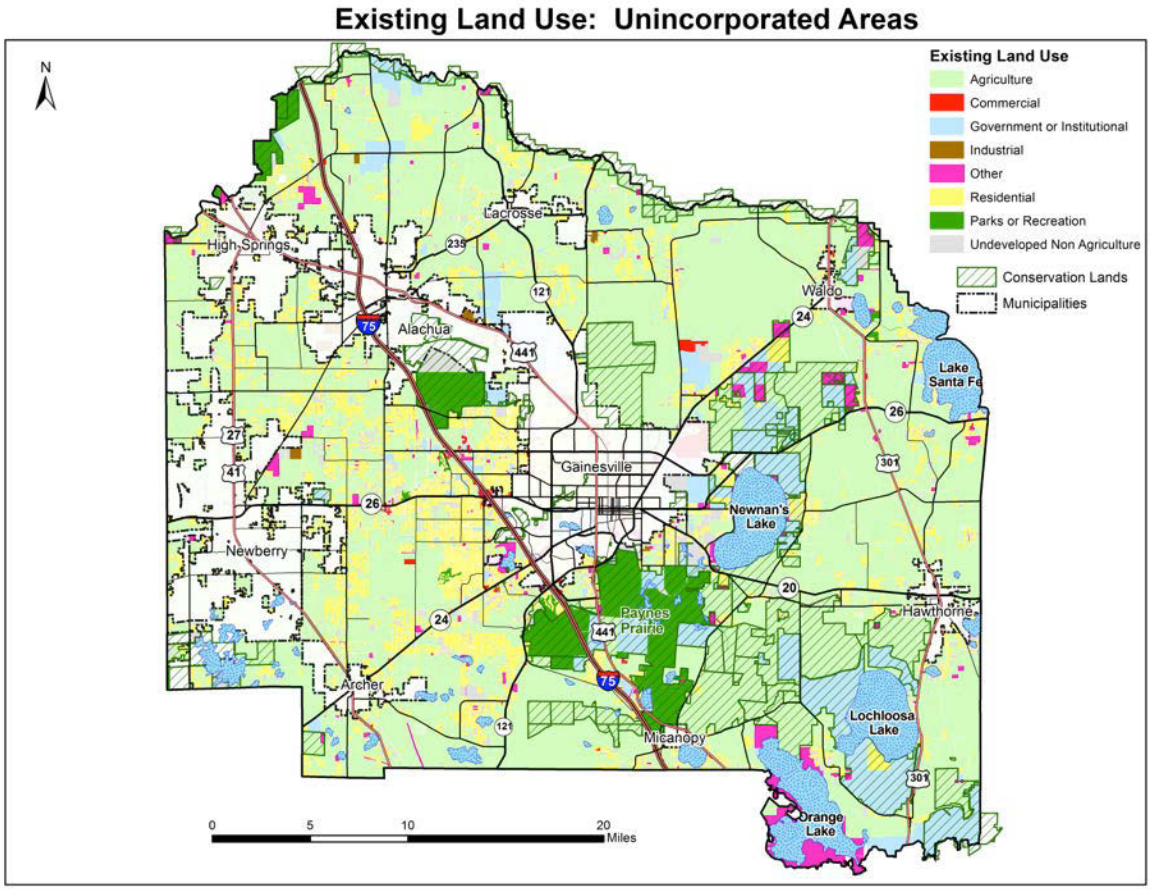


City of Waldo Existing Land Use Data

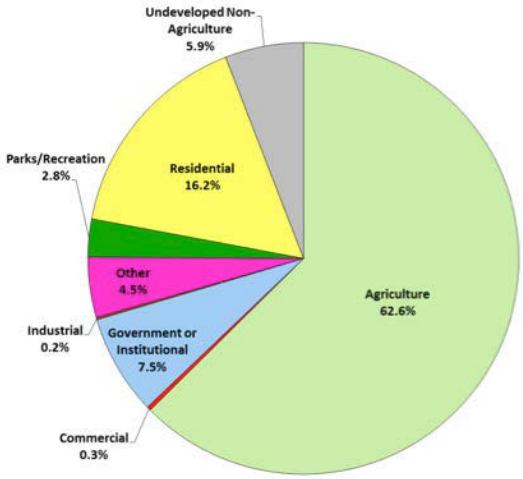


Category	Acreage
Agriculture	280
Commercial	149
Government or Institutional	42
Industrial	4
Other	428
Parks/Recreation	1
Residential	306
Undeveloped Non Agriculture	109
TOTAL	1,319

UNINCORPORATED AREAS



Unincorporated Areas Existing Land Use Data



Category	Acreage
Agriculture	251,120
Commercial	1,164
Government or Institutional	30,179
Industrial	643
Other	18,186
Parks/Recreation	11,371
Residential	64,854
Undeveloped Non Agriculture	23,629
TOTAL	401,146

Appendix B: WUI Risk Assessment

(Appended document begins on following page.)

Southern Wildfire Risk Assessment Summary Report

SOUTHERN GROUP OF STATE FORESTERS

CONSERVE · PROTECT · ENHANCE

Alachua County Wildland Urban Interface Risk

Report was generated using
www.southernwildfirerisk.com

Report version: 3.0

Report generated: 1/13/2015

Table of Contents

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Users should also note that property boundaries included in any product do not represent an on- the-ground survey suitable for legal, engineering, or surveying purposes. They represent only the approximate relative locations.

Introduction

Welcome to the Southern Wildfire Risk Assessment Summary Report.

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. The report is generated in MS WORD format.

The report has been designed so that information from the report can easily be copied and pasted into other specific plans, reports, or documents depending on user needs. Examples include, but are not limited to, Community Wildfire Protection Plans, Local Fire Plans, Fuels Mitigation Plans, Hazard Mitigation Plans, Homeowner Association Risk Assessments, and Forest Management or Stewardship Plans. Formats and standards for these types of reports vary from state to state across the South, and accordingly SouthWRAP provides the SWRA information in a generic risk report format to facilitate use in any type of external document. The SouthWRAP Risk Summary Report also stands alone as a viable depiction of current wildfire risk conditions for the user defined project area.

SouthWRAP provides a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in the South.

Results of the assessment can be used to help prioritize areas in the state where mitigation treatments, community interaction and education, or tactical analyses might be necessary to reduce risk from wildfires.

The SouthWRAP 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

To learn more about the SWRA project or to create a custom summary report, go to www.SouthernWildfireRisk.com.

Products

Each product in this report is accompanied by a general description, table, chart and/or map. A list of available SouthWRAP products in this report is provided in the following table.

SouthWRAP Product	Description
Wildland Urban Interface (WUI)	Depicts where humans and their structures meet or intermix with wildland fuel
WUI Risk Index	Represents a rating of the potential impact of a wildfire on people and their homes
Community Protection Zones	Represents those areas designated as primary and secondary priorities for community protection planning
Burn Probability	Probability of an area burning given current landscape conditions, percentile weather, historical ignition patterns and historical fire prevention and suppression efforts
Wildfire Ignition Density	Likelihood of a wildfire starting based on historical ignition patterns
Characteristic Rate of Spread	Represents the speed with which a fire moves in a horizontal direction across the landscape
Characteristic Flame Length	Represents the distance between the tip and base of the flame
Fire intensity Scale	Quantifies the potential fire intensity for an area by orders of magnitude
Fire Type – Extreme	Represents the potential fire type (surface or canopy) under extreme percentile weather conditions
Surface Fuels	Contains the parameters needed to compute surface fire behavior characteristics
Dozer Operability Rating	Level of difficulty to operate a dozer in an area based on limitations associated with slope and vegetation type

Wildland Urban Interface

Description

The South is one of the fastest growing regions in the nation, with an estimated population growth of 1.5 million people per year. The South also consistently has the highest number of wildfires per year. Population growth is pushing housing developments further into natural and forested areas where most of these wildfires occur. This situation puts many lives and communities at risk each year.

In particular, the expansion of residential development from urban centers out into rural landscapes, increases the potential for wildland fire threat to public safety and the potential for damage to forest resources and dependent industries. This increase in population across the region will impact counties and communities that are located within the Wildland Urban Interface (WUI). The WUI is described as the area where structures and other human improvements meet and intermingle with undeveloped wildland or vegetative fuels. Population growth within the WUI substantially increases the risk from wildfire.

For the **Alachua County Wildland Urban Interface Risk Index** project area, it is estimated that **253,825** people or **94 percent** of the total project area population (270,517) live within the WUI.

The Wildland Urban Interface (WUI) layer reflects housing density depicting where humans and their structures meet or intermix with wildland fuels.

WUI housing density is categorized based on the standard Federal Register and U.S. Forest Service SILVIS data set categories, long considered a de facto standard for depicting WUI. However, in the SWRA WUI data the number of housing density categories is

extended to provide a better gradation of housing distribution to meet specific requirements for fire protection planning activities. While units of the actual data set are in *houses per sq. km.*, the data is presented as the *number of houses per acre* to aid with interpretation and use by fire planners in the South.

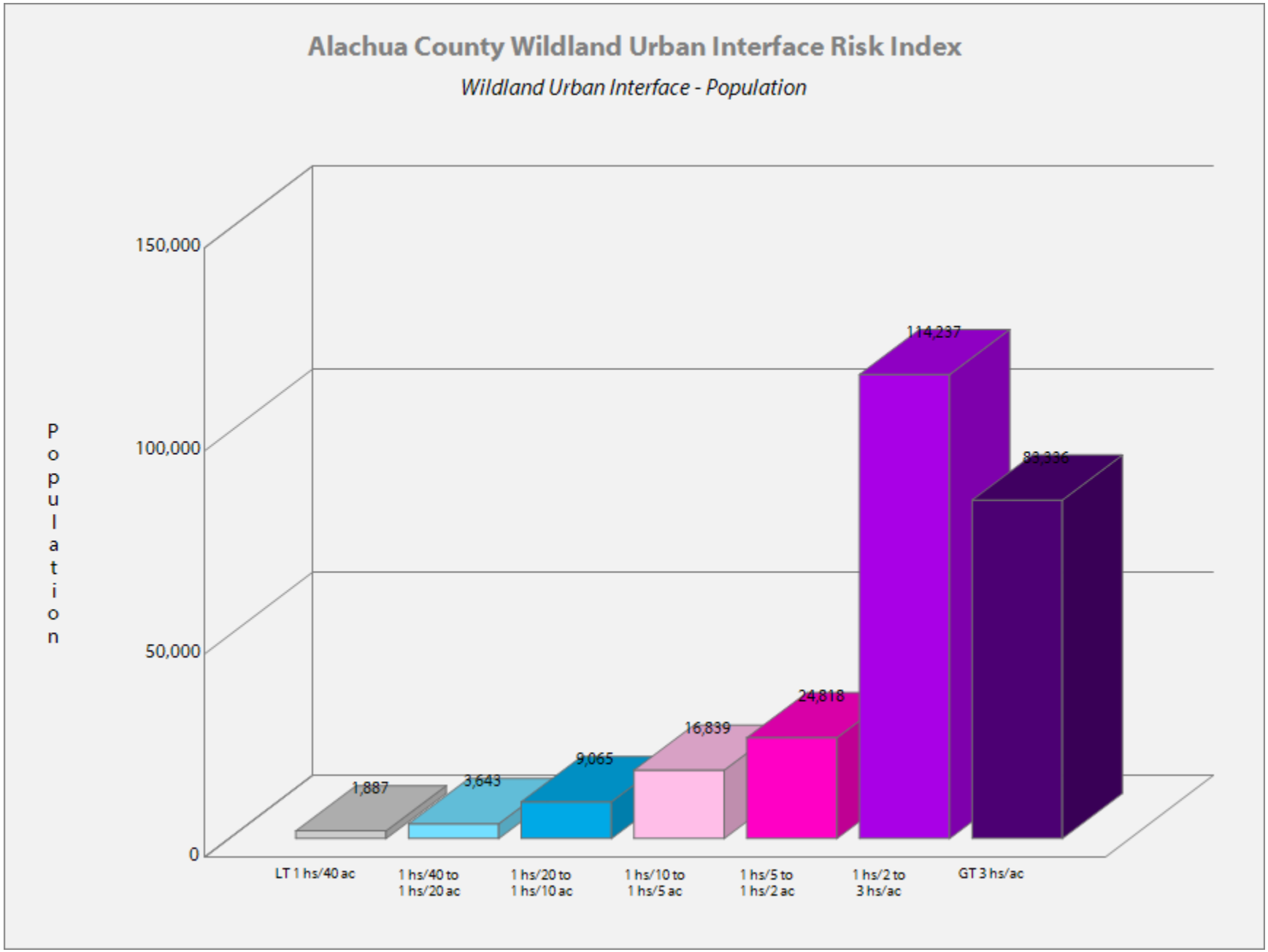
In the past, conventional wildland urban interface data sets, such as USFS SILVIS, have been used to reflect these concerns. However, USFS SILVIS and other existing data sources do not provide the level of detail for defining population living in the wildland as needed by Southern state WUI specialists and local fire protection agencies.

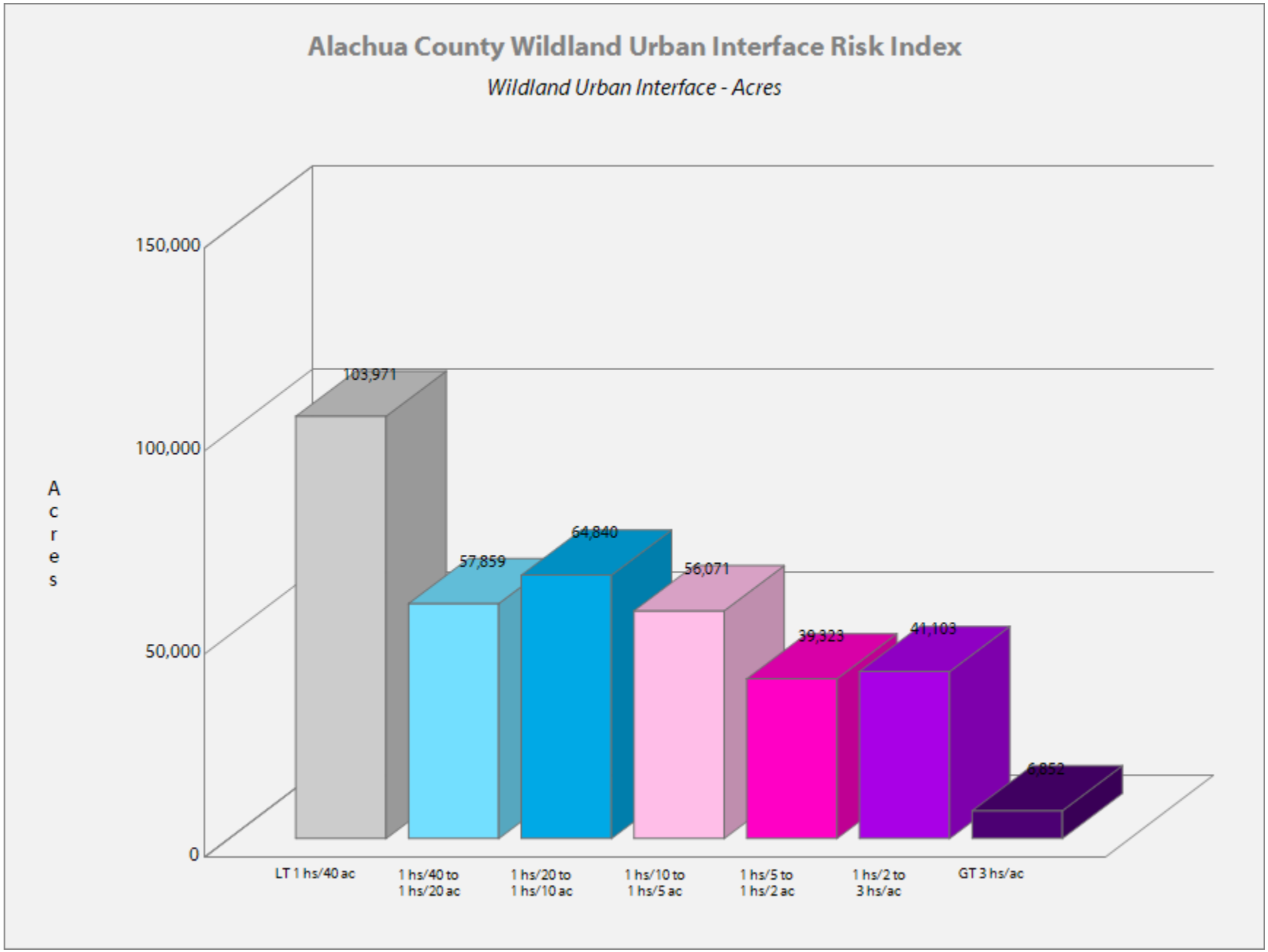
The new SWRA WUI 2012 dataset is derived using advanced modeling techniques based on the SWRA Where People Live (housing density) dataset and 2012 LandScan population count data available from the Department of Homeland Security, HSIP Freedom Data Set. WUI is simply a subset of the Where People Live dataset. The primary difference between the WPL and WUI is that populated areas surrounded by sufficient non-burnable areas (i.e. interior urban areas) are removed from the Where People Live data set, as these areas are not expected to be directly impacted by a wildfire. Simply put, the SWRA WUI is the SWRA WPL data with the urban core areas removed.

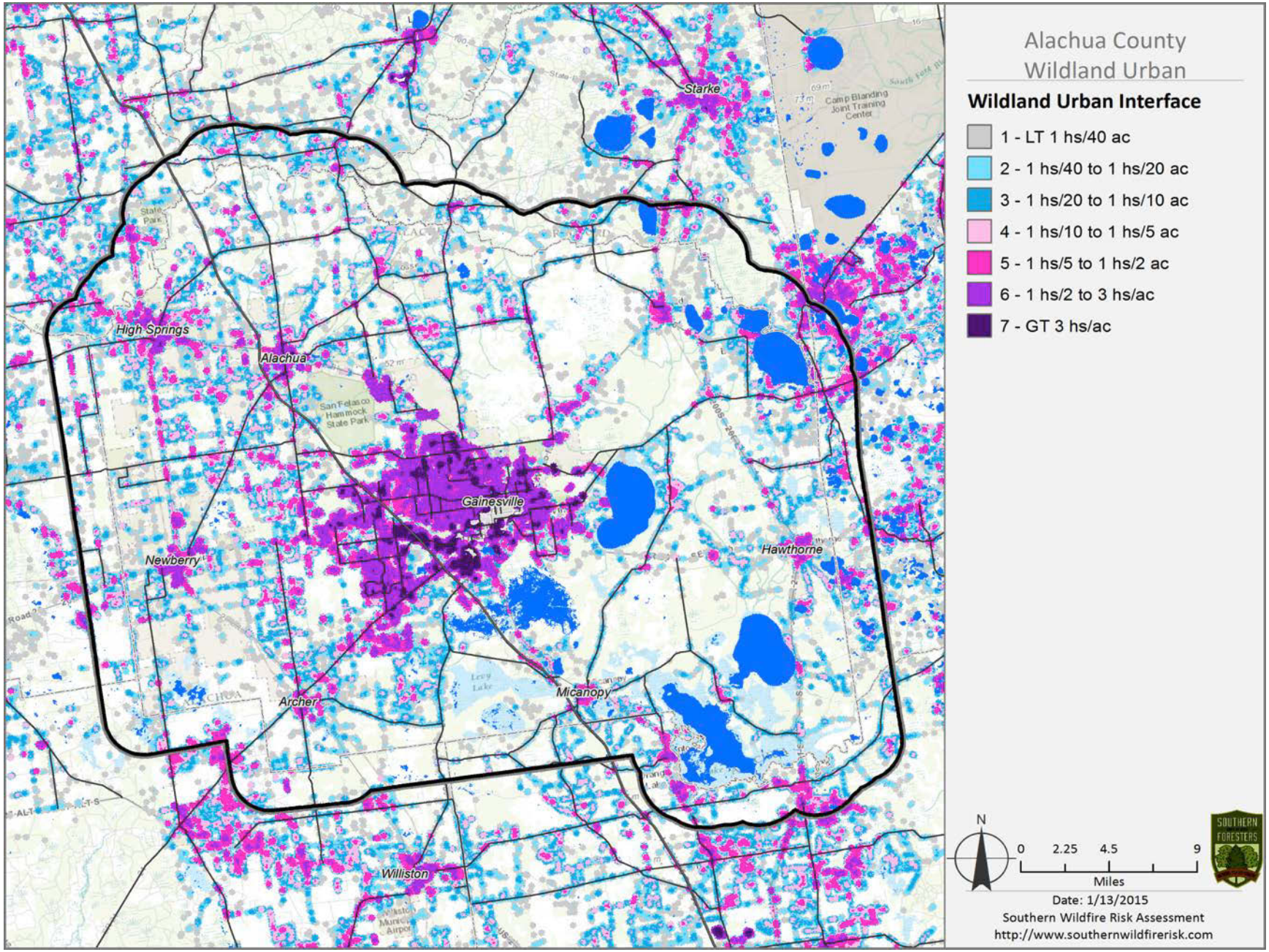
Data is modeled at a 30-meter cell resolution, which is consistent with other SWRA layers. The following table shows the total population for each WUI area within the project area.

WUI – Population and Acres

Housing Density	WUI Population	Percent of WUI Population	WUI Acres	Percent of WUI Acres
LT 1hs/40ac	1,887	0.7%	103,971	28.1%
1hs/40ac to 1hs/20ac	3,643	1.4%	57,859	15.6%
1hs/20ac to 1hs/10ac	9,065	3.6%	64,840	17.5%
1hs/10ac to 1hs/5ac	16,839	6.6%	56,071	15.2%
1hs/5ac to 1hs/2ac	24,818	9.8%	39,323	10.6%
1hs/2ac to 3hs/1ac	114,237	45.0%	41,103	11.1%
GT 3hs/1ac	83,336	32.8%	6,852	1.9%
Total	**253,825**	**100.0%**	**370,019**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Wildland Urban Interface - Population
Population
150,000
100,000
50,000
0
1,887
3,643
9,065
16,839
24,818
114,237
LT 1 hs/40 ac
1 hs/40 to 1 hs/20 ac
1 hs/20 to 1 hs/10 ac
1 hs/10 to 1 hs/5 ac
1 hs/5 to 1 hs/2 ac
1 hs/2 to 3 hs/ac
GT 3 hs/ac


Alachua County Wildland Urban Interface Risk Index
Wildland Urban Interface - Acres
Acres
150,000
100,000
50,000
0
103,971
57,859
64,840
56,071
39,323
41,103
6,852
LT 1 hs/40 ac
1 hs/40 to 1 hs/20 ac
1 hs/20 to 1 hs/10 ac
1 hs/10 to 1 hs/5 ac
1 hs/5 to 1 hs/2 ac
1 hs/2 to 3 hs/ac
GT 3 hs/ac


Alachua County
Wildland Urban
Wildland Urban Interface
1 - LT 1 hs/40 ac
2 - 1 hs/40 to 1 hs/20 ac
3 - 1 hs/20 to 1 hs/10 ac
4 - 1 hs/10 to 1 hs/5 ac
5 - 1 hs/5 to 1 hs/2 ac
6 - 1 hs/2 to 3 hs/ac
7 - GT 3 hs/ac
Starke
Camp Blanding Joint Training Center
High Springs
Alachua
San Felasco Hammock State Park
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

WUI Risk Index

Description

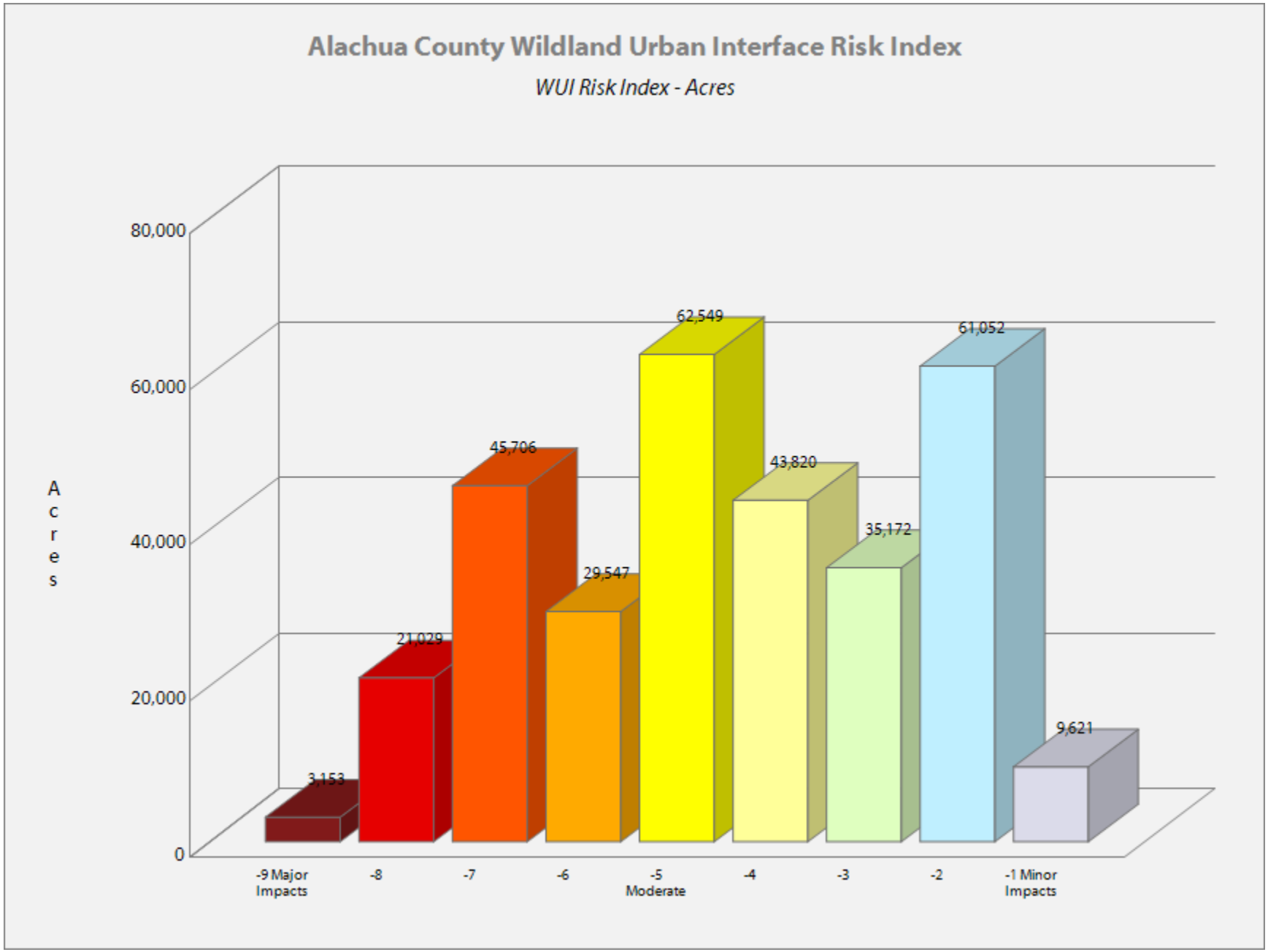
The Wildland Urban Interface (WUI) Risk Index layer is a rating of the potential impact of a wildfire on people and their homes. The key input, WUI, reflects housing density (houses per acre) consistent with Federal Register National standards. The location of people living in the Wildland Urban Interface and rural areas is key information for defining potential wildfire impacts to people and homes.

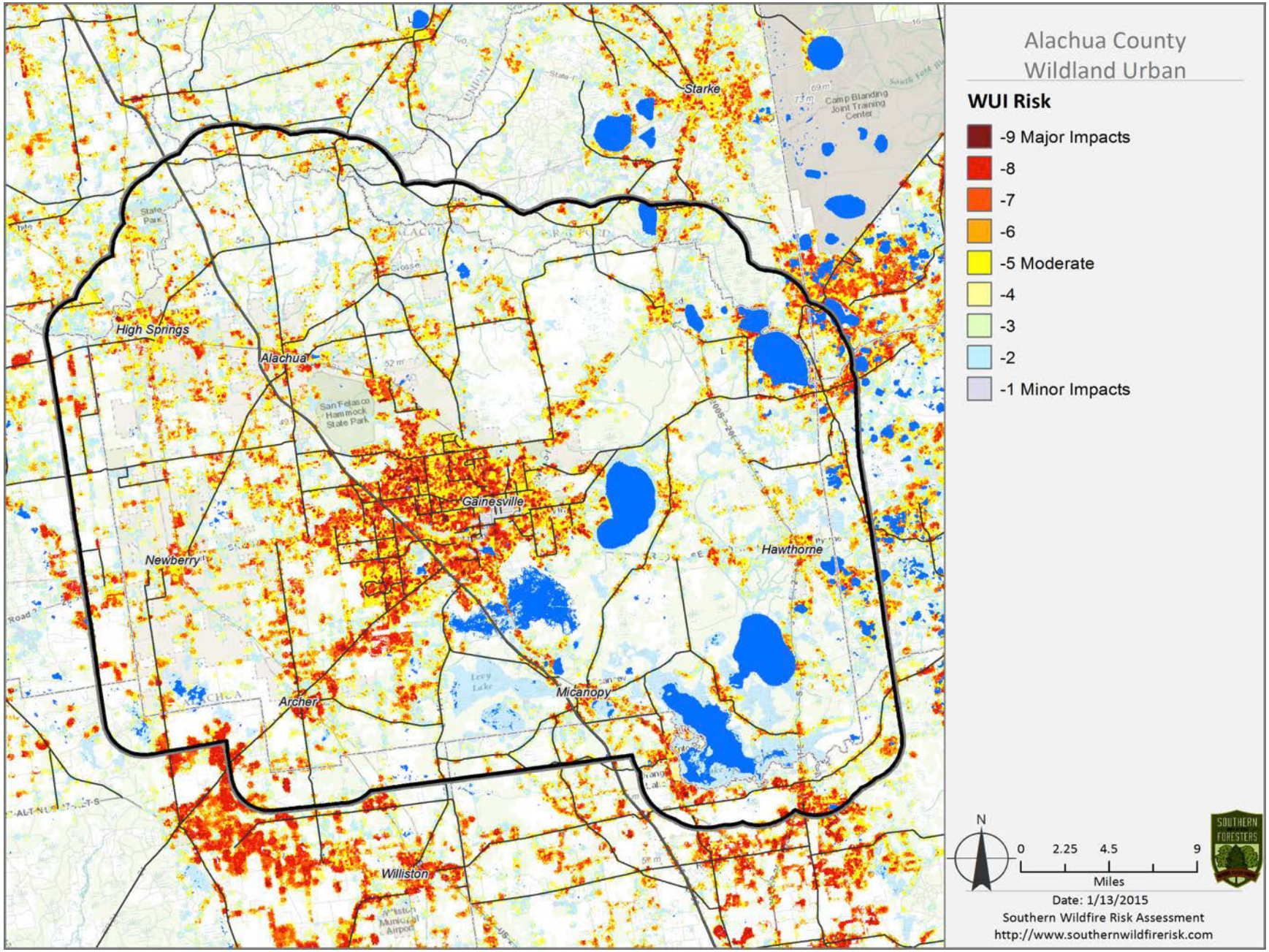
The WUI Risk Rating is derived using a Response Function modeling approach. Response functions are a method of assigning a net change in the value to a *resource* or *asset* based on susceptibility to fire at different intensity levels, such as flame length. The range of values is from -1 to -9, with -1 representing the least negative impact and -9 representing the most negative impact. For example, areas with high housing density and high flame lengths are rated -9 while areas with low housing density and low flame lengths are rated -1.

To calculate the WUI Risk Rating, the WUI housing density data was combined with Flame Length data and response functions were defined to represent potential impacts. The response functions were defined by a team of experts based on values defined by the SWRA Update Project technical team. By combining flame length with the WUI housing density data, you can determine where the greatest potential impact to homes and people is likely to occur.

Fire intensity data is modeled to incorporate penetration into urban fringe areas so that outputs better reflect real world conditions for fire spread and impact in fringe urban interface areas. With this enhancement, houses in urban areas adjacent to wildland fuels are incorporated into the WUI risk modeling. All areas in the South have the WUI Risk Index calculated consistently, which allows for comparison and ordination of areas across the entire region. Data is modeled at a 30-meter cell resolution, which is consistent with other SWRA layers.

Class	Acres	Percent
-9 Major Impacts	3,153	1.0%
-8	21,029	6.7%
-7	45,706	14.7%
-6	29,547	9.5%
-5 Moderate	62,549	20.1%
-4	43,820	14.1%
-3	35,172	11.3%
-2	61,052	19.6%
-1 Minor Impacts	9,621	3.1%
Total	**311,650**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
WUI Risk Index - Acres
Acres
80,000
60,000
40,000
20,000
0
3,153
21,029
45,706
29,547
62,549
43,820
35,172
61,052
9,621
-9 Major Impacts
-8
-7
-6
-5 Moderate
-4
-3
-2
-1 Minor Impacts


Alachua County
Wildland Urban
WUI Risk
-9 Major Impacts
-8
-7
-6
-5 Moderate
-4
-3
-2
-1 Minor Impacts
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Community Protection Zones

Description

Community Protection Zones (CPZ) represent those areas considered highest priority for mitigation planning activities. CPZs are based on an analysis of the Where People Live housing density data and surrounding fire behavior potential. Rate of Spread data is used to determine the areas of concern around populated areas that are within a 2-hour fire spread distance. This is referred to as the Secondary CPZ.

General consensus among fire planners is that for fuel mitigation treatments to be effective in reducing wildfire hazard, they must be conducted within a close distance of a community. In the South, the WUI housing density has been used to reflect populated areas in place of community boundaries (Primary CPZ). This ensures that CPZs reflect where people are living in the wildland, not jurisdictional boundaries.

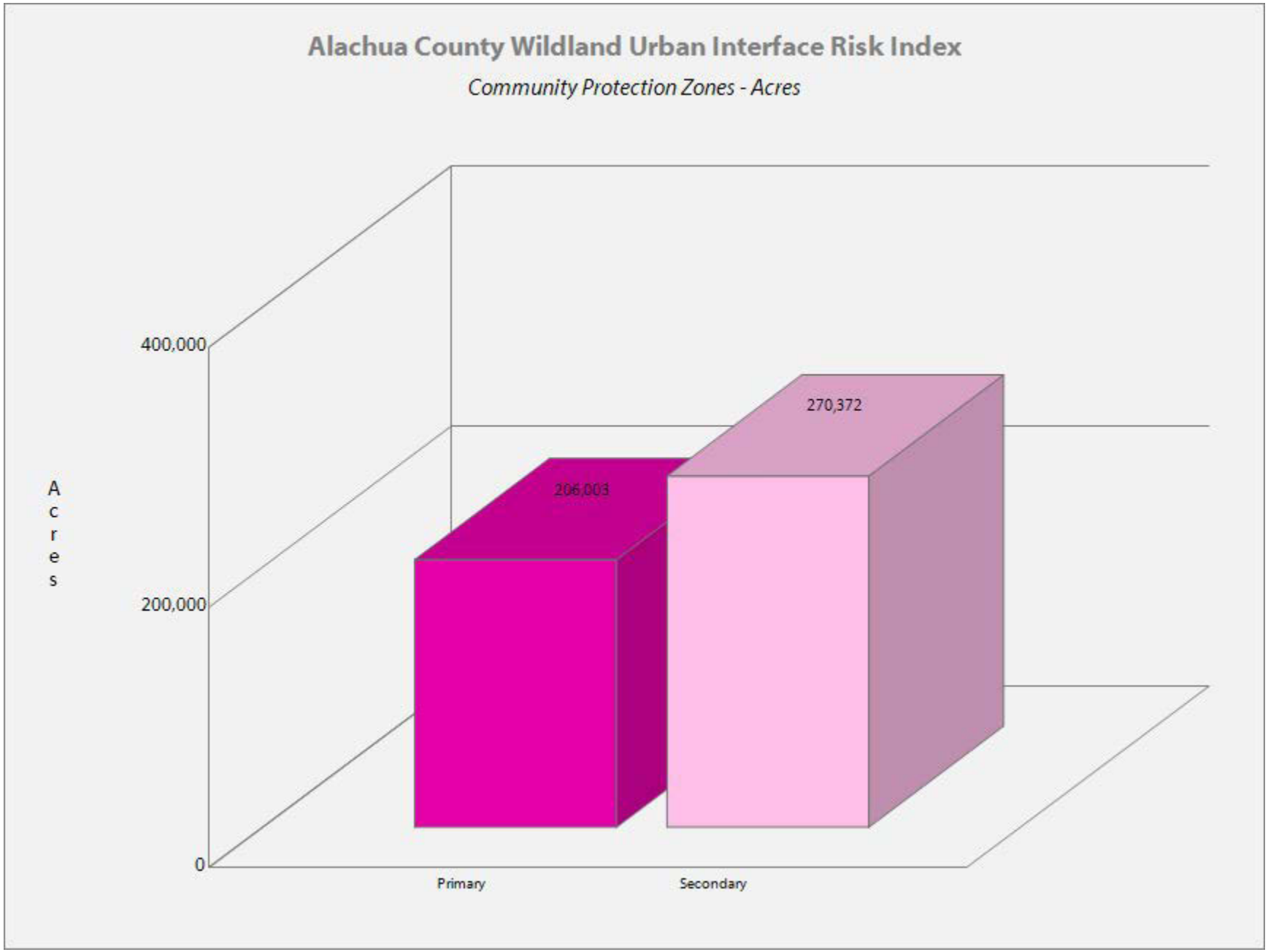
Secondary CPZs represent a variable width buffer around populated areas that are within a 2-hour fire spread distance. Accordingly, CPZs will extend farther in areas where rates of spread are greater and less in areas where minimal rate of spread potential exists. Secondary CPZ boundaries inherently incorporate fire behavior conditions.

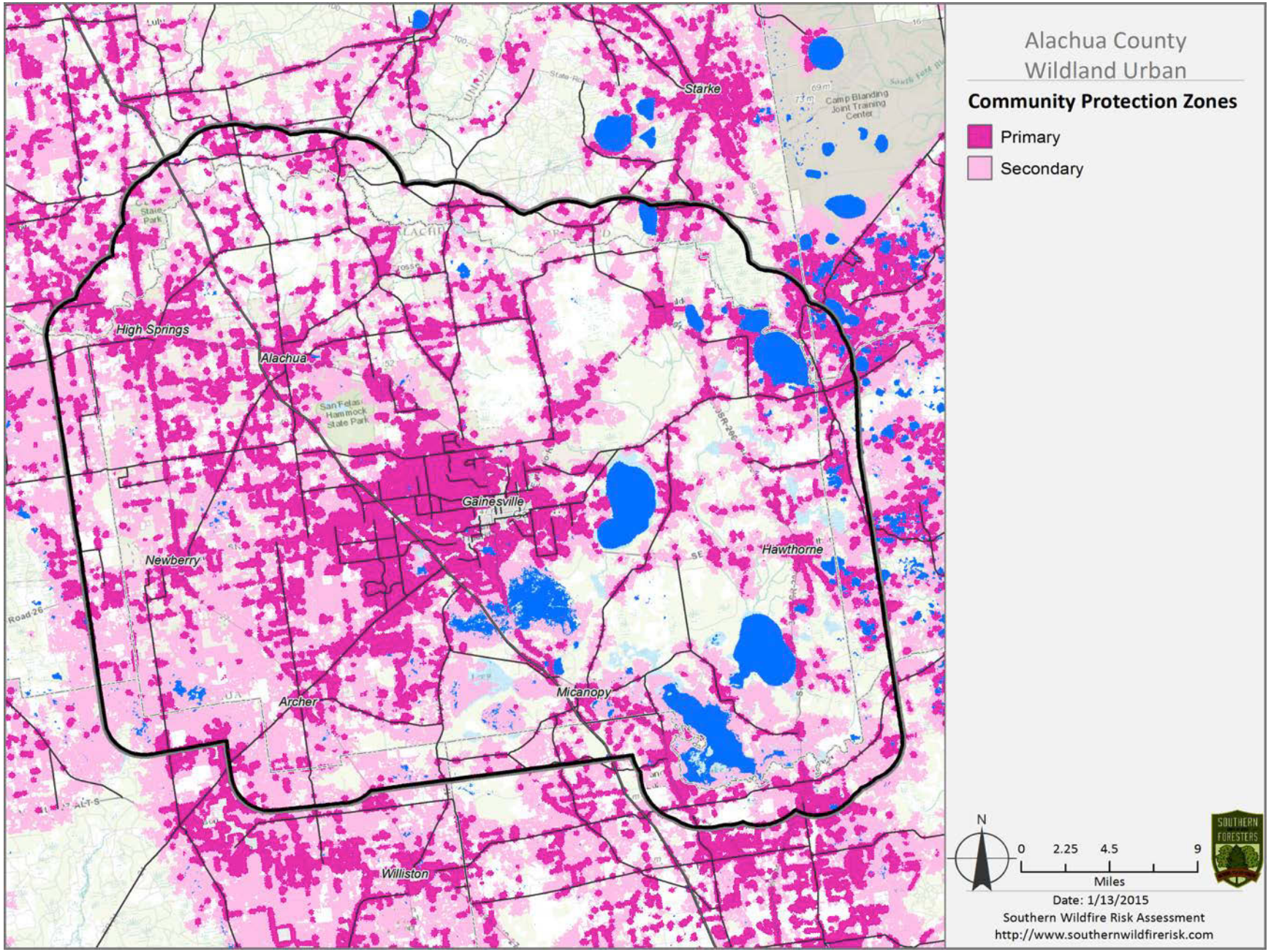
Primary CPZs reflect areas with a predefined housing density, such as greater than 1 house per 20 acres. Secondary CPZs are the areas around Primary CPZs within a 2 hour fire spread distance.

All areas in the South have the CPZs calculated consistently, which allows for comparison and ordination of areas across the entire region. Data is modeled at a 30-meter cell resolution, which is consistent with other SWRA layers.

Community Protection Zones - Acres

Class	Acres	Percent
Primary	206,003	43.2%
Secondary	270,372	56.8%
Total	**476,375**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Community Protection Zones - Acres
Acres
400,000
200,000
0
206,003
270,372
Primary
Secondary


Alachua County
Wildland Urban
Community Protection Zones
Primary
Secondary
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Burn Probability

Description

The Burn Probability (BP) layer depicts the probability of an area burning given current landscape conditions, percentile weather, historical ignition patterns and historical fire prevention and suppression efforts.

Describe in more detail, it is the tendency of any given pixel to burn, given the static landscape conditions depicted by the LANDFIRE Refresh 2008 dataset (as resampled by FPA), contemporary weather and ignition patterns, as well as contemporary fire management policies (entailing considerable fire prevention and suppression efforts).

The BP data does not, and is not intended to, depict fire-return intervals of any vintage, nor do they indicate likely fire footprints or routes of travel. Nothing about the expected shape or size of any actual fire incident can be interpreted from the burn probabilities. Instead, the BP data, in conjunction with the Fire Program Analysts FIL layers, are intended to support an actuarial approach to quantitative wildfire risk analysis (e.g., see Thompson et al. 2011).

Values in the Burn Probability (BP) data layer indicate, for each pixel, the number of times that cell was burned by an FSim-modeled fire, divided by the total number of annual weather scenarios simulated. Burn probability raster data was generated using the large fire simulator - FSim - developed for use in the Fire Program Analysis (FPA) project. FSim uses historical weather data and current landcover data for discrete geographical areas (Fire Planning Units - FPUs) and simulates fires in these FPUs. Using these simulated fires, an overall burn probability and marginal burn probabilities at four fire intensities (flame lengths) are returned by FSim for each 270m pixel in the FPU.

The fire growth simulations, when run repeatedly with different ignition locations and weather streams, generate burn probabilities and fire behavior distributions at each landscape location (i.e., cell or pixel). Results are objectively evaluated through comparison with historical fire patterns and statistics, including the mean annual burn probability and fire size distribution, for each FPU. This evaluation is part of the FSim calibration process for each FPU, whereby simulation inputs are adjusted until the slopes of the historical and modeled fire size distributions are similar and the modeled average burn probability falls within an acceptable range of the historical reference value (i.e., the 95% confidence interval for the mean).

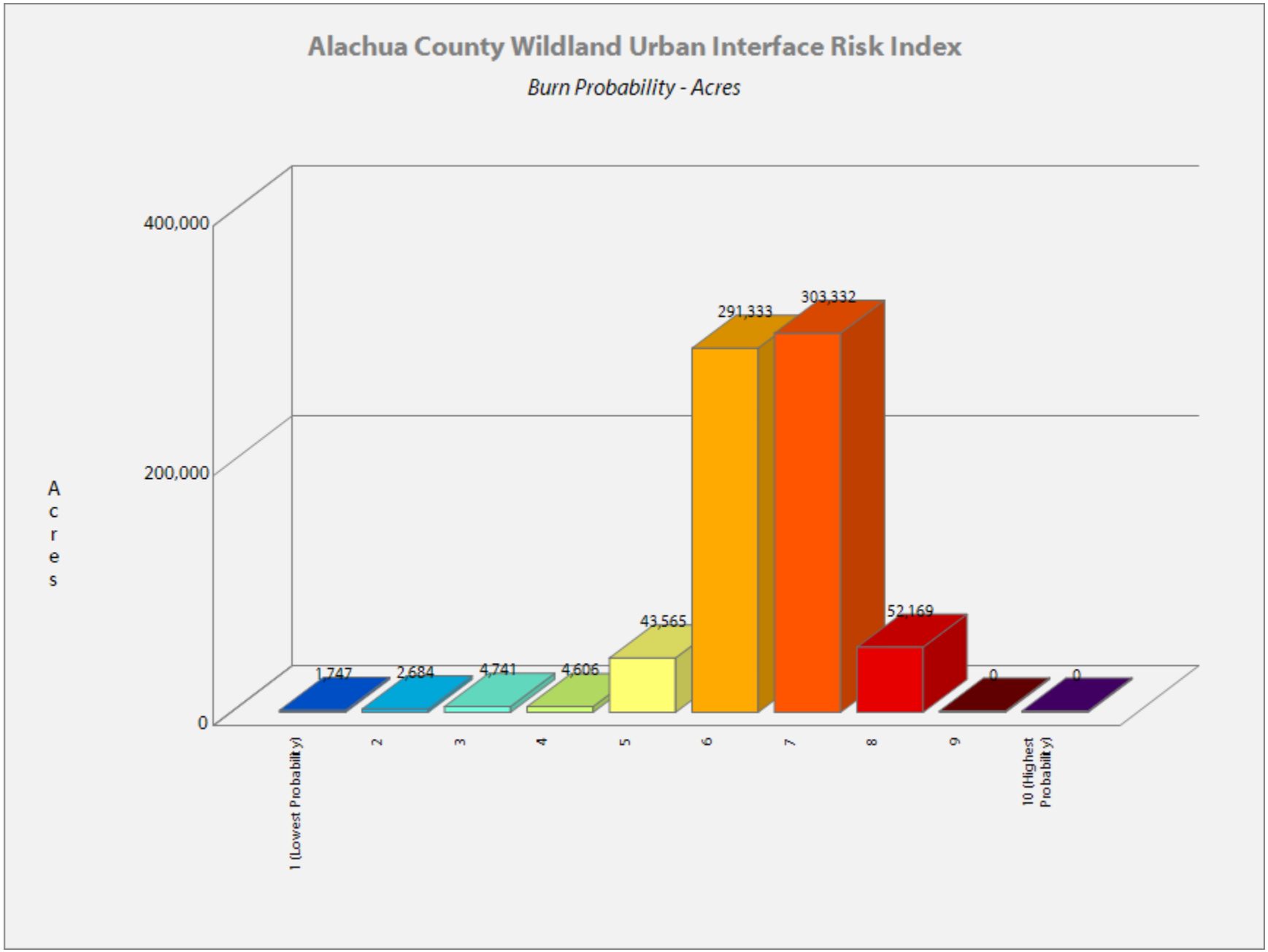
Please refer to the metadata available for this dataset for a detailed description of the data processing methods, assumptions and references that pertain to the development of this data. This information is available from the USFS Missoula Fire Sciences Laboratory.

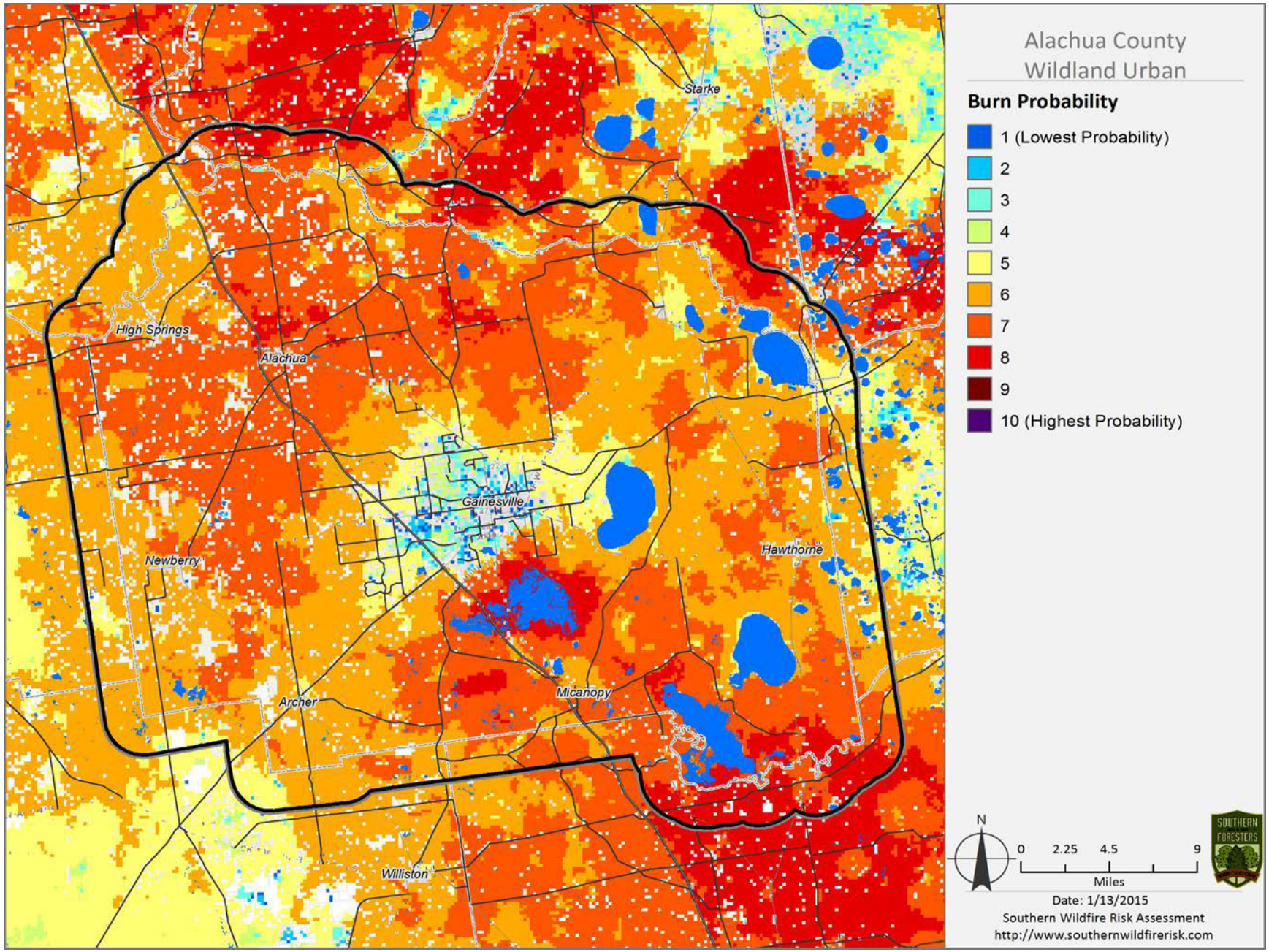
Please refer to the web site link in the report References to obtain more detailed descriptions of FPA and the related data products such as Burn Probability.

Burn Probability replaces the Wildland Fire Susceptibility Index (WFSI) layer developed in the original SWRA project completed in 2005.

Burn Probability - Acres

Class	Acres	Percent
1	1,747	0.2%
2	2,684	0.4%
3	4,741	0.7%
4	4,606	0.7%
5	43,565	6.2%
6	291,333	41.4%
7	303,332	43.1%
8	52,169	7.4%
9	0	0.0%
10	0	0.0%
Total	**704,177**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Burn Probability - Acres
Acres
400,000
200,000
0
1,747
2,684
4,741
4,606
43,565
291,333
303,332
52,169
0
0
1 (Lowest Probability)
2
3
4
5
6
7
8
9
10 (Highest Probability)


Alachua County
Wildland Urban
Burn Probability
1 (Lowest Probability)
2
3
4
5
6
7
8
9
10 (Highest Probability)
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
SOUTHERN FORESTERS
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Wildfire Behavior Outputs

Description

Fire behavior is the manner in which a fire reacts to the following environmental influences:

1. **Fuels**
2. **Weather**
3. **Topography**

Fire behavior characteristics are attributes of wildland fire that pertain to its spread, intensity, and growth. Fire behavior characteristics utilized in the Southern Wildfire Risk Assessment (SWRA) include fire type, rate of spread, flame length and fire intensity scale. These metrics are used to determine the potential fire behavior under different weather scenarios. Areas that exhibit moderate to high fire behavior potential can be identified for mitigation treatments, especially if these areas are in close proximity to homes, business, or other assets.

Fuels

The SWRA includes composition and characteristics for both surface fuels and canopy fuels. Significant increases in fire behavior will be captured if the fire has the potential to transition from a surface fire to a canopy fire.

Fuel datasets required to compute both surface and canopy fire potential include:

- **Surface Fuels**, generally referred to as fire behavior fuel models, provide the input parameters needed to compute surface fire behavior.
- **Canopy Cover** is the horizontal percentage of the ground surface that is covered by tree crowns. It is used to compute wind reduction factors and shading.
- **Canopy Ceiling Height/Stand Height** is the height above the ground of the highest canopy layer where the density of the crown mass within the layer is high enough to support vertical movement of a fire. A good estimate of canopy ceiling height would be the average height of the dominant and co-dominant trees in a stand. It is used for computing wind reduction to midflame height and spotting distances from torching trees (Fire Program Solutions, L.L.C, 2005).
- **Canopy Base Height** is the lowest height above the ground above which there is sufficient canopy fuel to propagate fire vertically (Scott & Reinhardt, 2001). Canopy base height is a property of a plot, stand, or group of trees, not of an individual tree. For fire modeling, canopy base height is an effective value that incorporates ladder fuel, such as tall shrubs and small trees. Canopy base height is used to determine if a surface fire will transition to a canopy fire.
- **Canopy Bulk Density** is the mass of available canopy fuel per unit canopy volume (Scott & Reinhardt, 2001). Canopy bulk density is a bulk property of a stand, plot, or group of trees, not of an individual tree. Canopy bulk density is used to predict whether an active crown fire is possible.

Weather

Environmental weather parameters needed to compute fire behavior characteristics include 1-hour, 10-hour, and 100-hour timelag fuel moistures, herbaceous fuel moisture, woody fuel moisture, and the 20-foot 10 minute average wind speed. To collect this information, weather influence zones were established across the region. A weather influence zone is an area where for analysis purposes the weather on any given day is considered uniform. Within each weather influence zone, historical daily weather is gathered to compile a weather dataset from which four percentile weather categories are created. The percentile weather categories are intended to represent low, moderate, high, and extreme fire weather days. Fire behavior outputs are computed for each percentile weather category to determine fire potential under different weather scenarios.

The four percentile weather categories include:

- Low Weather Percentile (0 – 15%)
- Moderate Weather Percentile (16 – 90%)
- High Weather Percentile (91 – 97%)
- Extreme Weather Percentile (98 – 100%)

Topography

Topography datasets required to compute fire behavior characteristics are elevation, slope and aspect.

FIRE BEHAVIOR CHARACTERISTICS

Fire behavior characteristics provided in this report include:

- **Characteristic Rate of Spread**
- **Characteristic Flame Length**
- **Characteristic Fire Intensity Scale**
- **Fire Type - Extreme**

Characteristic Rate of Spread

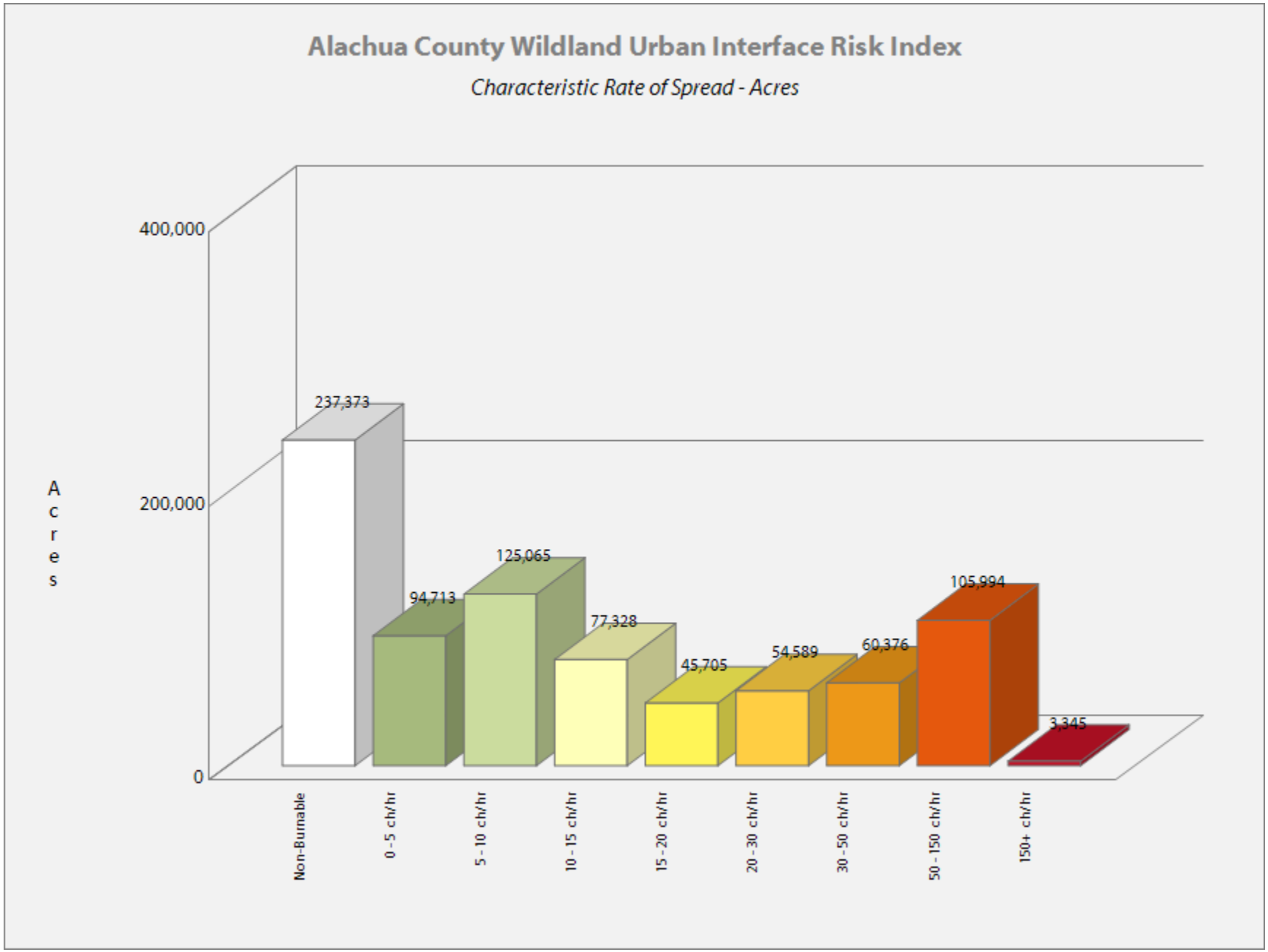
Characteristic Rate of Spread is the typical or representative rate of spread of a potential fire based on a weighted average of four percentile weather categories. Rate of spread is the speed with which a fire moves in a horizontal direction across the landscape, usually expressed in chains per hour (ch/hr) or feet per minute (ft/min). For purposes of the Southern Wildfire Risk Assessment, this measurement represents the maximum rate of spread of the fire front. Rate of Spread is the metric used to derive the Community Protection Zones.

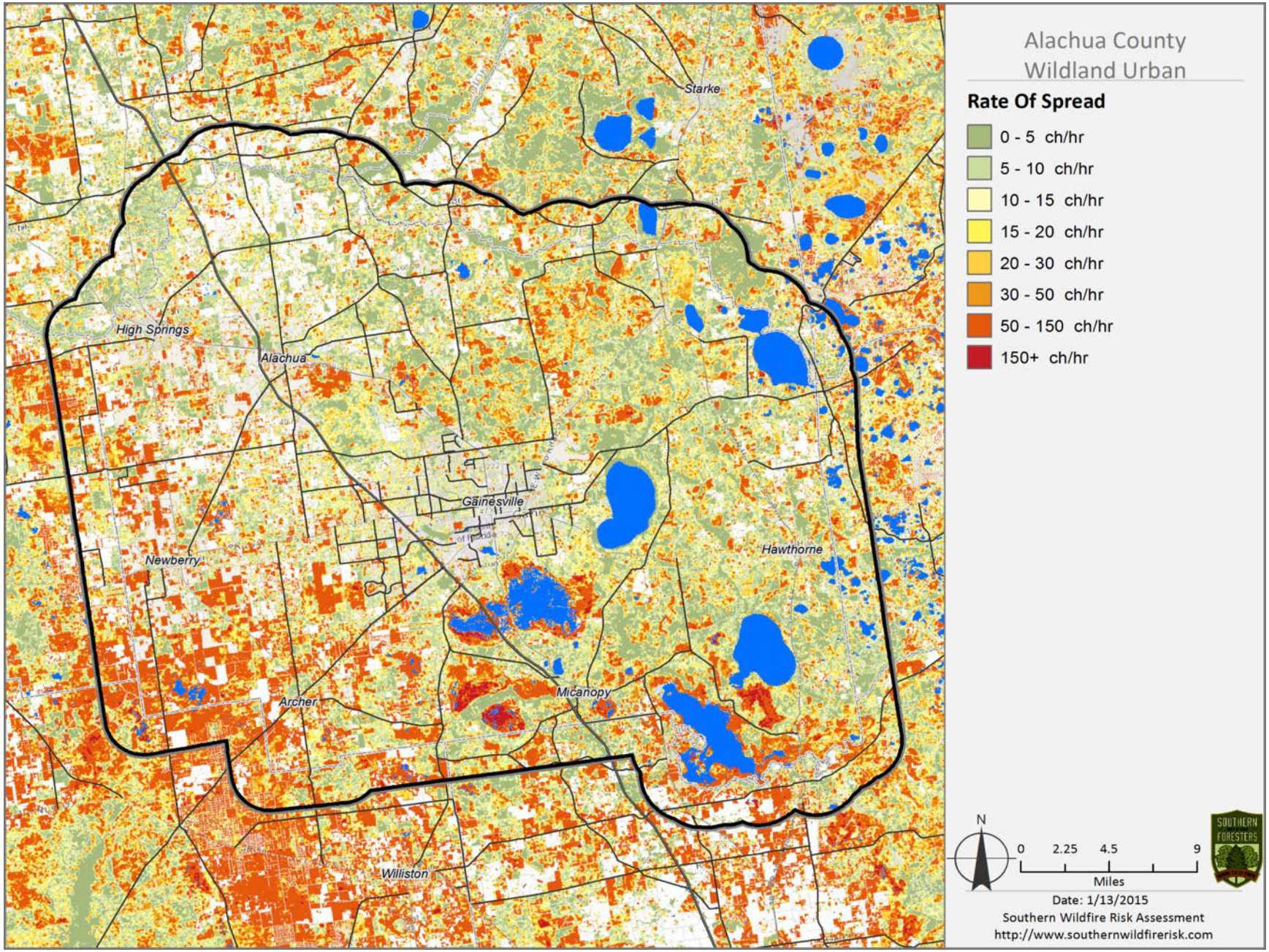
Rate of spread is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for each weather influence zone in the South. A weather influence zone is an area where, for analysis purposes, the weather on any given day is considered uniform.

For all Southern states, except Florida and Texas, this dataset was derived from updated fuels and canopy data as part of the 2010 SWRA Update Project recently completed in May 2014. For Texas, the 2010 Texas risk update data is portrayed. For Florida, the 2010 Florida risk assessment update data is shown.

Characteristic Rate of Spread – Acres

Rate of Spread	Acres	Percent
Non-Burnable	237,373	29.5%
0 - 5 (ch/hr)	94,713	11.8%
5 - 10 (ch/hr)	125,065	15.5%
10 – 15 (ch/hr)	77,328	9.6%
15 - 20 (ch/hr)	45,705	5.7%
20 - 30 (ch/hr)	54,589	6.8%
30 - 50 (ch/hr)	60,376	7.5%
50 - 150 (ch/hr)	105,994	13.2%
150 + (ch/hr)	3,345	0.4%
Total	**804,488**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Characteristic Rate of Spread - Acres
Acres
400,000
200,000
0
237,373
94,713
125,065
77,328
45,705
54,589
60,376
105,994
3,345
Non-Burnable
0 - 5 ch/hr
5 - 10 ch/hr
10 - 15 ch/hr
15 - 20 ch/hr
20 - 30 ch/hr
30 - 50 ch/hr
50 - 150 ch/hr
150+ ch/hr


Alachua County
Wildland Urban
Rate Of Spread
0 - 5 ch/hr
5 - 10 ch/hr
10 - 15 ch/hr
15 - 20 ch/hr
20 - 30 ch/hr
30 - 50 ch/hr
50 - 150 ch/hr
150+ ch/hr
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Characteristic Flame Length

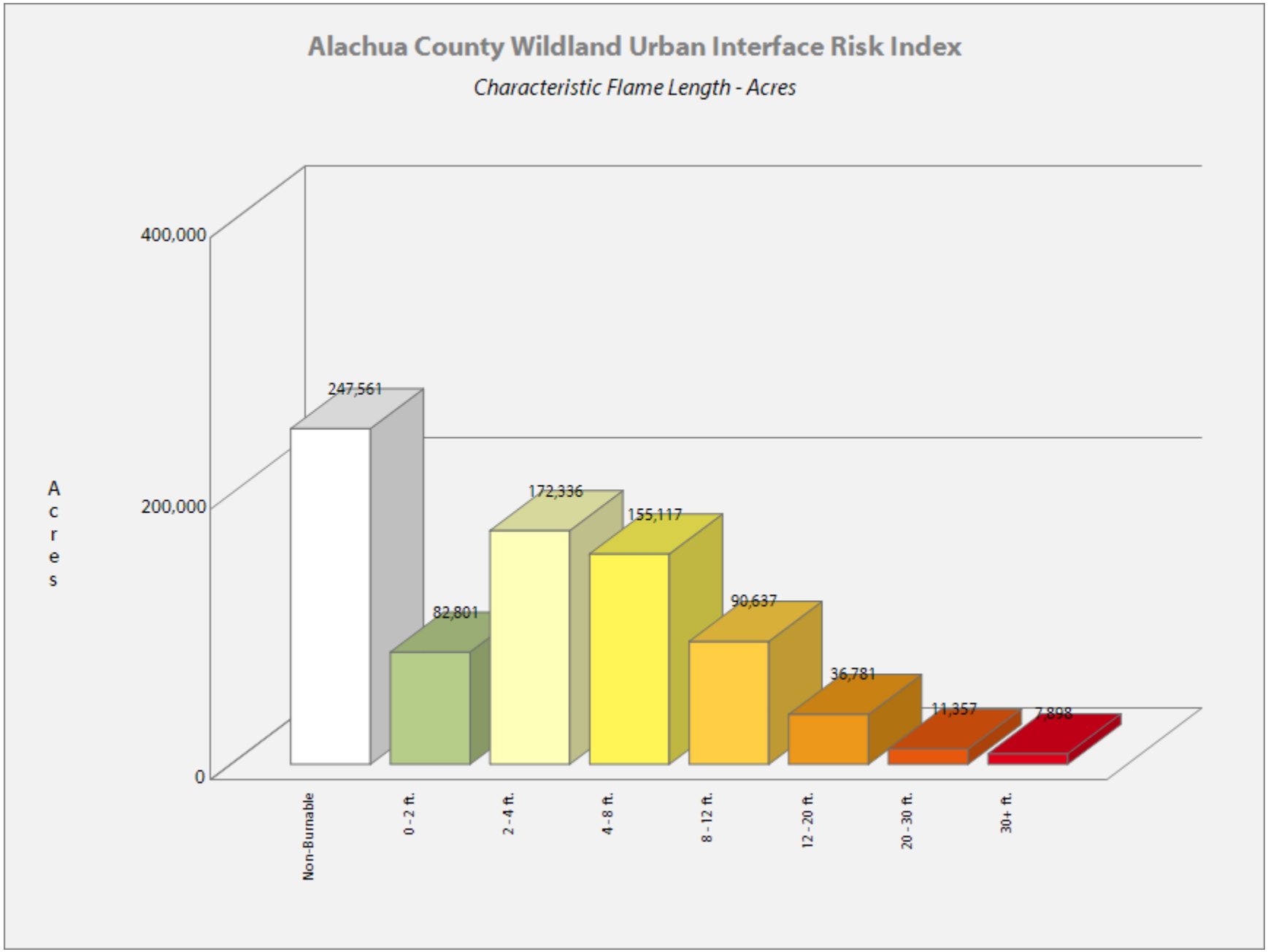
Characteristic Flame Length is the typical or representative flame length of a potential fire based on a weighted average of four percentile weather categories. Flame Length is defined as the distance between the flame tip and the midpoint of the flame depth at the base of the flame, which is generally the ground surface. It is an indicator of fire intensity and is often used to estimate how much heat the fire is generating. Flame length is typically measured in feet (ft). Flame length is the measure of fire intensity used to generate the response index outputs for the SWRA.

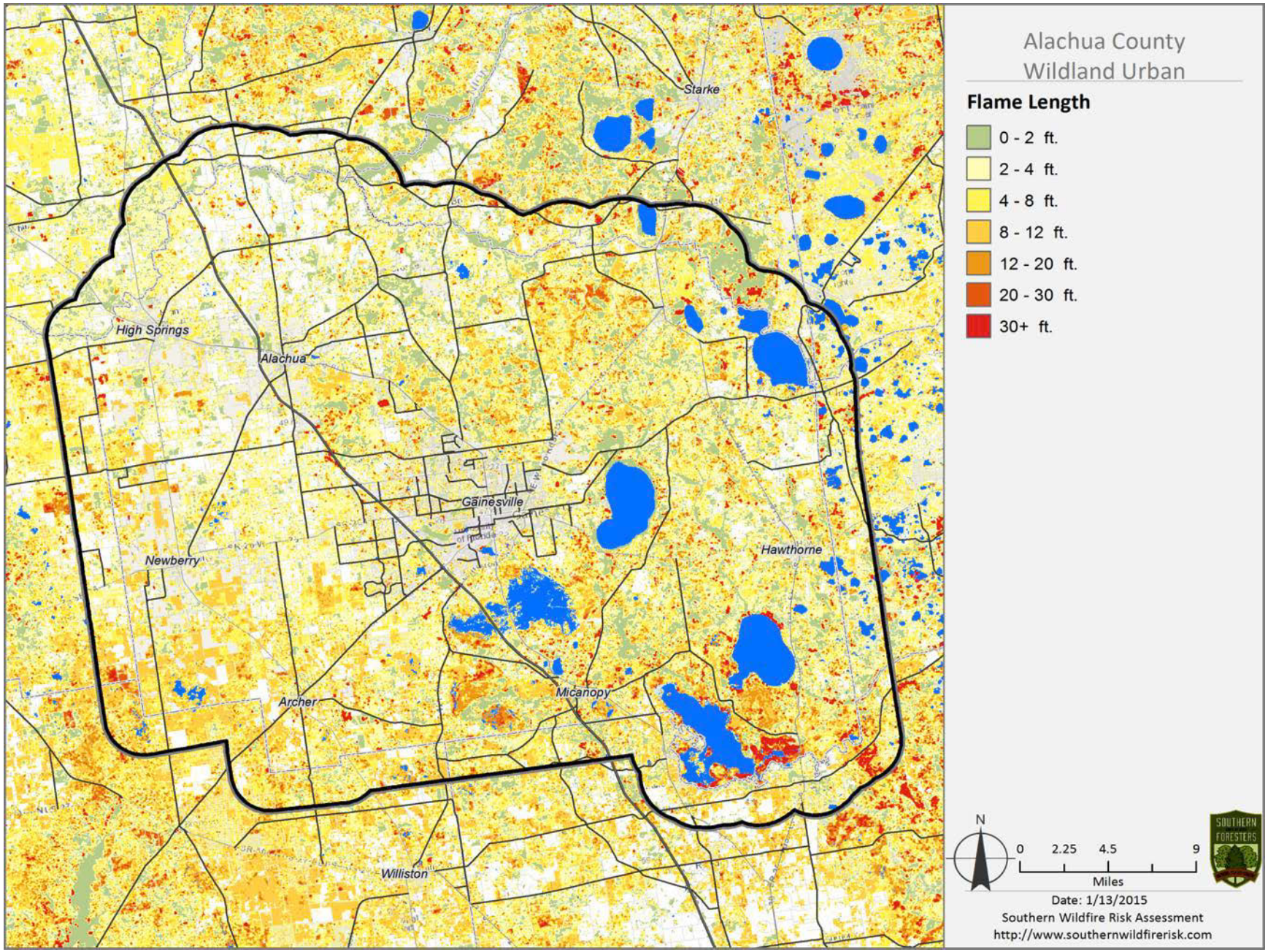
Flame length is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for each weather influence zone in the South. A weather influence zone is an area where, for analysis purposes, the weather on any given day is considered uniform.

For all Southern states, except Florida and Texas, this dataset was derived from updated fuels and canopy data as part of the 2010 SWRA Update Project recently completed in May 2014. For Texas, the 2010 Texas risk update data is portrayed. For Florida, the 2010 Florida risk assessment update data is shown.

Characteristic Flame Length – Acres

Flame Length	Acres	Percent
Non-Burnable	247,561	30.8%
0 - 2 ft	82,801	10.3%
2 - 4 ft	172,336	21.4%
4 - 8 ft	155,117	19.3%
8 - 12 ft	90,637	11.3%
12 - 20 ft	36,781	4.6%
20 - 30 ft	11,357	1.4%
30 + ft	7,898	1.0%
Total	**804,488**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Characteristic Flame Length - Acres
Acres
400,000
200,000
0
247,561
82,801
172,336
155,117
90,637
36,781
11,357
7,898
Non-Burnable
0 - 2 ft.
2 - 4 ft.
4 - 8 ft.
8 - 12 ft.
12 - 20 ft.
20 - 30 ft.
30+ ft.


Alachua County
Wildland Urban
Flame Length
0 - 2 ft.
2 - 4 ft.
4 - 8 ft.
8 - 12 ft.
12 - 20 ft.
20 - 30 ft.
30+ ft.
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Characteristic Fire Intensity Scale

Description

Characteristic Fire Intensity Scale (FIS) specifically identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist based on a weighted average of four percentile weather categories. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consist of 5 classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities. Refer to descriptions below.

1. **Class 1, Very Low:**
   Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
2. **Class 2, Low:**
   Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
3. **Class 3, Moderate:**
   Flames up to 8 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.
4. **Class 4, High:**
   Large Flames, up to 30 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.
5. **Class 5, Very High:**
   Very large flames up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire-induced winds. Indirect attack marginally effective at the head of the fire. Great potential for harm or damage to life and property.

For all Southern states, except Texas, this dataset was derived from updated fuels and canopy data as part of the 2010 SWRA Update Project recently completed in May 2014. For Texas, the 2010 Texas risk update data is portrayed.

To aid in viewing on the map, FIS is presented in 1/2 class increments. Please consult the SouthWRAP User Manual for a more detailed description of the FIS class descriptions.

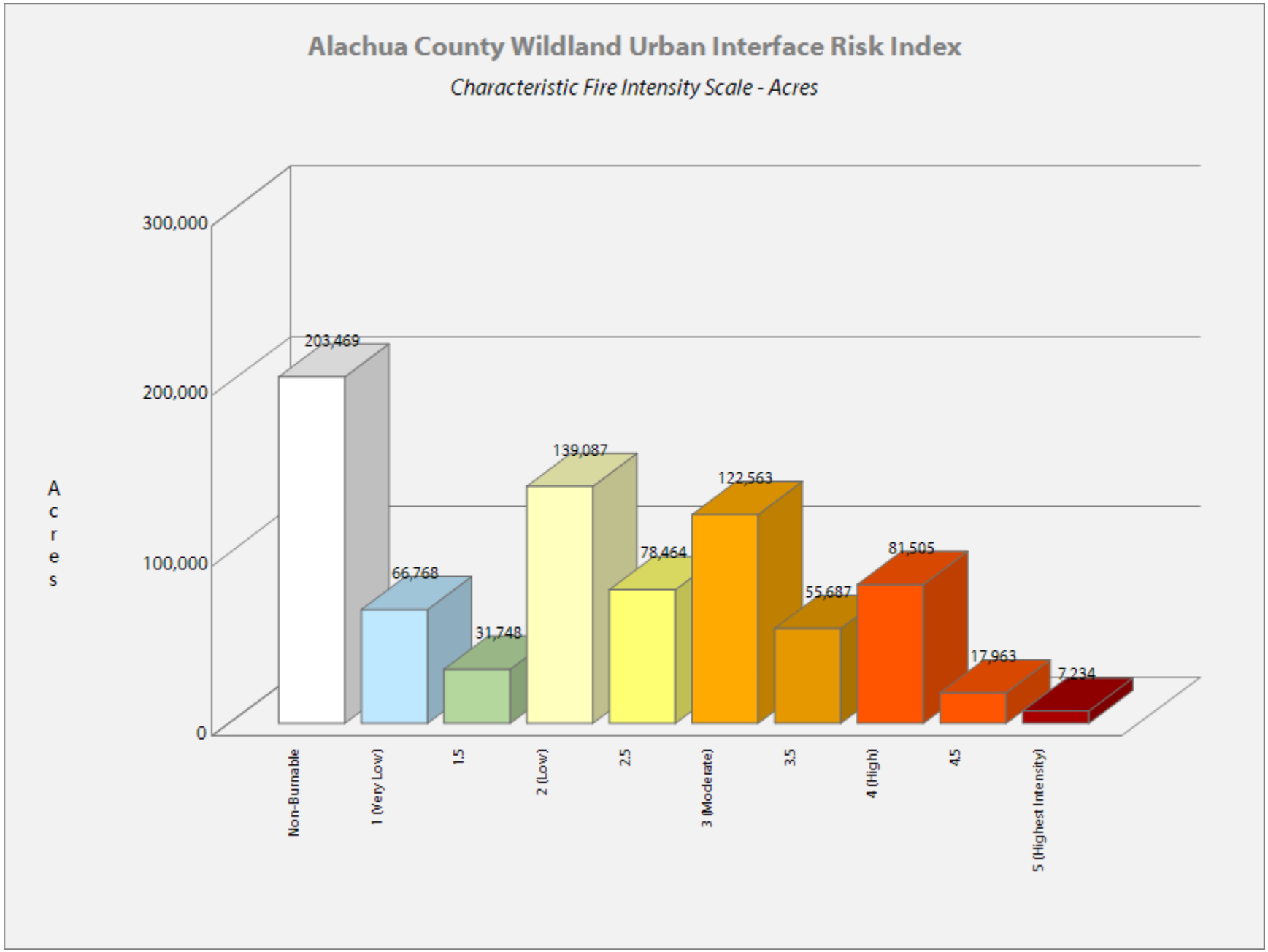
Since all areas in the South have fire intensity scale calculated consistently, it allows for comparison and ordination of areas across the entire region.

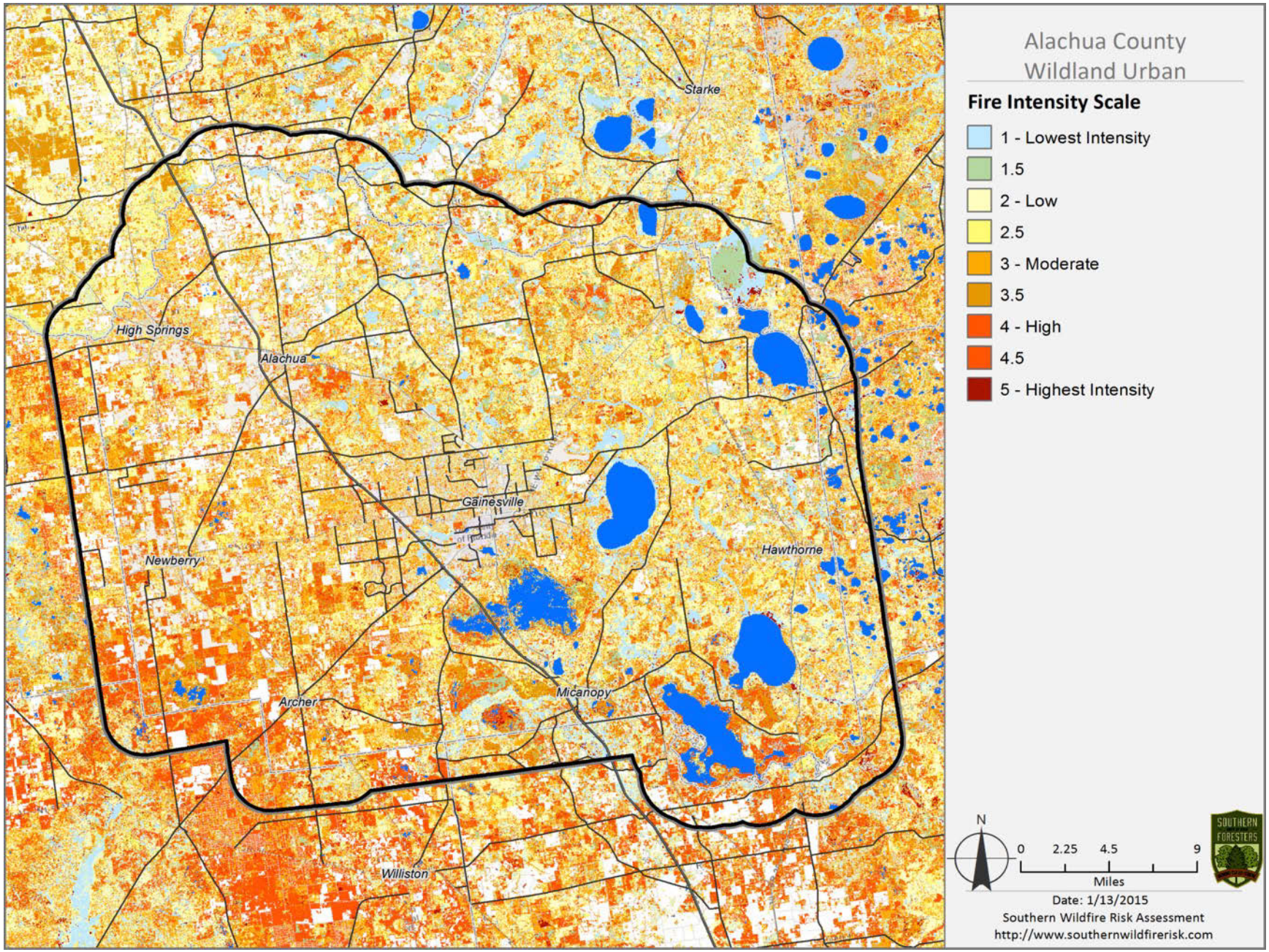
Fire intensity scale is a fire behavior output, which is influenced by three environmental factors - fuels, weather, and topography. Weather is by far the most dynamic variable as it changes frequently. To account for this variability, four percentile weather categories were created from historical weather observations to represent low, moderate, high, and extreme weather days for each weather influence zone in the South. A weather influence zone is an area where, for analysis purposes, the weather on any given day is considered uniform.

The fire intensity scale map is derived at a 30-meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county or local planning efforts.

Characteristic Fire Intensity Scale - Acres

Class	Acres	Percent
Non-Burnable	203,469	25.3%
1 Lowest Intensity	66,768	8.3%
1.5	31,748	3.9%
2 Low	139,087	17.3%
2.5	78,464	9.8%
3 Moderate	122,563	15.2%
3.5	55,687	6.9%
4 High	81,505	10.1%
4.5	17,963	2.2%
5 Highest Intensity	7,234	0.9%
Total	**804,488**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Characteristic Fire Intensity Scale - Acres
Acres
300,000
200,000
100,000
0
203,469
66,768
31,748
139,087
78,464
122,563
55,687
81,505
17,963
7,234
Non-Burnable
1 (Very Low)
1.5
2 (Low)
2.5
3 (Moderate)
3.5
4 (High)
4.5
5 (Highest Intensity)


Alachua County
Wildland Urban
Fire Intensity Scale
1 - Lowest Intensity
1.5
2 - Low
2.5
3 - Moderate
3.5
4 - High
4.5
5 - Highest Intensity
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Fire Type - Extreme

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

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

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

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

Fire Type – Extreme represents the potential fire type under the extreme percentile weather category. The extreme percentile weather category represents the average weather based on the top three percent fire weather days in the analysis period. It is not intended to represent a worst case scenario weather event. Accordingly, the potential fire type is based on fuel conditions, extreme percentile weather, and topography.

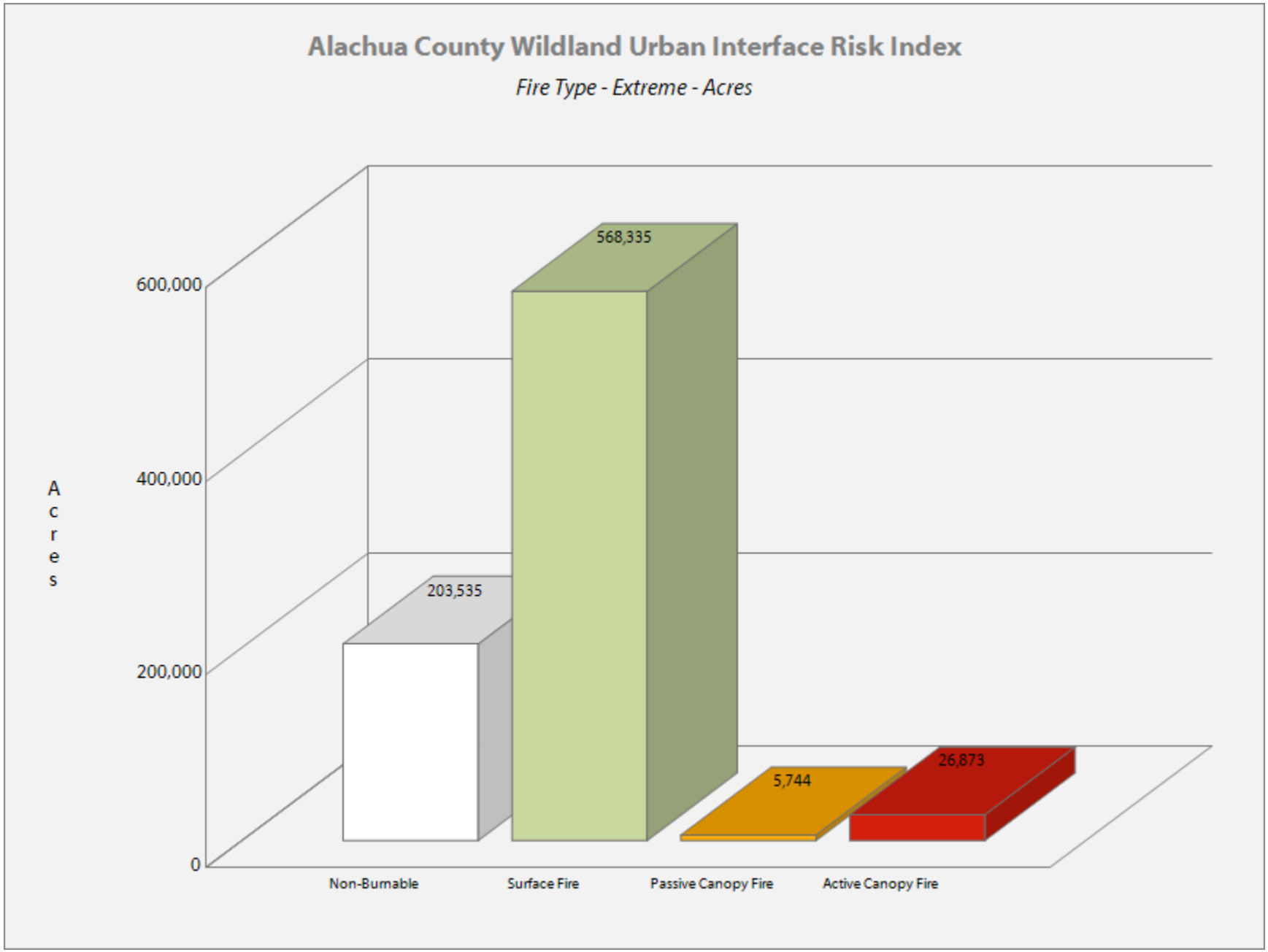
Canopy fires are very dangerous, destructive and difficult to control due to their increased fire intensity. From a planning perspective, it is important to identify where these conditions are likely to occur on the landscape so that special preparedness measure can be taken if necessary. The Fire Type – Extreme layer shows the footprint of where these areas are most likely to occur. However, it is important to note that canopy fires are not restricted to these areas. Under the right conditions, it can occur in other canopied areas.

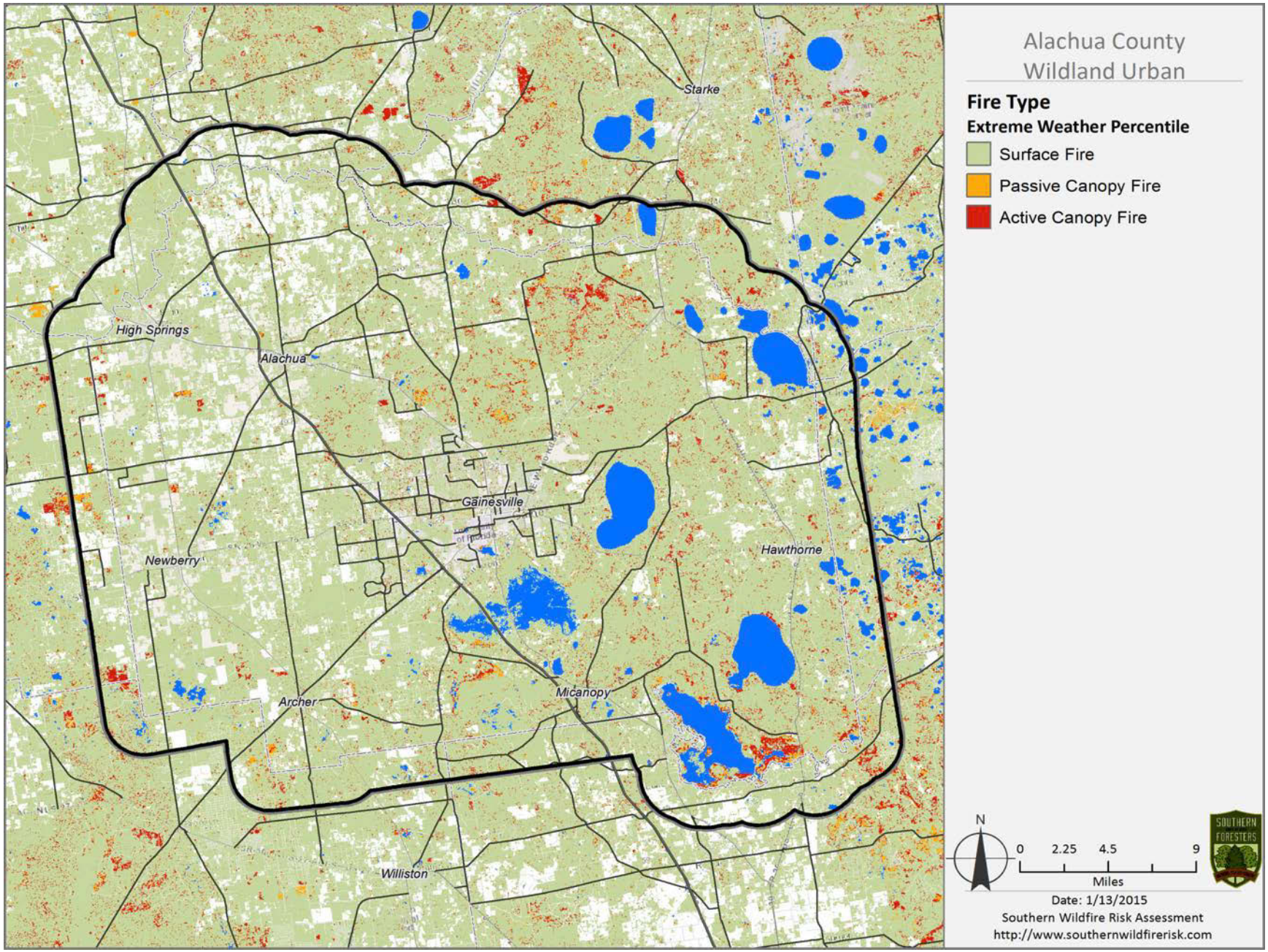
For all Southern states, except Florida and Texas, this dataset was derived from updated fuels and canopy data as part of the 2010 SWRA Update Project recently completed in May 2014. For Texas, the 2010 Texas risk update data is portrayed. For Florida, the 2010 Florida risk assessment update data is shown.

The fire type - extreme map is derived at a 30-meter resolution. This scale of data was chosen to be consistent with the accuracy of the primary surface fuels dataset used in the assessment. While not appropriate for site specific analysis, it is appropriate for regional, county or local planning efforts.

Fire Type (Extreme) - Acres

Fire Type	Acres	Percent
Non-Burnable	203,535	25.3%
Surface Fire	568,335	70.6%
Passive Canopy	5,744	0.7%
Active Canopy	26,873	3.3%
Total	**804,488**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Fire Type - Extreme - Acres
Acres
600,000
400,000
200,000
0
568,335
203,535
5,744
26,873
Non-Burnable
Surface Fire
Passive Canopy Fire
Active Canopy Fire


Alachua County
Wildland Urban
Fire Type
Extreme Weather Percentile
Surface Fire
Passive Canopy Fire
Active Canopy Fire
Starke
High Springs
Alachua
Gainesville
Newberry
Hawthorne
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

Surface Fuels

Description

Surface fuels, or fire behavior fuel models as they are technically referred to, contain the parameters needed by the Rothermel (1972) surface fire spread model to compute surface fire behavior characteristics, such as rate of spread, flame length, fireline intensity, and other fire behavior metrics. As the name might suggest, surface fuels only account for the surface fire potential. Canopy fire potential is computed through a separate but linked process. The Southern Wildfire Risk Assessment accounts for both surface and canopy fire potential in the fire behavior outputs.

Surface fuels are typically categorized into one of four primary fuel types based on the primary carrier of the surface fire: 1) grass, 2) shrub/brush, 3) timber litter and 4) slash. There are two standard fire behavior fuel model sets published for use. The Fire Behavior Prediction System 1982 Fuel Model Set (Anderson, 1982) contains 13 fuel models and the Fire Behavior Prediction System 2005 Fuel Model Set (Scott & Burgan, 2005) contains 40 fuel models.

The SWRA Surface Fuels have been updated to use the FBPS 2005 40 fuel model set from the LANDFIRE 2010 products, supplemented with additional enhancements obtained through calibration workshops with the Southern states. Florida uses FBPS 1982 fuel models derived based on spectral classification of Landsat Thematic Mapper (TM) satellite imagery derived as part of the Florida Forest Service fuels mapping and risk assessment projects. Texas fuels represent 2010 updates conducted as part of a statewide fuels and canopy mapping effort.

For the remaining 11 Southern states, the recently completed SWRA Update project produced a new surface fuels dataset based on 2010 LANDFIRE products. A detailed fuels calibration process was undertaken that involved collaboration with Southern state fuels and fire behavior specialists supported by federal partner involvement. Workshops were held to review the LANDFIRE fuels product and calibrate the data by modifying specific fuels classes to better reflect local knowledge and input. A key component of this calibration task involved using image processing techniques to better delineate conifer areas, and in particular pine areas (plantations and natural stands). The fuels layer represents 2010 conditions.

Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent
Grass Fuels Type Models (nearly pure grass and/or forb type)				
GR01	2005	Grass is short, patchy, and possibly heavily grazed. Spread rate moderate; flame length low.	0	0.0%
GR02	2005	Moderately coarse continuous grass, average depth about 1 foot. Spread rate high; flame length moderate.	0	0.0%
GR03	2005	Very coarse grass, average depth about 2 feet. Spread rate high; flame length moderate.	0	0.0%
GR04	2005	Moderately coarse continuous grass, average depth about 2 feet. Spread rate very high; flame length high.	0	0.0%
GR05	2005	Dense, coarse grass, average depth about 1 to 2 feet. Spread rate very high; flame length high.	0	0.0%
GR06	2005	Dryland grass about 1 to 2 feet tall. Spread rate very high; flame length very high.	0	0.0%
GR08	2005	Heavy, coarse, continuous grass 3 to 5 feet tall. Spread rate very high; flame length very high.	0	0.0%
GR09	2005	Very heavy, coarse, continuous grass 5 to 8 feet tall. Spread rate extreme; flame length extreme.	0	0.0%
Grass-Shrub Fuel Type Models (mixture of grass and shrub, up to 50 percent shrub coverage)				
GS01	2005	Shrubs are about 1 foot high, low grass load. Spread rate moderate; flame length low.	0	0.0%
GS02	2005	Shrubs are 1 to 3 feet high, moderate grass load. Spread rate high; flame length moderate.	0	0.0%
GS03	2005	Moderate grass/shrub load, average grass/shrub depth less than 2 feet. Spread rate high; flame length moderate.	0	0.0%
GS04	2005	Heavy grass/shrub load, depth greater than 2 feet. Spread rate high; flame length very high.	0	0.0%
Shrub Fuel Type Models (Shrubs cover at least 50 percent of the site, grass sparse to nonexistent)				
SH01	2005	Low shrub fuel load, fuelbed depth about 1 foot; some grass may be present. Spread rate very low; flame length very low.	0	0.0%

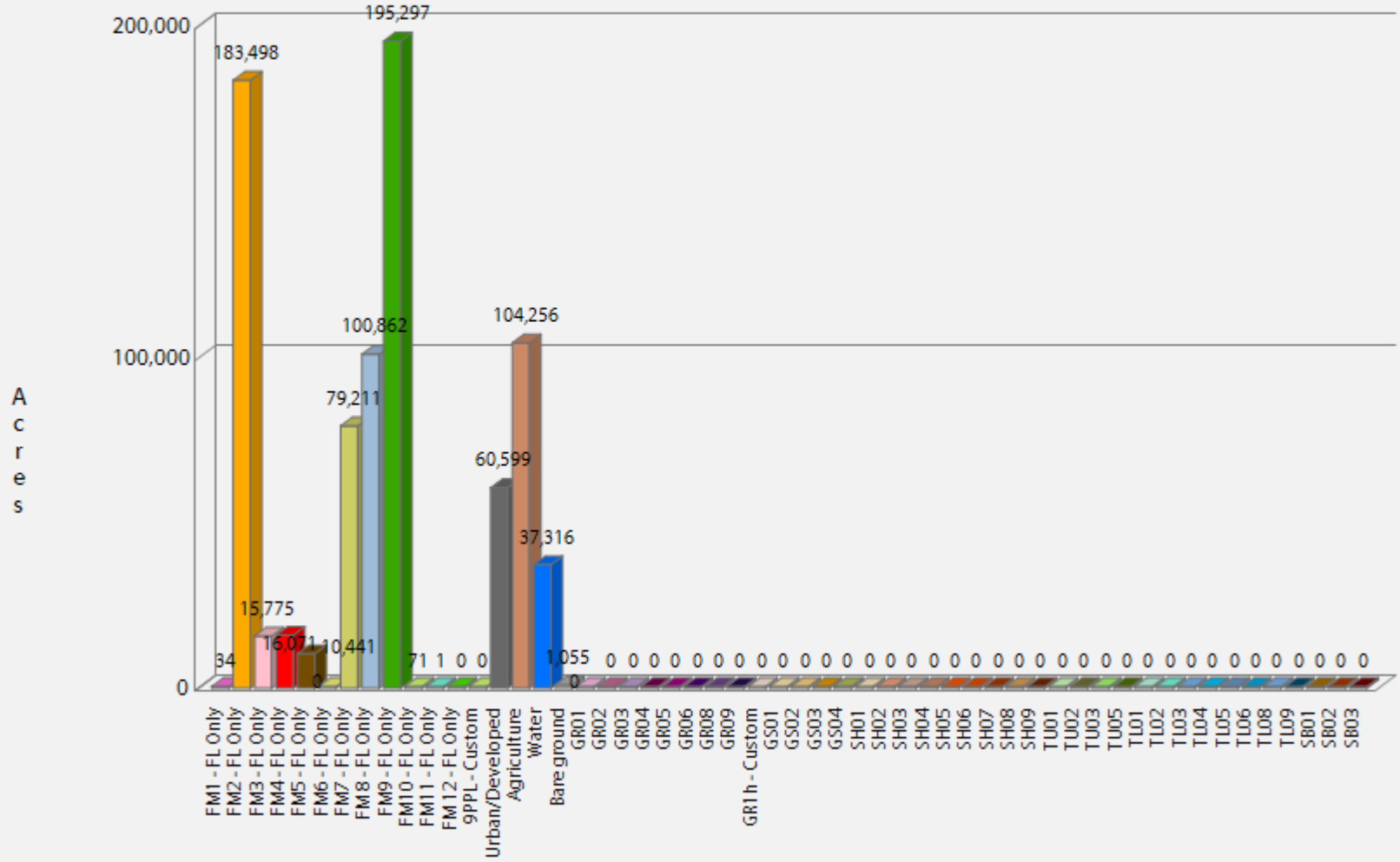
Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent
SH02	2005	Moderate fuel load (higher than SH01), depth about 1 foot, no grass fuel present. Spread rate low; flame length low.	0	0.0%
SH03	2005	Moderate shrub load, possibly with pine overstory or herbaceous fuel, fuel bed depth 2 to 3 feet. Spread rate low; flame length low.	0	0.0%
SH04	2005	Low to moderate shrub and litter load, possibly with pine overstory, fuel bed depth about 3 feet. Spread rate high; flame length moderate.	0	0.0%
SH05	2005	Heavy shrub load, depth 4 to 6 feet. Spread rate very high; flame length very high.	0	0.0%
SH06	2005	Dense shrubs, little or no herb fuel, depth about 2 feet. Spread rate high; flame length high.	0	0.0%
SH07	2005	Very heavy shrub load, depth 4 to 6 feet. Spread rate lower than SH05, but flame length similar. Spread rate high; flame length very high.	0	0.0%
SH08	2005	Dense shrubs, little or no herb fuel, depth about 3 feet. Spread rates high; flame length high.	0	0.0%
SH09	2005	Dense, finely branched shrubs with significant fine dead fuel, about 4 to 6 feet tall; some herbaceous fuel may be present. Spread rate high, flame length very high.	0	0.0%
Timber-Understory Fuel Type Models (Grass or shrubs mixed with litter from forest canopy)				
TU01	2005	Fuelbed is low load of grass and/or shrub with litter. Spread rate low; flame length low.	0	0.0%
TU02	2005	Fuelbed is moderate litter load with shrub component. Spread rate moderate; flame length low.	0	0.0%
TU03	2005	Fuelbed is moderate litter load with grass and shrub components. Spread rate high; flame length moderate.	0	0.0%
TU05	2005	Fuelbed is high load conifer litter with shrub understory. Spread rate moderate; flame length moderate.	0	0.0%
Timber Litter Fuel Type Models (dead and down woody fuel litter beneath a forest canopy)				
TL01	2005	Light to moderate load, fuels 1 to 2 inches deep. Spread rate very low; flame length very low.	0	0.0%
TL02	2005	Low load, compact. Spread rate very low; flame length very low.	0	0.0%

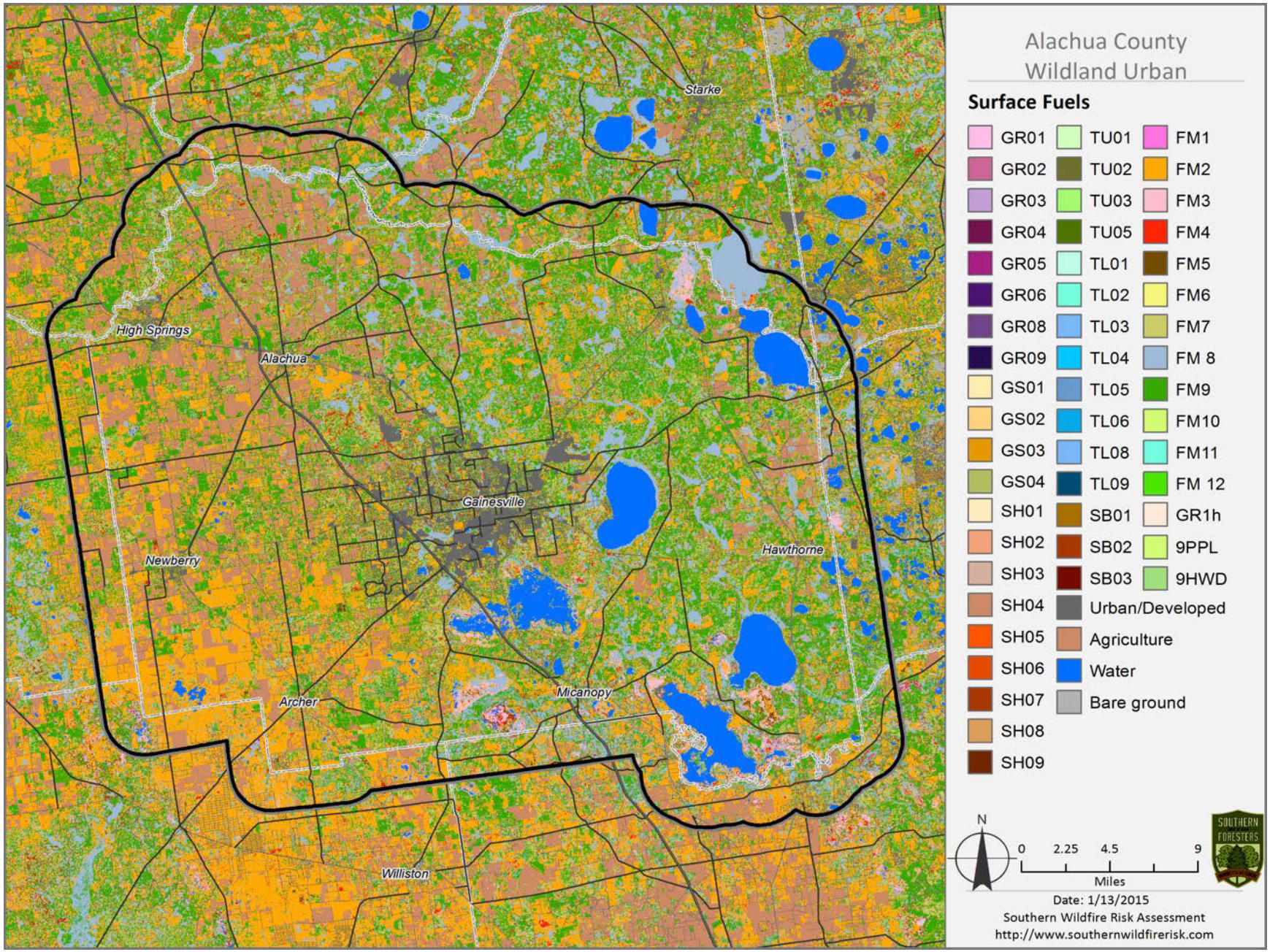
Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent
TL03	2005	Moderate load conifer litter. Spread rate very low; flame length low.	0	0.0%
TL04	2005	Moderate load, includes small diameter downed logs. Spread rate low; flame length low.	0	0.0%
TL05	2005	High load conifer litter; light slash or mortality fuel. Spread rate low; flame length low.	0	0.0%
TL06	2005	Moderate load, less compact. Spread rate moderate; flame length low.	0	0.0%
TL08	2005	Moderate load and compactness may include small amount of herbaceous load. Spread rate moderate; flame length low.	0	0.0%
TL09	2005	Very high load broadleaf litter; heavy needle-drape in otherwise sparse shrub layer. Spread rate moderate; flame length moderate.	0	0.0%
Slash-Blowdown Fuel Type Models (activity fuel/slash or debris from wind damage)				
SB01	2005	Low load activity fuel. Spread rate moderate; flame length low.	0	0.0%
SB02	2005	Moderate load activity or low load blowdown. Spread rate moderate; flame length moderate.	0	0.0%
SB03	2005	High load activity fuel or moderate load blowdown. Spread rate high; flame length high.	0	0.0%
Custom Fuel Type Models (all states except Florida)				
9PPL	Custom	Long-needle (pine litter, plantations) with a high load	0	0.0%
GR01h	Custom	Pasture and hayland	0	0.0%
Non-burnable Fuel Type Models (insufficient wildland fuel to carry a wildland fire under any condition)				
NB01	2005	Urban or suburban development; insufficient wildland fuel to carry wildland fire. Includes roads.	60,599	7.5%
NB03	2005	Agricultural field, maintained in nonburnable condition.	104,256	13.0%

Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent
NB08	2005	Open water	37,316	4.6%
NB09	2005	Bare ground	1,055	0.1%
1982 Fire Behavior Prediction System – ONLY USED FOR FLORIDA ASSESSMENT				
FM 1	1982	Short grass	34	0.0%
FM 2	1982	Timber grass and understory	183,498	22.8%
FM 3	1982	Tall grass	15,775	2.0%
FM 4	1982	Chaparral	16,071	2.0%
FM 5	1982	Brush	10,441	1.3%
FM 6	1982	Dormant brush	0	0.0%
FM 7	1982	Southern rough	79,211	9.8%
FM 8	1982	Compact timber litter	100,862	12.5%
FM 9	1982	Hardwood litter	195,297	24.3%
FM 10	1982	Timber (understory)	71	0.0%
FM 11	1982	Light logging slash	1	0.0%
FM 12	1982	Medium logging slash	0	0.0%
			804,488	**100.0%**

Alachua County Wildland Urban Interface Risk Index

Surface Fuels - Acres




Alachua County
Wildland Urban
Surface Fuels
GR01
GR02
GR03
GR04
GR05
GR06
GR08
GR09
GS01
GS02
GS03
GS04
SH01
SH02
SH03
SH04
SH05
SH06
SH07
SH08
SH09
TU01
TU02
TU03
TU05
TL01
TL02
TL03
TL04
TL05
TL06
TL08
TL09
SB01
SB02
SB03
Urban/Developed
Agriculture
Water
Bare ground
FM1
FM2
FM3
FM4
FM5
FM6
FM7
FM 8
FM9
FM10
FM11
FM 12
GR1h
9PPL
9HWD
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com
Starke
High Springs
Alachua
Gainesville
Hawthorne
Newberry
Archer
Micanopy
Williston

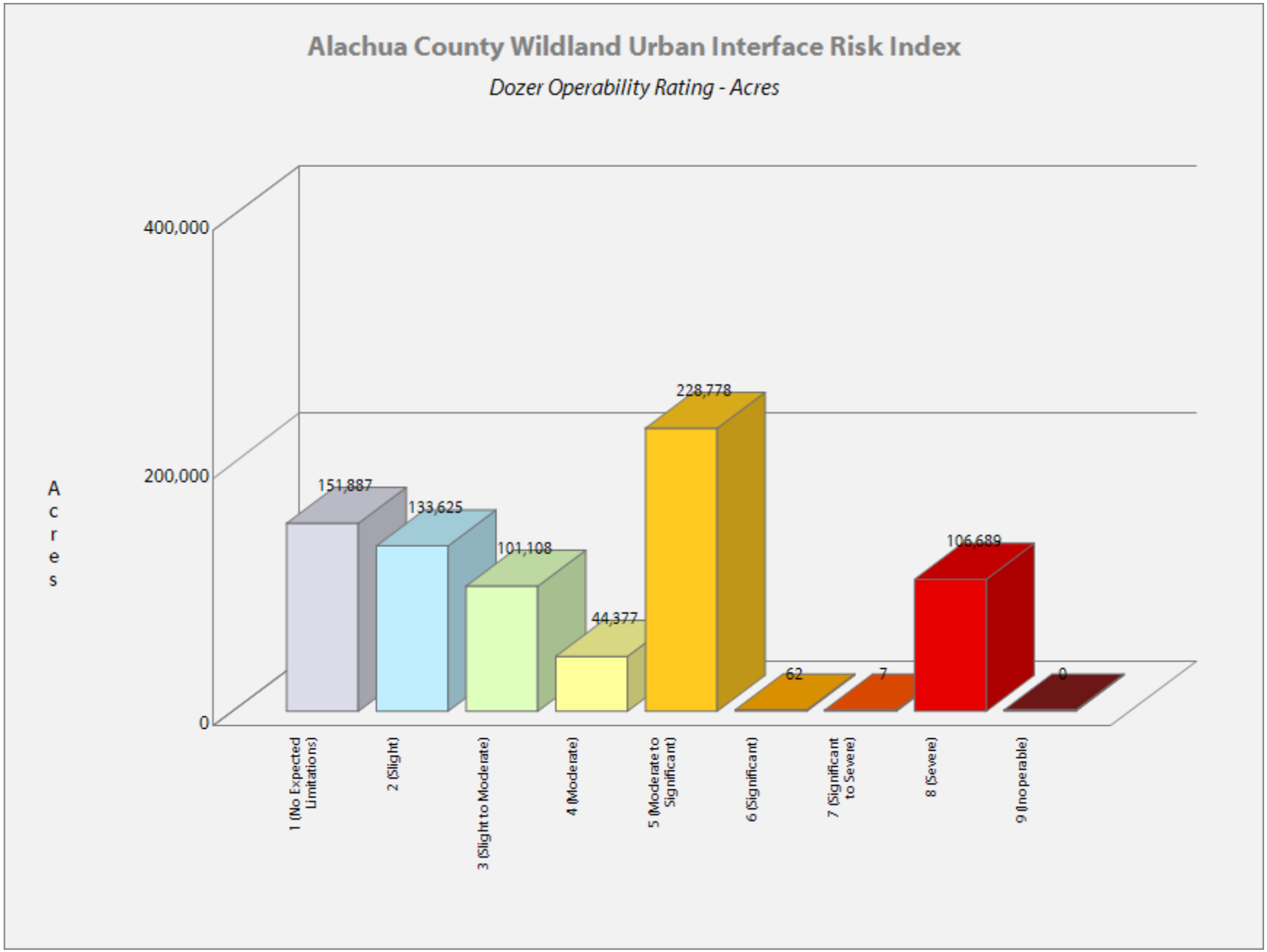
Dozer Operability Rating

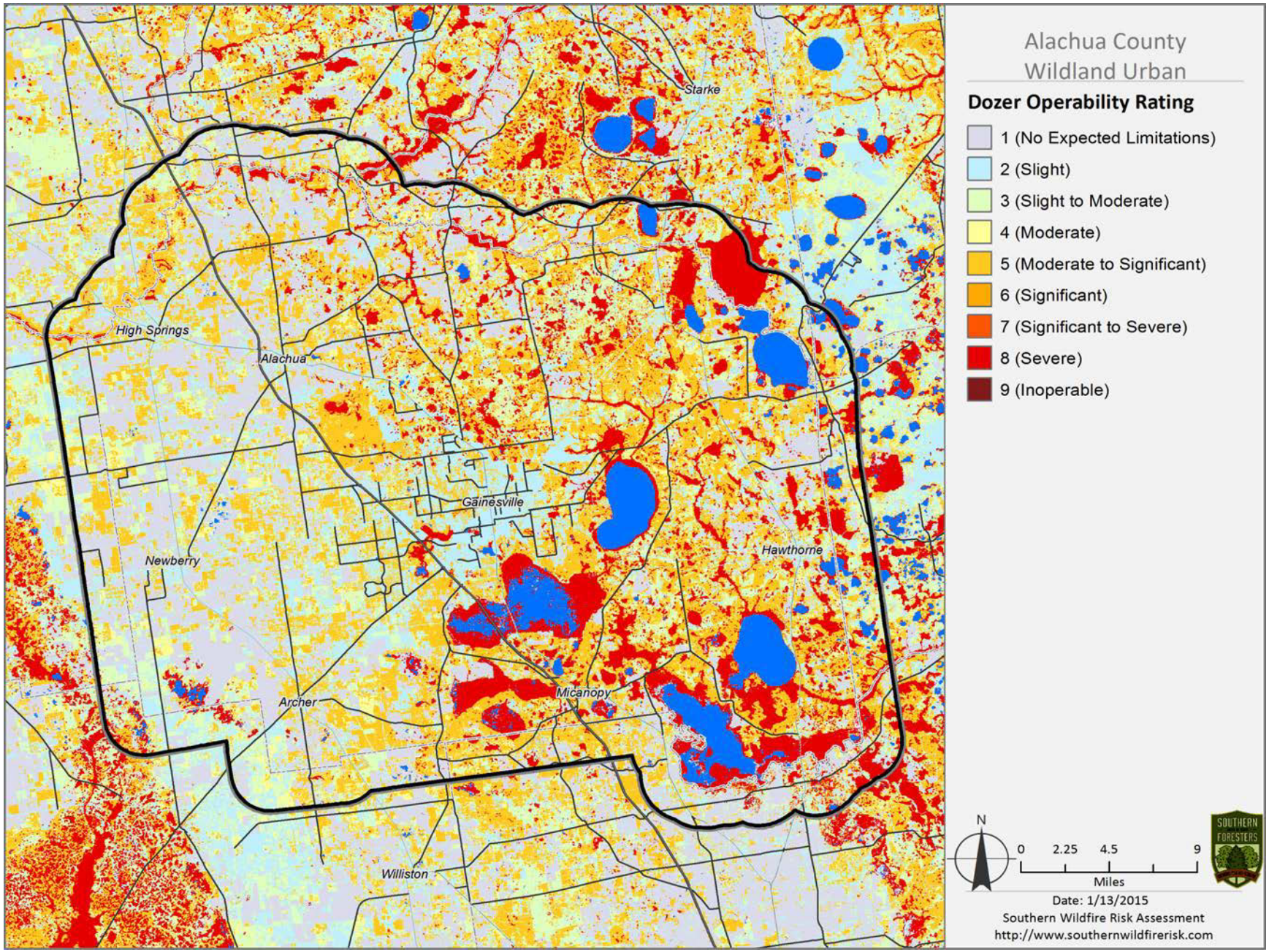
Description

The Dozer Operability Rating (DOR) expresses how difficult it is to operate a dozer in an area based on limitations associated with slope and vegetation/fuel type. Using the fireline production rates published in the NWCG Fireline Handbook 3 (PMS 410-1) as a guide, operability values were assigned to a matrix based on 6 slope classes and 10 vegetation/fuels classes. The possible values range from 1 to 9, with 1 representing no limitations and 9 being inoperable.

Dozer Operability Rating - Acres

Class	Acres	Percent
1 (No Expected Limitations)	151,887	19.8%
2 (Slight)	133,625	17.4%
3 (Slight to Moderate)	101,108	13.2%
4 (Moderate)	44,377	5.8%
5 (Moderate to Significant)	228,778	29.8%
6 (Significant)	62	0.0%
7 (Significant to Severe)	7	0.0%
8 (Severe)	106,689	13.9%
9 (Inoperable)	0	0.0%
Total	**766,534**	**100.0%**


Alachua County Wildland Urban Interface Risk Index
Dozer Operability Rating - Acres
Acres
400,000
200,000
0
151,887
133,625
101,108
44,377
228,778
62
7
106,689
0
1 (No Expected Limitations)
2 (Slight)
3 (Slight to Moderate)
4 (Moderate)
5 (Moderate to Significant)
6 (Significant)
7 (Significant to Severe)
8 (Severe)
9 (Inoperable)


Alachua County
Wildland Urban
Dozer Operability Rating
1 (No Expected Limitations)
2 (Slight)
3 (Slight to Moderate)
4 (Moderate)
5 (Moderate to Significant)
6 (Significant)
7 (Significant to Severe)
8 (Severe)
9 (Inoperable)
Starke
High Springs
Alachua
Gainesville
Hawthorne
Newberry
Archer
Micanopy
Williston
N
0
2.25
4.5
9
Miles
Date: 1/13/2015
Southern Wildfire Risk Assessment
http://www.southernwildfirerisk.com

References

Anderson, H. E. (1982). Aids to determining fuel models for estimating fire behavior. USDA For. Serv. Gen. Tech. Rep. INT-122.

Dobson, J. E., E. A. Bright, P. R. Coleman, and B.L. Bhaduri. "LandScan: a global population database for estimating populations at risk. "Remotely Sensed Cities Ed. V. Mesev, London: Taylor & Francis. 2003. 267-281.

Fire Program Analysis (FPA) System and US Forest Service Missoula Fire Sciences Laboratory, 20140307, Burn Probabilities for the Conterminous US (270-m GRID) from Calibrated FSim Runs for the 2014 FPA Submissions [bp_20140307]:, Fire Program Analysis (FPA) System, National Interagency Fire Center, Boise, ID.

National Wildfire Coordinating Group (NWCG). (2008). Glossary of Wildland Fire Terminology. Publication Management System document PMS-205.

Radeloff, V.C., R.B. Hammer, S.I Stewart, J.S. Fried, S.S. Holcomb, and J.F. McKeefry. 2005. The Wildland Urban Interface in the United States. Ecological Applications 15: 799-805

Scott, J. H., & Burgan, R. E. (2005). Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Gen. Tech. Rpt. RMRS-GTR-153.

Scott, J. H., & Reinhardt, E. D. (2001). Assessing the Crown Fire Potential by Linking Models of Surface and Crown Fire Behavior. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Research Paper RMRS-RP-29.

Scott, Joe. November 2006. Off the Richter: Magnitude and Intensity Scales for Wildland Fire. A non-published white paper prepared for the AFE Fire Congress, November 2006, San Diego, CA.

Thompson, M. P., D. E. Calkin, M. A. Finney, A. A. Ager, and J. W. Gilbertson-Day. 2011. Integrated National-Scale Assessment of Wildfire Risk to Human and Ecological Values. Stochastic Environmental Research and Risk Assessment 25:761-780.

More information about the Fire Program Analysis project is available from http://www.forestsandrangelands.gov/WFIT/applications/FPA/index.shtml

More information about the Oak Ridge National Laboratory LandScan data is available from http://web.ornl.gov/sci/landscan/landscan_documentation.shtml

More information about the U.S. Forest Service SILVIS data is available from http://silvis.forest.wisc.edu/maps/wui_main

SOUTHERN GROUP OF STATE FORESTERS
WILDFIRE RISK ASSESSMENT PORTAL

Appendix C: Critical Facilities Table

(Appended document begins on following page.)

Critical Facilities By Jurisdiction

Facility	Address	City	Jurisdiction	Telephone	Function	Longitude	Latitude
Alachua County Fire Rescue CSW	5901 NW 34th Blvd.	Gainesville	Alachua Co	352.384.3116	DRC	-82.352936	29.709796
Gainesville Westside Recreation Center	1001 NW 34th Street	Gainesville	Gainesville	352.334.2186	DRC	-82.371471	29.661474
Alachua County EOC/ Combined Communications Center	1100 SE 27th St	Gainesville	Alachua Co	352.264.6500	Emergency Services	-82.289809	29.642296
Alachua County Animal Shelter	3400 NE 53rd Avenue	Gainesville	Alachua Co.	352.264.6870			
Alachua Substation #1	10199 Cellon Creek Blvd	Alachua	Alachua	386.418.6100	Energy	-82.27331	29.46431
Fire Station 21 (Mobile DRC)	15040 NW Highway 441	Alachua	Alachua Co	352.384.3116	Fire Station	-82.49352	29.792773
Fire Station 27 (Mobile DRC)	429 W SR 24	Archer	Alachua Co	352.384.3116	Fire Station	-82.526816	29.53275
Fire Station 12 (Mobile DRC)	1320 SE 43 Street	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.27284	29.638839
Fire Station 15 (ACFR)	7000 SW 88 Street	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.437624	29.588354
Fire Station 16 (ACFR)	1600 Ft. Clarke Blvd.	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.436311	29.667623
Fire Station 19 (ACFR) (Mobile DRC)	2000 SW 43rd Street	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.389661	29.635763
Fire Station 3 (GFR Engine/ACFR Rescue)	800 NE Waldo Rd	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.306478	29.659489
Rescue 10 (ACFR)	913 SE 5th Street	Gainesville	Alachua Co	352.384.3116	Fire Station		
Rescue 9 (ACFR)	5901 NW 34 Street Ext	Gainesville	Alachua Co	352.384.3116	Fire Station	-82.353374	29.710393
Rescue 20 (ACFR)	16935 NW US 441	High Springs	Alachua Co	352.384.3116	Fire Station	-82.556134	29.810777
Fire Station 24	301 Cypress Street	Melrose	Alachua Co	352.384.3116	Fire Station	-82.048822	29.710696
Fire Station 17 (ACFR) (Mobile DRC)	3509 NW 143rd Street	Jonesville	Alachua Co	352.384.3116	Fire Station		
Rescue 8 (ACFR)	5715 NE US 301	Orange Heights	Alachua Co	352.384.3116	Fire Station	-82.134804	29.7084
Fire Station 31 Substation (Island Grove)	20020 SE 219 Avenue	Island Grove	Cross Creek	352.466.3353	Fire Station	-82.107811	29.453635
Fire Station 31 (Cross Creek)	19109 S CR 325	Cross Creek	Cross Creek	352.466.3353	Fire Station	-82.159302	29.479071
Fire Station 1 (GFR)	427 S. Main Street	Gainesville	Gainesville	352.334.5078	Fire Station	-82.324623	29.647356
Fire Station 2 (GFR)	2210 SW Archer Road	Gainesville	Gainesville	352.334.5078	Fire Station	-82.35522	29.635223
Fire Station 4 (GFR)	10 SW 36th Street	Gainesville	Gainesville	352.334.5078	Fire Station	-82.376987	29.651224
Fire Station 5 (GFR)	1244 NW 30th Avenue	Gainesville	Gainesville	352.334.5078	Fire Station	-82.339186	29.680553

Fire Station 6 (GFR)	3681 NE 47th Avenue	Gainesville	Gainesville	352.334.5078	Fire Station	-82.279166	29.695899
Fire Station 7 (GFR)	5601 NW 43rd Street	Gainesville	Gainesville	352.334.5078	Fire Station	-82.388828	29.704541
Fire Station 8 (GFR)	3223 NW 42nd Avenue	Gainesville	Gainesville	352. 393 8430	Fire Station		
Fire Station 29	205 NW 1 Avenue	High Springs	High Springs	386.454.2056	Fire Station	-82.599339	29.827848
Fire Station 22	20421 N SR 121	LaCrosse	LaCrosse	386.462.1544	Fire Station	-82.404546	29.843269
Fire Station 26	704 NE 1 Street	Micanopy	Micanopy	352.466.3741	Fire Station	-82.280168	29.508796
Fire Station 28	310 NW 250 Street	Newberry	Newberry	352.472.2150	Fire Station	-82.613082	29.652537
Fire Station 23	14380 Earle St	Waldo	Waldo	352.468.1301	Fire Station	-82.169473	29.790691
Fire Station 25 (ACFR)	7405 SE 221st Street	Hawthorne	Alachua Co	481.3229	Fire Rescue		
Fire Station 30 (Windsor)	1401 SE CR 234	Windsor	Windsor	352.378.8671	Fire Station	-82.187174	29.638545
Alachua City Hall	15100 NW 142 Terr	Alachua	Alachua	386.418.6100	Government Office	-82.29884	29.47604
Gainesville City Hall	200 East University Avenue	Gainesville	Gainesville	352.334.5010	Government Office		
High Springs City Hall	110 NW 1st Avenue	High Springs	High Springs	386.454.1416	Government Office		
Hawthorne City Hall	6700 SE 221st Street	Hawthorne	Hawthorne	481.3229	Government Office		
La Crosse City Hall	20613 N SR 121	La Crosse	La Crosse	386.462.2784	Government Office		
Newberry City Hall	25440 West Newberry Rod	Newberry	Newberry	352.472.2388	Government Office		
Waldo City Hall	14655 Kennard St	Waldo	Waldo	352.258.6921	Government Office	-82.16861	29.78944
Malcom Randall VA Medical Center	1601 SW Archer Road	Gainesville	Gainesville	352.374.6113	Healthcare		
North Florida Regional Medical Center	6500 Newberry Road	Gainesville	Gainesville	352.333.4000	Healthcare		
Shands at University of Florida	1600 SW Archer Road	Gainesville	Gainesville	352.265.0111	Healthcare	-82.34372	29.63917
Shands at Vista	4101 NW 89th Boulevard	Gainesville	Gainesville	352.265.5491	Healthcare	-82.437187	29.691503
Clinic	7050 SE 221st St	Hawthorne	Hawthorne	481.3229	Healthcare		
Alachua Police Station	15000 NW 142 Terr	Alachua	Alachua	386.418.6100	Law Enforcement	-82.29883	29.4757
Alachua County Sheriff's Office	2621 SE Hawthorne Rd	Gainesville	Alachua Co	352.955.2500	Law Enforcement	-82.31889	29.64306
Florida Highway Patrol	6300 NW 13th Street	Gainesville	Alachua Co	352.955.2150	Law Enf.	-82.35306	29.71083

Gainesville Police Department	721 NW 6th Street	Gainesville	Gainesville	352.334.2401	Law Enforcement	-82.33056	29.65778
Santa Fe Community College PD	3000 NW 83rd Street	Gainesville	Gainesville	352.395.5556	Law Enforcement	-82.43222	29.6825
UF- Police Dept	Bldg 27 1435 Museum Road	Gainesville	Gainesville	352.392.1111	Law Enforcement	-82.34361	29.65278
High Springs Police Dept	110 NW 2nd Avenue	High Springs	High Springs	352.454.1415	Law Enforcement	-82.59667	29.82833
Alachua Branch Library	14913 NW 14 Street	Alachua	ACLD	352.334.3906	Library	-82.494257	29.792064
Archer Branch Library	13266 SW State Road 45	Archer	ACLD	352.334.3906	Library	-82.519097	29.537049
Headquarters Library	401 E University Avenue	Gainesville	ACLD	352.334.3906	Library	-82.321619	29.651934
Millhopper Branch Library	3145 NW 43 Street	Gainesville	ACLD	352.334.3906	Library	-82.321619	29.651934
Tower Road Branch Library	3020 SW 75 Street	Gainesville	ACLD	352.334.3906	Library	-82.422522	29.624512
Hawthorne Branch Library	6640 SE 221 Street	Hawthorne	ACLD	352.334.3906	Library	-82.086595	29.59297
High Springs Branch Library	135 SE 221 Street	High Springs	ACLD	352.334.3906	Library	-82.598267	29.827647
Micanopy Branch Library	706 N. E. Cholakka Blvd.	Micanopy	ACLD	352.334.3906	Library	-82.279722	29.50444
Newberry Branch Library	110 South Seaboard Drive	Newberry	ACLD	352.334.3906	Library	-82.610458	29.645332
Waldo Branch Library	14257 Cole Street	Waldo	ACLD	352.334.3906	Library	-82.169762	29.78919
Hawthorne Branch Library	6640 SE 221st Street	Hawthorne	ACLD	352.481.3229	Library		
Alachua County Fairgrounds - Primary	2900 NE 39th Avenue	Gainesville	Alachua Co	352.384.3101	LSA	-82.281312	29.682047
Phoenix Commercial Park	12895 Northwest US Highway 441	Alachua	Alachua Co	386.418.1051	LSA		
Sysco South Redistribution Center	12421 NW 173rd St	Alachua	Alachua Co	386.418.8501	LSA		
Hitchcock's Foodway	15560 NW US Hwy 441	Alachua	Alachua	386.418.6100	POD	-82.50021	29.797024
G-Tech	2153 SE Hawthorne Rd	Gainesville	Alachua Co	352.384.3101	POD	-82.295063	29.645465
Westside Baptist Church	10000 Newberry Rd	Gainesville	Alachua Co	352.384.3101	POD	-82.447377	293662109
Archer City Hall	16780 SW 134th Ave	Archer	Archer	352.495.2880	POD	-82.522077	29.531179
Maddox Park	17106 SW Archer Rd	Archer	Archer	352.495.2880	POD	-82.523649	29.532042
Old Fire Station	16639 SW 137th Ave	Archer	Archer	352.495.2880	POD	-82.519549	29.527942
MLK Jr Center/Citizens Field	1028 NE 14th St	Gainesville	Gainesville	352.334.5010	POD	-82.307134	29.661003
The Oaks Mall	6419 Newberry Rd	Gainesville	Gainesville	352.334.5010	POD	-82.410476	29.658429
Westside Park	1001 NW 34th St	Gainesville	Gainesville	352.334.5010	POD	-82.371609	29.661753
Hawthorne High School	21403 SE 69 Ave	Hawthorne	Hawthorne	352.481.2432	POD	-82.092038	29.589965

High Springs Civic Center	305 NW Santa Fe Blvd	High Springs	High Springs	386.588.4013	POD	-82.597388	29.833797
Micanopy Town Hall	76 NE Cholokka Blvd	Micanopy	Micanopy	352.466.3121	POD	-82.280163	29.509342
Newberry High School	400 SW 258th St	Newberry	Newberry	352.472.3259	POD	-82.614288	29.639163
Classic Café	17500 NE US Hwy 301	Waldo	Waldo	352.258.6921	POD	-82.167858	29.798252
Waldo Baptist Church	14330 Kennard St	Waldo	Waldo	352.258.6921	POD	-82.173031	29.78666
Waldo City Park	14705 NE Waldo Rd	Waldo	Waldo	352.258.6921	POD	-82.167565	29.790543
Archer Community School- Bldg 6/General Pop	14533 SW 170 Street	Archer	ACPS	352.955.7654	Shelter – Gen Pop		
Eastside High - Bldg 15/Special Needs	1201 SE 45th Terrace	Gainesville	ACPS	352.955.7654	Shelter - SN	-82.268707	29.639976
High Springs Community Bldg 5/Gen Pop	1015 N Main Street	High Springs	ACPS	352.955.7654	Shelter - Gen Pop	-82.592395	29.833504
Kanapaha Middle - Bldg 3/General Pop	5005 SW 75th Street	Gainesville	ACPS	352.955.7654	Shelter - Gen Pop	-82.421703	29.623273
Kanapaha Middle - Bldg 4/General Pop	5005 SW 75th Street	Gainesville	ACPS	352.955.7654	Shelter - Gen Pop	-82.421703	29.623273
Meadowbrook Elementary –Bldg 1/ General Pop	11525 NW 39th Avenue	Gainesville	ACPS	352.955.7654	Shelter- Gen Pop		
Oakview Middle - Bldg 3/General Pop	701 N Main Street	Newberry	ACPS	352.955.7654	Shelter - Gen Pop	-82.607255	29.637756
Oakview Middle - Bldg 4/General Pop	701 N Main Street	Newberry	ACPS	352.955.7654	Shelter - Gen Pop	-82.607255	29.637756
Shell Elementary - Bldg 2/General Pop	21633 SE 65th Avenue	Hawthorne	ACPS	352.955.7654	Shelter - Gen Pop	-82.090913	29.593837
Santa Fe High – Bldg 34/ Gen Pop	16213 NW 441	Alachua	ACPS	352.955.7654	Shelter – Gen Pop		
Talbot Elementary - Bldg 3/General Pop	5701 NW 43rd Street	Gainesville	ACPS	352.955.7654	Shelter – Gen Pop	-82.388362	29.708936
Waldo Community – Bldg 6/General Pop	14450 NE 148th Avenue	Waldo	ACPS	352.955.7654	Shelter – Gen Pop		
Williams Elementary – Bldg 6/General Pop	1245 SE 7th Avenue	Gainesville	ACPS	352.955.7654	Shelter – Gen Pop		
University of Florida - General Pop	Building 686	Gainesville	UF	352.392.1590	Shelter - Gen Pop	-82.3476	29.6459
University of Florida SW Rec Ctr Gen Pop	Building 316	Gainesville	UF	352.392.1590	Shelter - Gen Pop	-82.3681	29.6459
Gainesville Senior Center General Pop	5701 NW 34th Street	Gainesville	Gainesville	352.265.9040	Shelter- Gen Pop		
Newberry Archery Center General Pop	24880 NW 16TH Ave	Newberry	Newberry	352.472.2388	Shelter- General Population		

Buchholz High - Bldg 8/Special Needs	5510 NW 27th Avenue	Gainesville	ACPS	352.955.7654	Shelter - SN	-82.402699	29.681702
Rawlings Elementary Bldg 4 Special Needs	3500 NE 15th Street	Gainesville	ACPS	352.955.7654	Shelter - SN	-82.306411	29.68608
Westwood Middle - Bldg 18/Special Needs	3215 NW 15th Avenue	Gainesville	ACPS	352.955.7654	Shelter - SN	-82.370467	29.664651
Alachua Elementary Blg #6/ Special Needs	13800 NW 152nd Place	Alachua	ACPS	352.955.7654	Shelter- SN		
Railroad	Adjacent to HWY 301	Hawthorne	CSX		Transportation		
US Hwy 20 Overpass	US Hwy 301 & SR 20	Hawthorne	DOT		Transportation		
Highway SR 24 & US Hwy 301	Highway SR 24	Waldo	Waldo		Transportation		
Water Tower/Water Treatment	14750 Weeks St	Waldo	Waldo	352.258.6921	Water		
Wastewater Treatment Facility	13700 NW 126 Terr	Alachua	Alachua	386.418.6100	Waste Water	-82.28825	29.46879
Ground Water Storage Facility	10198 NW 104 Terr	Alachua	Alachua	386.418.6100	Water	-82.27465	29.465
Water Treatment Plant	14991 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.29485	29.47572
Lift Station #1	13675 NW 147 Ave	Alachua	Alachua	386.418.6100	Waste Water	-82.29443	29.47393
Lift Station #2	13815 NW 142 Place	Alachua	Alachua	386.418.6100	Waste Water	-82.29562	29.47159
Lift Station #3	16052 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.30882	29.48102
Lift Station #4	15928 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.30577	29.4804
Lift Station #5	13183 Rachael Blvd (CR2054)	Alachua	Alachua	386.418.6100	Waste Water	-82.29187	29.47183
Lift Station #6	12301 NW 147th Lane	Alachua	Alachua	386.418.6100	Waste Water	-82.28649	29.47332
Lift Station #7	14311 NW 167 Place	Alachua	Alachua	386.418.6100	Waste Water	-82.29858	29.48503
Lift Station #8	13709 NW CR 235	Alachua	Alachua	386.418.6100	Waste Water	-82.29802	29.46838
Lift Station #9	15931 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.3057	29.48105
Lift Station #10	13700 NW 126 Terr	Alachua	Alachua	386.418.6100	Waste Water	-82.2881	29.46909
Lift Station #11	13687 NW 140 St	Alachua	Alachua	386.418.6100	Waste Water	-82.29627	29.46826
Lift Station #12	11850 Palmetto Blvd	Alachua	Alachua	386.418.6100	Waste Water	-82.24788	29.45948
Lift Station #14	7471 White Oaks Rd	Alachua	Alachua	386.418.6100	Waste Water	-82.25487	29.45495
Lift Station #15	11794 NW 173 St	Alachua	Alachua	386.418.6100	Waste Water	-82.31866	29.4575
Lift Station #16	13302 Progress Blvd	Alachua	Alachua	386.418.6100	Waste Water	-82.28572	29.46638
Lift Station #17	13700 NW 126 Terr	Alachua	Alachua	386.418.6100	Waste Water	-82.28825	29.46862

Lift Station #18	14121 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.2821	29.47058
Lift Station #19	13270 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.26842	29.46605
Lift Station #20	12642 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.2582	29.46228
Lift Station #21	12081 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.24755	29.45994
Lift Station #22	14608 Peggy Rd (CR2054)	Alachua	Alachua	386.418.6100	Waste Water	-82.30125	2947094
Lift Station #23	16212 NW 123 Ave	Alachua	Alachua	386.418.6100	Waste Water	-82.3088	29.46168
Lift Station #24	13896 NW US Hwy 441	Alachua	Alachua	386.418.6100	Waste Water	-82.2752	29.46919
Newberry Water Treatment Plant #1	120 NW 260th Street	Newberry	Newberry	352.472.1537	Potable Water		
Newberry Water Treatment Plant #2	24820 NW 16th Avenue	Newberry	Newberry	352.472.1537	Potable Water		
Newberry Waste Water Treatment Plant	1905 SW 260th Street	Newberry	Newberry	352.472.1537	Waste Water		
Newberry Wellfield	25439 West Newberry Road	Newberry	Newberry	352.472.1537			
Hawthorne Wastewater Treatment	23016 SE 65th Lane	Hawthorne	Hawthorne	481.3229	Waste Water		
Hawthorne Lift Station	22307 SE 61st Ave	Hawthorne	Hawthorne	481.3229	Waste Water		
Hawthorne Lift Station	21895 SE 65th Ave	Hawthorne	Hawthorne	481.3229	Waste Water		
Hawthorne Lift Station	22034 SE 67th Place	Hawthorne	Hawthorne	481.3229	Waste Water		
Water Treatment	22817 SE 74th Lane	Hawthorne	Hawthorne	481.3229	Water		
Waldo Wastewater Treatment Plant	15185 NE Waldo Rd	Waldo	Waldo		Waste Water		
Waldo Lift Station #1	NE 141 St corner 144th Ave	Waldo	Waldo	352.258.6921	Waste Water	-82.168611	29.789444
Waldo Lift Station #2	NE 147 Ave corner 148 Terr	Waldo	Waldo	352.258.6921	Waste Water		
Waldo Lift Station #3	South end NE 148th Terr	Waldo	Waldo	352.258.6921	Waste Water		
Waldo Lift Station #4	Behind 17500 NE US 301	Waldo	Waldo	352.258.6921	Waste Water		
Laveda Brown Environmental Park	5763 NE 63RD av	Alachua County	Alachua Co		Solid/Haz waste mgmt		
Alachua County Jail	3333 NE 39th Avenue	Gainesville	Alachua Co	352.491-4444	Law Enforcement		
FDOT Compound	5017 NE 39th Avenue	Gainesville	State of Fl		Transportation		
Gainesville Regional Airport	3420 NE 39th Avenue	Gainesville	Gainesville		Airport		
Alachua County Public Works	56056 NW 120th Lane	Alachua County	Alachua County		Public Works Fleet Fuel		

Alachua County Administrative Building	12 SE 1st Street	Gainesville	Alachua County	352.374.5204	County Government
Alachua County Growth Management	10 SW 2nd Avenue	Gainesville	Alachua County	352.374.5249	Damage Assessment
Alachua County Criminal Courthouse	220 South Main Street	Gainesville	Alachua County	352.337.6277	Criminal Justice
Alachua County Civil Courthouse	201 East University Avenue	Gainesville	Alachua County	352.374.3648	Civil Court
Alachua County Information Services	26 NE 1st Street	Gainesville	Alachua County	352.338.7300	Network/ Internet
Alachua County Environmental Park	5763 NE 63rd Avenue	Alachua County	Alachua County	352.334.0172	Solid Waste Haz Waste
Alachua County Public Schools Admin	1817 E University Avenue	Gainesville	ACPS		School Admin
ACPS Bus Depot	1800 SE Hawthorne Road	Gainesville	ACPS		Buses Transportation
Alachua County Health Department	224 SE 24th Street	Gainesville	State of Fl		Healthcare
Alachua Co Health Department Alachua	15530 NW Hwy 441	Alachua	State of Fl		Healthcare
Alachua Co Health Department Newberry	25435 West Newberry Road	Newberry	State of Fl		Healthcare
Gainesville Murphree Water Plant	1600 NE 53rd Avenue	Gainesville	Gainesville		Water Plant
Alachua County Fire Rescue HQ	911 SE 5th Street	Gainesville	Alachua County	352.384.3101	ACFR HQ Alt EOC
FAA Automated Flight Services Station	4352 NE 40th Terrace	Gainesville	Federal		Flight Services
FAA Facilities Sector Office	4790 NE 40th Terrace	Gainesville	Federal		Flight Services
Federal Building	401 SE 1st Avenue	Gainesville	Federal		Criminal Justice

Appendix D: Overview of Completed Mitigation Projects

Completed Mitigation Projects

Alachua County

Fire Rescue Headquarters and Stations

Project Description	Project Costs	Project Timeline
A wind retrofit project to re-enforce window and door openings at the Fire Rescue Headquarters building and 3 fire stations. Project enhances protection of public safety equipment in these buildings. Fire stations and Headquarters are listed critical facilities.	Total Costs: $ 48,525 Federal Share: $ 36,772 Local Share: $ 11,753 Funding Source: HMGP	Completed July 2008.

Alachua County

Sheriff Admin Building and CCC/EOC Building

Project Description	Project Costs	Project Timeline
A wind retrofit project to add shutters to window and door openings at the ASO Administration building and upgrade the existing system on the CCC/EOC building. Project enhances protection of public safety equipment in these buildings. ASO Admin building and the CC/EOC are listed critical facility.	Total Costs: $ 125,640 Federal Share: $ 94,230 County Share: $ 31,410 Funding Source: PDM Grant	Completed September 2011.

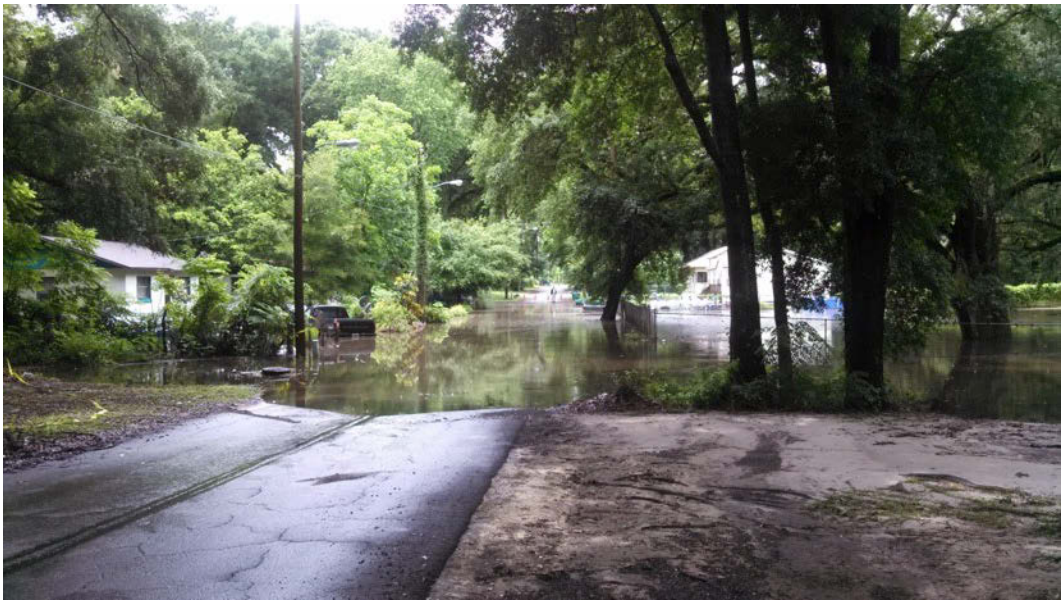
City of Alachua

Project Description	Project Costs	Project Timeline
Lincoln Gardens Drainage Project. Enhancement of storm water management system to address flooding and erosion. Installation of roadway curb and guttering, additional storm water inlets, and right-of-way stabilization [grading and installation of sod].	Total Costs: $ 351,070 Federal Share: $ 263,300 City Share: $ 87,770 Funding Source: HMGP	Phase 1 Planning and Design: October 2006 – July 2008 Phase 2 Construction: August 2009 – April 2010

Project Description	Project Costs	Project Timeline
Mulberry Landing Drainage Improvements. Installation of drainage pipe and inlet structures to address historic flooding.	Total Costs: $ 51,850 Federal Share: $ 38,888 Local Share: $ 12,962 Funding Source: HMGP	Phase 1 Planning and Design: October 2006 – August 2008 Phase 2 Construction: August 2009 – April 2010

Project Description	Project Costs	Project Timeline
Wastewater Treatment Plant Access Road Drainage Improvements. Installation of drainage pipe and regarding of roadside swales to enhance water conveyance. The City of Alachua Wastewater Treatment Plan is a listed critical facility.	Total Costs: $ 48,852 Federal Share: $ 36,718 Local Share: $ 12,134 Funding Source: HMGP	Phase 1 Planning and Design: April 2007 – November 2008 Phase 2 – Construction: August 2009 – May 2010

City of Archer



Project Description	Project Costs	Project Timeline
Storm water Management System Enhancement. Expansion of an existing storm water retention basin.	Total Costs: $ 54,713 Funding Source: CDBG	Project completed August 2011

Jurisdiction	Project	Contact
Gainesville FR	Fire Station Hardening	Tim Hayes 352.334.5065
Gainesville PD	Retro City PD Building [Building Razed and Re-built]	Pete Backhaus 352.334.2450
Alachua County SO	Dialogic Upgrade [System Replaced by ACEM CodeRed]	Kelly Amerson 352.491.4555
Alachua County FR	Upgrade EOC AV system	Dave Donnelly 352.264.6510
Alachua County FR	Alert Notification System	Dave Donnelly 352.264.6510
Newberry PW	Archery Center Wind Retrofit [Hurricane Shelter Retrofit]	Wendy Kinser 352.472.3998
Newberry PW	Archery Center Shelter Generator	Wendy Kinser 352.472.3998

Appendix E: LMS Work Group Bylaws / 2015 Update

ARTICLE I. PURPOSE OF THE LMS WORK GROUP

The Alachua County Board of County Commissioners, Local Mitigation Strategy (LMS) Work Group is responsible for maintaining current the LMS; a comprehensive planning document intended to reduce or attempt to eliminate the loss of life, property and economic vitality in the event of a natural or technological disaster; to be formally adopted by local government officials, County Commissioners, incorporated jurisdictions within the county for eligibility to pre-disaster mitigation funding and federal disaster relief. The LMS Work Group will develop, update and maintain a comprehensive plan for hazard mitigation which will be intended to accomplish said purpose.

ARTICLE II MEMBERSHIP

Participation in the LMS Work Group is voluntary by all entities. Membership in the LMS Work Group is open to all jurisdictions, county government, private and civic organizations, trade and commercial support groups, property owners associations, Native American Tribes or authorized tribal organizations, state agencies, regional planning council, independent special districts, and non-profit organizations.

Establishment of an LMS Work Group including participants, organizational structure and eligibility are authorized by Chapter 9G-22.004 and 9G-22.005 F.A.C. These rules are authorized under Chapter 252 F.S.

A. ***Voting members***

Jurisdictions in good standing are eligible to vote and submit mitigation projects by complying with each of the following criteria: 1) the jurisdiction must have adopted the most recent LMS by Resolution or Ordinance; and 2) the jurisdiction's voting member or alternate(s) must have attended at least one of the preceding two consecutive most recent LMS Work Group meetings (min. 66.7% attendance rate).

Jurisdictions within Alachua County eligible to vote upon satisfying the above prerequisites are:

City of Alachua Alachua County Alachua County Library Dist. City of Archer
City of Gainesville
City of Hawthorne City of High Springs City of LaCrosse City of Micanopy
City of Newberry City of Waldo Santa Fe College University of Florida

B. ***Non voting members***

Chapter 9G, (c) F.A.C. – Representation from interested private organizations, civic organizations, trade and commercial support groups, property owners associations, Native American Tribes or authorized tribal organizations, water management districts, regional planning councils, independent special districts and non-profit organizations.

The LMS Work Group encourages organizations, community stakeholders and other agencies, listed in Chapter 9G-22.004 and 9G-22.005 F.A.C. above, to demonstrate their participation by endorsing the LMS Work Group by letter and participating in Work Group meetings.

ARTICLE III ORGANIZATIONAL STRUCTURE

A. ***Officers***

The organizational structure of the LMS Work Group shall consist of a Chair and Vice Chair both who are elected by majority vote with additional officers appointed by the Chair as needed. Any voting member or alternate of the LMS Work Group in good standing as described in Article II. A. is eligible for election as an officer. The Chair of the LMS Work Group will declare meetings, prepare agendas, and preside at each meeting of the LMS Work Group, as well as establish temporary Task Force when necessary and assign personnel to them. The Vice Chair will fulfill the duties and responsibilities of the Chair in his or her absence. The Chair and Vice Chair will serve a term of one calendar year beginning January through December and be eligible for re-election.

Elections for officers of the subsequent term will occur during the last meeting of each calendar year.

B. *Membership*

- Representatives from Alachua County Board of County Commissioners
- Representatives from each jurisdiction within Alachua County
- Representatives from private business or civic associations and/or other groups the Chair may invite (per Chapter 9G-22.004 and .005 F.A.C.) who support the LMS.
- Representatives from public education institutions (UF, SFCC).
- Independent Special District (Alachua County Library District)

C. *Task Forces*

A temporary Task Force and their members may be established at any time for special purposes by the LMS Work Group and the Chair. All members of the Task Force(s) may vote regardless of their jurisdiction or organizational membership.

D. ***The Project Ranking Task Force***

The Project Ranking Task Force will work on a permanent basis while scoring projects for ranking purposes. This Task Force serves at the pleasure of the Chair and the LMS Work Group and must report to the Work Group on project scoring at each Work Group meeting. The Task Force will meet as needed.

E. ***Staffing***

Alachua County Department of Public Safety, Division of Emergency Management will provide staff support to the LMS Work Group, Chair and any Task Force created by the Chair. This support shall include technical and clerical support as necessary for the benefit of the LMS Work Group. Other jurisdictions and organizations may also provide such services on a voluntary basis upon request of the chair of the LMS Work Group.

ARTICLE IV RESPONSIBILITIES

All responsibilities of the LMS Work Group shall be as specified by Chapter 9G-22.004 and 9G-22.005 F.A.C. These rules are authorized under F.S. 252.

The LMS Work Group will be responsible for oversight and coordination of all actions and decisions by each Task Force formed and are solely responsible for formal actions in the name of the Task Force, including the release of reports, development of resolutions, issuance of position papers and similar activities. The LMS Work Group makes assignments to the Task Force, coordinates their work and takes action on their recommendations. All duties described above are within the supervision of the LMS Work Group Chair.

A. ***Planning***

The LMS Work Group will be responsible to identify, analyze hazards threatening Alachua County and the vulnerabilities to those hazards as well as to assist in the definition of actions to mitigate the impacts of those hazards; to define structural and non-structural actions needed to decrease the human, economic and environmental impacts of disasters and to prepare for consideration and action by the LMS Work Group a strategy for implementation of those initiatives in both the pre and post-disaster time frame; to define the general financial vulnerability of the community to the impacts of disasters; to assist with identification of initiatives to minimize vulnerabilities; and to seek funding sources for all priority mitigation initiatives identified in the mitigation strategy developed by the LMS Work Group.

B. ***Public Information***

The LMS Work Group will encourage public input to the LMS Work Group. Alachua County Fire Rescue, Division of Emergency Management staff will inform the public about the activities of the LMS Work Group by way of local newspaper published in the Public Meetings section and when possible on the Alachua County Web site in accordance with Chapter 286 F.S.

ARTICLE V ACTIONS BY THE LMS WORK GROUP

A**.** ***Authority of actions***

The LMS Work Group voting members have final authority regarding decisions and or actions to the LMS including adoption of recommendations from any or all Task Force groups.

B. ***Meetings, Voting and Quorum***

Meetings of the LMS Work Group including all Task Force groups will be conducted in accord with Robert's Rules of Order, if and when deemed necessary by the chair of the meeting. Meetings of the LMS Work Group will be conducted at least annually with a minimum of ten (10) working days notice. Task Force groups, then assigned by the LMS Work Group, will meet as necessary.

Each voting member in good standing, as defined in Article II of this document, is allowed to cast one vote. Voting must be done in person while attending a LMS Work Group meeting. Proxy voting is not allowed. However, each jurisdiction may designate up to two alternate members who may vote in the absence of the regular voting member. Such alternate voting members must be permanent alternates and so designated at least 10 working days in advance of the meeting at which they will vote. Each jurisdiction must provide a list and maintain any revisions of the regular and alternate members to the LMS Work Group.

All final actions and decisions made by the LMS Work Group will be by affirmative vote of a quorum of the voting members. A quorum consists of a minimum of three (3) voting members in attendance.

C. ***Special meetings***

Special meetings and any possible voting may be conducted under administrative emergency situations or when other extenuating circumstances judged necessary by both the Chair and Vice Chair of the LMS Work Group. If extenuating circumstances occur and it is impossible for the LMS Work Group to meet together in one location, it is acceptable to meet via conference call, the web or other methods available at that time. All special meetings shall be conducted in accordance with Chapter 125 F.S. under emergency situations including any waivers of Article IV, Public Information.

D. ***Public Hearings***

When required by statute or the policies of Alachua County Board of County Commissioners or when deemed necessary by the LMS Work Group, a public hearing regarding actions under consideration for implementation by the LMS Work Group will be held in accord with Chapter 125 F.S. for public hearings.

E. ***Documentation of Actions***

All meetings minutes and other forms of action by the LMS Work Group and any Task Forces Groups will be documented and made available for inspection by the public as provided by Chapter 119 F.S.

ARTICLE VI ADOPTION OF AND AMENDMENTS TO THE BYLAWS

The Bylaws of the LMS may be adopted and/or amended by a two-thirds vote of the voting members present, during a regular meeting. All proposed amendments to the Bylaws will be provided to each member of the LMS Work Group not less than ten (10) working days prior to a vote.

ARTICLE VII DISSOLVEMENT OF THE LMS WORKING GROUP

The LMS Work Group may be dissolved by the affirmative vote of two-thirds (2/3) of the voting membership in good standing of the LMS Work Group and/or by instruction of the Alachua County Board of County Commissioners. When the LMS Work Group terminates activity all remaining documents, records, equipment and supplies belonging to the LMS Work Group will be transferred for disposition to Alachua County Public Safety, Emergency Management Section who is responsible for the Local Mitigation Strategy per Chapter 9G-22.004 and 9G-22.005 F.A.C. and specific authority F.S. 252**.**

Appendix F: Project Ranking Task Force Procedures

1. Purpose and Authority

1.1. These procedures describe the process for submission, ranking and adoption of projects for the Alachua County Local Mitigation Strategy (LMS).

1.2. Authority for the procedures is derived from approval of the Alachua County Local Mitigation Strategy Work Group and Rule 9G-22.005(6)-(7), Florida Administrative Code.

1.3. The purpose of the procedures is to create and maintain both a ranked and an unranked project list. The ranked list, referred to as the LMS Project Ranking List, will be employed to set the order of priority for projects.

2. Project Ranking Task Force

2.1. The Project Ranking Task Force is a permanent Task Force of the Local Mitigation Strategy Work Group. The Task Force is established by Article III.B.ii of the *Bylaws of the Alachua County Local Mitigation Strategy Work Group*.

2.2. Task Force members will be appointed annually by the Work Group. Task Force Members are not required to be voting members of the Work Group.

2.3. Task Force members will be responsible for meeting and electing a Chair and Vice-Chair.

2.4. A minimum of three (3) appointed Task Force members is required in order to conduct a Project Ranking Task Force meeting.

3. LMS Project Ranking List

3.1. The purpose of the *LMS Project Ranking List* is to comply with Rule 9G-22.005(7), Florida Administrative Code by maintaining a list of approved projects in order of priority. The priority will be employed to determine distribution of funding under mitigation grant programs such as the Hazard Mitigation Grant Program.

3.2. Project Application Submission

3.2.1. Jurisdictions participating in the Alachua County LMS may submit projects for inclusion on the Project Ranking List. Project proposals must be submitted by March 15th of each year or an alternate date determined by the Work Group.

3.2.2. For a project to be considered, a completed *Mitigation Project Proposal* must be submitted either electronically or hard copy by the appropriate deadline to the Alachua County Division of Emergency Management. Copies of the project application and instructions are available from the Division.

3.2.3. Following an incident which impacts Alachua County, such as hurricane, the Work Group may instruct the Task Force to meet, accept and rank new projects. The Work Group will be responsible for setting project application and ranking deadlines should this occur.

3.3. Project Ranking

3.3.1. The Task Force will meet within thirty (30) calendar days following the project application deadline to validate and rank all submitted projects.

3.3.2. Alachua County Division of Emergency Management will email each jurisdiction's voting member the Task Force validated score for all projects submitted by the member's jurisdiction.

3.4. Appeals of Task Force Validated Scores by a Jurisdiction

3.4.1. Following notification in Section 3.3.2, a jurisdiction's voting member may appeal a Task Force validated score within thirty (30) calendar days. The appeal must be in writing, e-mail or hard copy, to the Alachua County Division of Emergency Management.

3.4.2. All appealed projects will be removed from the Task Force recommended ranked list and the Alachua County Division of Emergency Management will notify all Task Force members of the appeal.

3.4.3. The Task Force will meet within thirty (30) calendar days following the appeals date deadline in Section 3.4.1 to re-evaluate all appealed projects.

3.4.4. Jurisdictions may make a presentation and submit additional, relevant information to the Task Force regarding each appealed project.

3.4.5. Alachua County Division of Emergency Management will e-mail each jurisdiction's voting member the Task Force validated score for all re-evaluated projects submitted by the member's jurisdiction.

3.4.6. The validated scores of all appealed projects will be placed on the ranked list unless a jurisdiction's voting member disagrees with the re-evaluated score.

3.4.7. Jurisdictions not satisfied with the re-evaluated project score validated by the Task Force may appeal to the Work Group for final resolution.

3.5. Approval by Alachua County Local Mitigation Strategy Work Group

3.5.1. The Work Group must vote to approve and accept or reject the ranked list of validated scores recommended by the Task Force.

3.5.2. If approved and accepted by the Work Group, the list will become the *LMS Project Ranking List*.

3.6. Maintenance and Publication

3.6.1. Alachua County Division of Emergency Management will be responsible for clerical maintenance of the Project Ranking List.

3.6.2. Publication and distribution of the Project Ranking List as directed by the Work Group will be the responsibility of the Alachua County Division of Emergency Management.

4. LMS Initiative List

4.1. The purpose of the *LMS Initiative List* is to maintain an unranked list of mitigation projects.

4.2. The list will denote each project submitted by jurisdictions participating in the LMS. Jurisdictions will appear alphabetically on the list. The list will **not** be employed to determine distribution of funding under mitigation grant programs.

4.3. Project Application Submission

4.3.1. Projects submitted for the Ranking List will automatically be included on the Initiative List.

4.3.2. Jurisdictions participating in the LMS may submit projects for inclusion on the Initiative List that are not submitted for the Ranking List.

4.3.3. For a project to be included on the Initiative List, a completed *Score Guide Cover Page* must be submitted either electronically or hard copy to the Alachua County Division of Emergency Management. Copies of the *Score Guide* and instructions are available from the Division. The jurisdiction should indicate on *the Score Guide Cover Page* that the project is for inclusion solely on the Initiative List.

4.3.4. Jurisdictions participating in the LMS may submit or remove projects for the Initiative List year round.

4.4. Maintenance and Publication

4.4.1. Alachua County Division of Emergency Management will be responsible for clerical maintenance of the Initiative List.

4.4.2. Publication and distribution of the Initiative List as directed by the Work Group will be the responsibility of the Alachua County Division of Emergency Management.

4.4.3. Alachua County Division of Emergency Management will e-mail an updated version of the Initiative List to voting members of all jurisdictions participating in the LMS within ten (10) working days of a project being added or removed from the list.

5. Public Record

5.1. The *LMS Project Ranking List* and *LMS Initiative list* will be considered public records. Jurisdictions should exercise appropriate judgment when naming project proposals since

project titles will be included on both lists.

5.2. Jurisdictions will be considered custodian of their submitted project proposals, not Alachua County Division of Emergency Management or Alachua County LMS Work Group.

5.3. Some project proposals may be exempt from public release based upon the provisions of Section 119.071, Florida Statutes. Jurisdictions are responsible for documenting projects that qualify for exemption from public by completing LMS Exemption Form A or B and note "Exempt" on the *Score Guide.*

6. 2007 Update of Alachua County Local Mitigation Strategy Projects

6.1. As part of an update cycle of the Alachua County Local Mitigation Strategy, dates for submission, ranking and approval of projects will be altered for calendar year 2007.

6.2. Deadline for submission of project *Score Guide* will be determined by the Work Group and communicated to each jurisdiction's voting member.

6.3. Jurisdictions will be notified a minimum of sixty (60) calendar days before the application deadline.

6.4. Following, the application deadline, the Task Force will have sixty (60) days to meet, rank projects and provide ranking recommendations to the Work Group. The Task Force may request additional time to complete duties from the Work Group.

6.5. The *LMS Initiative List* will be compiled and distributed by Alachua County Division of Emergency Management within ten (10) business days following the application deadline and then updated according to Section 4.3.2.

Appendix G: Priority Ranked Projects

Alachua County 2015 Local Mitigation Strategy – Mitigation Project Priorities

Project Sponsor	Project Description	Point of Contact	Score	Target Hazard	Potential Funding Source	Estimated Cost	Project Status	Time to Complete Project
1 **City of Newberry**	Fire Station Hardening	Ben Buckner 352-472-2150	29.5	wind	1,2	$51,500	Pending	3 months
2 **Town of Micanopy**	Fire Station Hardening	Debbie Gonano 352-466-3121	29	wind	1,2	$181,000	Pending	3 months
3 **Alachua County Public Works**	Red Lobster NFRMC Flood Abatement	Ruth Findley 352-374-5245	28.75	water	1,2,3	$11.5 million	Pending	Unknown
4 **City of Gainesville Public Works**	Hydraulic Hydrologic Model	Andy Roberts 352-334-5070	28.5	water	1,2,3	$ 2.4 million	Pending	24 months
5 **City of Gainesville**	Wildfire Mitigation Program	Donald Sessions 352-334-5078	27	fire	1,2	$840,000	Pending	5 years
6 **Alachua County Public Works**	Robin Lane Flood Abatement	Ruth Findley 352-374-5245	26.5	water	1,2,3	$1.35 million	Pending	Unknown
7 **Alachua County Public Works**	Meadowbrook Hills of Santa Fe Flood Abatement	Ruth Findley 352-374-5245	26	water	1,2,3	$6 million	Pending	Unknown
8 **Alachua County Public Works**	Oak Crest Eagle Point Flood Abatement	Ruth Findley 352-374-5245	26	water	1,2,3	$5 million	Pending	Unknown
9 **Alachua County Public Works**	SW NW 91st Street Flood Abatement	Ruth Findley 352-374-5245	26	water	1,2,3	$600,000	Pending	Unknown
10 **Alachua County Library District**	High Springs Branch Library Stormwater Management	Rick Pisano	25	water	1,2,3	$195,000	Pending	Unknown

Abbreviations

ASO = Alachua Sheriff's Office

EM = Emergency Management

FR = Fire Rescue

PW = Public Works

PD = Police Department

GS = General Services

N = New Project or structure

E = Existing project or structure

Funding Sources: Most probable funding sources – 1. Hazard Mitigation Grant Program, 2. Pre-Disaster Mitigation, 3. Flood Mitigation Assistance grant programs.

Hazards

1. Tropical Weather/Hurricanes – wind events
2. Flooding - water
3. Thunderstorms
4. Tornados
5. Communications
6. Wildfire - fire
7. Extreme Temperatures/Drought
8. Sinkholes/Subsidence
9. Terrorism
10. Hazardous Materials

Appendix H: Project Initiatives List

2015 LMS Mitigation Initiatives - Not Priority Ranked

Project Sponsor / Jurisdiction	Project Description	Point of Contact	Target Hazard	Funding Source	Project Status	Time to Complete Project
Alachua County Public Works	Retrofit Scale Housese/Admin	Michael Fay 374.5245	wind	1,2	Pending	<12 months
Alachua County Public Works	Wind Retrofit PW Admin	Michael Fay 374-5245	wind	1,2	Pending	<12 months
Alachua County Public Works	Wind Retrofit Animal Services	Michael Fay 374.5245	wind	1,2	Pending	<12 months
Alachua County Public Works	Wind Retrofit Hague Warehouse	Michael Fay 74.5245	wind	1,2	Pending	<12 months
High Springs	Wind retrofit City Hall, FR Station, Police Station	Bruce Gillingham 386.599.4214	wind	1,2	Pending	>12 months
University of FL	UF surge area flooding abatement	Linda Dixon 392.8799	water	1,2,3	Pending	>12months
Santa Fe College	Wind Retrofit Police Building	Charles Griggs 395.5000	wind	1,2	Pending	<12 months
Newberry PW	City Hall Retrofit	Connie Goode 472.8149	wind water	1,2,3	Pending	>12 months
University of FL	WUFT-TV Transmitter Relocation [E]	Linda Dixon 392.8799	communications disruption	1,2,3	Pending	>12 months
Hawthorne PW	Towne Lake Drainage Improvements	Ellen Vause 481.2432	water	1,2,3	Pending	>12 months
University of FL	PKY Creek Restoration [E]	Linda Dixon 332.5078	water	1,2,3	Pending	>12 months
University of FL	UF-GRU Sewer Line Connection [N]	Linda Dixon 392.8799	water quality	1,2,3	Pending	>12 months
LaCrosse FR	LaCrosse FS retrofit [E]	Barbara Thomas 485.1203	wind	1,2	Pending	>12 months
Hawthorne PW	Elevated Water Tank	Ellen Vause 352.481.2432	water supply	1,2	Pending	Unknown
Waldo PW	Generator	Kim Worley 468.1001	water supply	1,2	Pending	>12 months

City of Alachua	Survey of Critical Facilities Mitigation Opportunities	Diane Morgan 386.418.6100	water, fire, wind	1,2,3	Pending	>12 months
City of Archer In Conjunction with Alachua County	Develop Flood Abatement Project	John Glanzer 352.495.2880	water	1,2,3	Pending	>12 months
Alachua County School District	Talbot Elementary School Fenestration Hurricane Shelter Retrofit	Shane Andrews 352.955.7400	wind	Shelter Retrofit	Pending	>12 months

Abbreviations

ASO = Alachua Sheriff's Office

EM = Emergency Management

FR = Fire Rescue

PW = Public Works

PD = Police Department

GS = General Services

N = New Project or structure

E = Existing project or structure

Funding Sources: Most probable funding sources – 1. Hazard Mitigation Grant Program, 2. Pre-Disaster Mitigation, 3. Flood Mitigation Assistance grant programs.

Hazards

Tropical Weather/Hurricanes – wind events, Flooding, Thunderstorms, Tornados, Wildfire

Appendix I: Deleted LMS Projects

Jurisdiction	Project/Activity	Contact	Why Deleted
Gainesville	Thomas Center Fresh Air Vent	Larry Abbott 352.334.2140	Not mitigation
Gainesville	City Hall Fresh Air Vent	Larry Abbott 352.334.2140	Not mitigation
Gainesville PW	Old Library fresh air vent	Larry Abbot 352.334.2140	Not mitigation
Gainesville PD	Reichert House Civil Disorder	Pete Backhaus 352.334.2450	Not mitigation/no sponsor
Gainesville FR	Urban Fire Code Enforcement	Tim Hayes 352.334.5065	Not mitigation
Gainesville FR	Hazmat Highway Spills	Donnie Sessions 352.334.5078	Not Mitigation
Gainesville FR	Technical Building Collapse	Donnie Sessions 352.334.5078	Not Mitigation
Gainesville FR	Mobile Command Vehicle	Donnie Sessions 352.334.5078	Not Mitigation
Gainesville FR	Chem/Bio Terrorism Response	Donnie Sessions 352.334.5078	Not Mitigation
Gainesville FR	GIS Data Strategic Planning	Donnie Sessions 352.334.5078	Not Mitigation
Gainesville PW	Clear Lake Lift Station	Stewart Pearson 352.334.5070	No Sponsor
Gainesville General Services	Mobile Command Response Vehicle	Pete Backhaus 352.334.2450	Not Mitigation
Gainesville PW	SW 8th/Kirkwood Flood Project	Stewart Pearson 352.334.5070	No Sponsor
Gainesville PW	SW 34th Street Flood Project	Stewart Pearson 352.334.5070	No Sponsor
Gainesville PW	Old Archer road Flood Project	Stewart Pearson 352.334.5070	No Sponsor
Alachua County FR	Wildfire Mitigation Plans	Jeff Bielling 352.264.6520	No Sponsor
University of Florida	UF Creek Restoration	Linda Dixon 352.392.8799	No Sponsor
University of Florida	PK Young Creek Restoration	Linda Dixon 352.392.8799	No Sponsor
University of Florida	UF-GRU Sewer Line Connection	Linda Dixon 352.392.8799	No Sponsor
Archer PW	City Hall Wind Retrofit	Sandra McIntosh 352.495.2880	No Sponsor

Appendix J: Project Score Guide 2015

(Forms begin on following page.)

Alachua County Local Mitigation Strategy

Score Guide / Cover Page

Jurisdiction/Agency:

Date of submittal:

Project Contact:

Contact Address:

Telephone:_____ Fax: _____ E-mail:

Project Name:

Project Description: (include a brief project overview):

Project Estimated Cost:

Project Estimated Completion Timeframe:

If project is exempt from the Public Record Act, provide Florida Statute and statement from legal representative documenting exemption. Exempt: Yes/No

This project submitted for: ___LMS Project Ranking List* (score required)

____ LMS Initiative List (score not required)

*** If project listed on LMS Project Ranking List, the project will also be listed on the LMS Initiative list in alphabetical order.**

Proposed Project Type:

Please indicate the type of project proposed in accordance to the four tier approach of the LMS Workgroup.

☐ Life Safety ☐ Critical Operations and Infrastructure

☐ Economic Vitality ☐ Preparedness Planning and Studies

When scoring projects, assign a score to the nearest quarter point (0.25) within the Decision Factor score range, unless the Decision Factor requires a whole number score.

1. Jurisdictional Benefits:

This **decision factor** evaluates the extent of the jurisdictional benefits of the proposed mitigation project.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
3	Project will benefit a multi-jurisdictional area.		
2	Project will benefit a single jurisdiction.		
1	Project will benefit less than 100% of a jurisdiction (i.e., neighborhood)		

2. Estimate of Population Benefited:

This **decision factor** evaluates the benefit to human health and safety derived from implementation of the project. The beneficial effects of the proposed project may affect more than the population of the sponsoring entity.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
5	This project would benefit the health and safety of at least 200,000 people by directly reducing personal injury and/or risk of illness.		
4	This project would benefit the health and safety of between 100,000 to 199,999 people by directly reducing personal injury and/or risk of illness.		
3	This project would benefit the health and safety of 5,001 to 99,999 people by directly reducing personal injury and/or risk of illness.		
2	This project would benefit the health and safety of up to 5,000 people by directly reducing personal injury and/or risk of illness.		
0	This project has no direct benefit to the health and safety of the population.		

3. Environmental and Human Health Impact

This **decision factor** is designed to account for potential short or long term environmental impact or human health hazards that may occur as a result of implementation of the project.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
2	The project will demonstrably improves environmental and/or human health conditions		
1	The project offers minimal improvement potential to the environment or human health.		
0	Risk to human health and/or the environment are undeterminable.		
-1	The project creates a situation that is a detriment to human health or has short or long-term negative environmental impacts.		

4. Consistency with other Plans and Programs:

This **decision factor** is used to consider the level of consistency that the mitigation project has with other current plans and programs that have been approved, accepted or utilized by the community to be affected or benefited by the project. The premise here is that proposed project proposal should be ranked higher if they are consistent with and further these other plans and programs, rather than if they are inconsistent or in conflict with the goals and objectives of generally accepted guiding principles.

The following types of plans, policies and programs to be considered under this decision factor are the following:

- The goals and objectives of the Alachua County Local Mitigation Strategy (LMS)
- Entities adopted Comprehensive Plan, or other guiding plan or document.
- Special Area Plans or Conservation Management Plans
- The jurisdiction's Comprehensive Emergency Management Plan and or the Alachua County Comprehensive Emergency Management Plan (CEMP).
- Any applicable land development code or zoning ordinance.
- Any applicable environmental resource preservation or protection plan, policy or ordinance
- Any other applicable local, state building code or federal law, regulation or plan.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
4	The project or activity is incorporated into at least three of the documents listed, or judged to be highly consistent with all.		
3	The project or activity is incorporated into at least two of the documents listed.		
2	The project or activity is incorporated into at least one of the documents listed.		
1	The project or activity is consistent with other standards deemed acceptable however not specifically listed above.		
-1	Project or activity is inconsistent with [conflicts with] adopted comprehensive plan or land development code.		
-2	Project or activity is inconsistent with [conflicts with] a Special Area Plan or a Conservation Management Plan.		

5. Community Exposure:

The proposed project mitigates a frequently occurring hazard or problem or a hazard to which a community is particularly vulnerable. The scoring factor is based upon combinations of high, medium and low levels of exposure and frequency.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
5.0	High Exposure and High Frequency		
4.5	High Exposure and Medium Frequency		
4.0	High exposure and Low Frequency		
3.5	Medium Exposure and High Frequency		
3.0	Medium Exposure and Medium Frequency		
2.5	Medium Exposure and Low Frequency		
2.0	Low Exposure and High Frequency		
1.5	Low Exposure and Medium Frequency		
1.0	Low Exposure and Low Frequency		

6. Supports Natural Resources, Critical Infrastructure, Critical Services or Key Resources:

This **decision factor** evaluates how the project will support public or private critical infrastructure, services, or man-made or natural resources that provide a hazard mitigation function. The critical infrastructure, service, or resource must provide some capacity for or type of hazard mitigation such as the enhancement of storm water systems [man-made resource] or the restoration of floodplains [natural resource] to attenuate flooding potential.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
5	The project will ensure continuity of operations of critical infrastructure or services.		
3	The project will support infrastructure, resources that provide hazard mitigation functions or services with history of loss or damage.		
1	The project will support infrastructure, or resources that provide hazard mitigation functions or services without history of loss or damage.		
0	The project's operation would have no impact community infrastructure or services if disrupted.		

7. The Probability of Receiving Funding for Implementation:

This **decision factor** considers the likelihood that a project will be adequately funded for its implementation or completion as proposed The underlying assumption is that one of the fundamental purposes of the Alachua County LMS is to secure funding for meritorious project proposals which otherwise may not be funded in a timely manner. Please list the likely funding sources for the proposed project:

Score	Description of the Decision Factor	Applicant Score	Committee Validation
4	The only potential funding sources for this project are readily available through mitigation or emergency preparedness funding sources.		
3	The only potential funding sources are other state or federal grants or similar funding sources.		
2	Funding may be accomplished through matching local jurisdiction dollars with funds from budgeting, capital improvement, or a mixture of other funding sources.		
1	Funding may be obtained through available locally controlled budget sources.		

8. The Feasibility of Implementation:

This **decision factor** considers the feasibility of implementation of the project from an administrative or managerial perspective. At a minimum, the following external factors are to be evaluated for each proposed project:

- The time involved to complete a project, including planning and engineering studies, environmental assessments and ecological surveys.
- The type, number and time needed to secure permits and approvals.
- If the project proposal would require a referendum vote by the general public.
- If the project proposal would require a public hearing and/or specific commission/council approval.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
4	The project would be relatively easy to complete or implement within one year.		
3	The project is not anticipated to be difficult to implement; no external factors affect the proposed project or would only have a minimal influence on the implementation process.		
2	The project may be somewhat difficult to implement because one identified external factor will impede the implementation process.		
1	The project may be fairly difficult to implement because two external factors will impede the implementation process.		
0	The project may be difficult to implement because three or more external factors will impede the implementation process.		

9. Community Rating System:

This **decision factor** takes into a proposed project's positive affect upon Community Rating System (CRS) flood-related activities. These activities would enhance public safety, reduce damages to property and public infrastructure, avoid economic disruption and losses, reduce human suffering and protect the environment.

- Project supports public information activities.
- Project supports mapping (i.e. GIS) and regulations.
- Project supports flood damage reduction activities.
- Project supports flood preparedness activities.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
4	The project supports all four elements of CRS flood-related activities.		
3	The project supports three elements of CRS flood-related activities.		
2	The project supports two elements of CRS flood-related activities.		
1	The project supports one element of CRS flood-related activities.		
0	The project has no component applicable to the CRS.		

10. Repetitive Loss Mitigation:

This **decision factor** rates how the project would mitigate Severe Repetitive Loss (RL) properties which are structures flooded two or more times in a ten-year period.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
4	Project protects 50% or more of RL structures		
2	Project protects less than 50% of RL structures.		
0	Project does not protect a RL structures		

11. Preliminary Estimated Benefit /Cost Ratio:

This **decision factor** considers the preliminary estimated benefit to cost ratio (BCR) of implementing the project. Please show the calculations used to derive the BCR and list all assumptions. A more detailed Benefit/Cost Ratio analysis using FEMA- approved methods and formulae will be required to support the proposed mitigation project for any funding application and prior to initiation of any project. Planning projects do not require the support of a Benefit/Cost analysis and will be assigned a score of 2 for purposes of project ranking.

Score	Description of the Decision Factor	Applicant Score	Committee Validation
2	The project demonstrates a BCR > 1 indicating that the expected benefit is more than the costs associated with the project. Planning projects will be assigned a score of 2.		
-2	The project demonstrates a BCR < 1 indicated that the expected benefit is equal to or less than the costs associated with the project.		
0	The cost benefit ratio cannot be determined.		

12. Other Benefits:

This **decision factor** credits the project for benefits relating to proactive mitigation activities. Scoring for this decision factor will be determined by the LMS Project Ranking TF based on responses given in the "Project Description Form."

Score	Description of the Decision Factor	Committee Validation
1.5	Project provides multi-hazard risk reduction (i.e. wind, flood, fire, etc.)	
	Project provides another benefit not addressed. Please justify	

13. LMS Priority:

This **decision factor** will be used only when the scores of projects result in a tie. Projects supporting life/safety considerations shall be ranked above non-life safety projects. The Project Ranking TF will determine the final ranking of tied projects by a vote of the Task Force. The TF will provide a summary of the reasoning behind the final project ranking. All applicants **must** answer the following question:

Does the project support Life Safety considerations:

☐ Yes ☐ No

Alachua County Local Mitigation Strategy Workgroup

Project Description Form

Jurisdiction/Agency: _____

Proposed Project Name (brief description)

_____

Please present a brief description of your project that includes:

A. Justification of self-evaluation scores of the Decision Factors.
B. Components of your project that warrant special attention.
C. Any other pertinent information that can be used in ranking the proposed project.

Provide an overall description of your proposed project including your goals to be accomplished by the project and the objectives to be completed as intermediate steps towards the goal(s).

1. Provide information on the jurisdiction's population that will potentially benefit from your project such as demographics and an estimated number of people. Indicate if the project would provide multi-jurisdictional benefits.

2. Describe how the project will directly influence the health and safety of the population of Alachua County or a portion thereof.

3. Provide an explanation of how the project will directly affect the environment and human health. Include possible risks or adverse effects that may be associated with implementation or completion of the proposed project.

4. Provide documentation explaining the consistency of your project with the plans and programs of the applicable jurisdiction including an explanation of consistency with the adopted Alachua County Comprehensive Plan~~s~~, Special Area Plans, Conservation Management Plans, or other applicable plans, policies, and/or guiding principles.

~~5.~~ Assess the relative exposure to an identified hazard of your community and the frequency with which this hazard occurs.

6. Illustrate how your project will affect essential or non-essential services or infrastructure necessary to support life (power, water, sewer, gas, medical care); provide for safety and security (law enforcement, fire, telecommunications); minimize adverse impacts to the economy(fueling facility, food retail outlet); protect cultural resources (artifacts, historical buildings); protect natural resources and/or their functions (floodplains, flood attenuation, water quality); or promote educational programs.

7. Present the likelihood that your project proposal would receive funding for implementation from HMGP or another funding source. Indicate if the project is eligible for short-term, long-term, or capital improvement grants.

8. Present an explanation of the feasibility of implementing your project including, but not limited to supplying information on the complexity of implementation and a timeframe for completion.

9. Describe how your project is complementary to one or more of the components or activities of the Community Rating System (CRS).

10. Describe how your project would mitigate Repetitive Loss properties identified by FEMA or known to a jurisdiction.

11. Illustrate how your project considers the Benefit to Cost Ratio (BCR) of providing quantitative and qualitative benefits for health, safety and valuable resource protection at may be realized by implementing the initiative. Determine the Preliminary Estimated BCR using the sum of the net benefits of the project divided by the total cost to complete or implement the project. Provide the assumptions and data utilized in the analysis. Be aware that the FEMA approved software and Benefit Cost Ratio procedures must be used to support your project before it will be eligible for State or Federal funding.

12. Provide a description of other benefits or proactive mitigation activities that would be provided by the proposed project.

Alachua County Local Mitigation Strategy Work Group
Validation Worksheet

Sponsor/Agency Contact: _____

Project Proposal Name (or brief description) _____

Date Scoring validated by LMS Committee: _____ **Project Confidential: Y / N**

Applicant Scores	Determining Factors	Committee Validation
	1. Jurisdictional Benefits	
	2. Population Benefited	
	3. Environmental and Human Health Impact	
	4. Consistency with other Plans and Programs	
	5. Community Exposure	
	6. Supports Natural Resources, Critical Infrastructure and Services, or Key Resources	
	7. Probability of Receiving Funding for Implementation	
	8. Feasibility of Implementation	
	9. Community Rating System	
	10. Repetitive Loss Mitigation	
	11. Preliminary Estimated Benefit Cost Ratio	
	12. Other Benefits	
	13. LMS Priority Ranking	

Total Applicant Score			Total Validation Score

Authorized LMS Official:

(1) _____ _____

Ranking TF Chair Signature

(2) _____ _____

LMS Work Group Chair Signature

Appendix K: LMS Work Group Member List

NAME	AGENCY/TITLE	PHONE	E-MAIL
Allen, Kenneth	University of Florida/Emergency Manager	352-392-1591	kallen@ehs.ufl.edu
Andrews, Shane	Facility Director, Alachua County Public Schools	352-955-7400 xtc 1401	andrewsl@gm.sbac.edu
Baker, Adrienne	City of Gainesville/Fire Rescue	352-334-5065	bakerac@cityofgainesville.org
Benkhatar, Mehdi	Alachua County/Growth Management Planner	352-374-2361	mbenkhatar@alachuacounty.us
Bielling, Jeffery	Alachua County/ EM Asst. Director	352-264-6520	jbielling@alachuacounty.us
Bond, Ludie	Florida Forest Service/Mitigation Specialist	352-955-6458	bondl@freshfromflorida.com
Bonetti, Rob	Asst. Finance Director City of Alachua	386-418-6166	rbonetti@cityofalachua.org
Booth, Ed	City of High Springs/City Manager		ebooth@highsprings.us
Buch, Ramesh	Alachua County/ Environmental Protection Dept. Land Conservation Manager	352-264-6804	rpbuch@alachuacounty.us
Buckner, Ben	City of Newberry/Fire Chief	352-258-4465	ben.buckner@ci.newberry.fl.us
Cooper, Chris	Code Enforcement Manager City of Gainesville	352-334-5010	cooperce@cityofgainesville.org
Cuthbert, Bill	City of Hawthorne/Public Works	352-481-4483	bcuthbert@cityofhawthorne.net
Dalusio, Amy	Exec. Admin. Asst. To City Mgr. City of Newberry	472-5447 x 106	amy.dalusio@ci.newberry.fl.us
Davis, Susan	SJRWMD, Intergovernmental Coordinator	407-659-4838	sdavis@sjrwmd.com
Dickens, Dave	Director, Admin and Operations Division, Suwannee River Water Mngt. District	386-362-1001	rdd@srwmd.org
Donnelly, David	Alachua County/ EM Director	352-264-6500	dad@alachuacounty.us

Dubberly, Dianne	LaCrosse/City Manager	386-462-2784	lacrosse386@windstream.net
Dycus, Doug	FDOT District 2/Engineer	386-961-7312	douglas.dycus@dot.state.fl.us
Fay, Michael	Alachua County Public Works/Development Program Mgr	352-374-5245	mjf@alachuacounty.us
Ferrone, Greg	Alachua County/Building Official	352-338-3284	gferrone@alachuacounty.us
Freeland, John	Building Official City of Gainesville	352-334-5050	freelandjc@cityofgainesville.org
Foltz, John	Alachua County CERT/volunteer Coordinator	352-514-3397	foltz@ufl.edu
Gillingham, Bruce	High Springs FD/Chief	386-588-4214	hsfd@windstream.net
Glanzer, John	City of Archer Interim City Manager	352.495.2880	jglanzer@cityofarcher.com
Gonano, Debbie	Town of Micanopy/City Manager	352-466-3121	townhall@micanopytown.com
Grieb, Hal	University of Florida/EM Coordinator	352-294-3061	hal.grieb@ufl.edu
Grieshaber, Al	City of Archer/City Manager	352-495-2880	citymanager@cityofarcher.com
Hofstetter, Stephen	Alachua County/Natural Resource Program Supervisor	352-264-6800	shofstetter@alachuacounty.us
Kincaid, Ivor	Land Manager Alachua Conservation Trust	352-373-1078	act.landmanager@gmail.com
Kinser, Wendy	City of Newberry/Grants Administrator	352-472-0119	wendy.kinser@ci.newberry.fl.us
Lalwani, Lalit	Alachua County/PW Development Review Engineer	352-372-5245	llalwani@alachuacounty.us
LaRue, James	Disaster Avoidance and Recovery Plans Manager Shands at UF	265-8317 ext. 85577	laruej@shands.ufl.edu
Link, James	Civil Engineer Alachua County Public Works	352.548.1289	jlink@alachuacounty.us
Martin, Todd	Member Representative Clay Electric Cooperative	352- 372-8543	tmartin@clayelectric.com
McGruder, Lakesha	City of Hawthorne/Clerk	352-481-2432	lmcgruder@cityofhawthorne.net

McIntire, David	Lt. Fire Rescue, City of Gainesville	352-334-5078	mcintiredw@cityofgainesville.org
Morgan, Diane	City of Alachua/Grants Administrator	386-418-6131	dmorgan@cityofalachua.org
Pagan, Kathleen	Alachua County Growth Management/Senior Planner	352-374-5249	kpagan@alachuacounty.us
Peet, Jeffrey	Progress Energy/Engineer	352-337-6903	jeffrey.peet@pgnmail.com
Pisano, Rick	Senior Building Mechanic Alachua County Library District	352-334-3906	rpisano@aclib.us
Renshaw, Andy	City of Gainesville/Floodplain Manager	352-334-5070, x5522	renshawal@cityofgainesville.org
Rittenhouse, Jamie	Florida Forest Service/Forest Area Supervisor	352-955-2101	Jamie.Rittenhouse@freshfromflorida.com
Scott, Teresa	City of Gainesville/Public Works Director	352-334-5070	scottta@ci.gainesville.fl.us
Shuping, April	City of Gainesville/Controller		shupingma@cityofgainesville.org
Tabor, Justin	Principal Planner City of Alachua		jtabor@cityofalachua.com
Thomas, Barbara	Councilman, Town of LaCrosse		tennwalkerlady@yahoo.com
Vause, Ellen	City of Hawthorne/City Manager	352-481-2432	evause@cityofhawthorne.net
Wolf, Rick	Alachua County/Growth Management Asst. Director	352-374-5248	rew@alachuacounty.us
Worley, Kim	City of Waldo/City Manager	352-258-6921	kim@waldo-fl.com
Whitcraft, Dan	Facility Dept. Manager Alachua County Library District	352-334-3906	dwhitcraft@aclib.us

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

April 16, 2015
2:00 PM Alachua County EOC

Agenda

I. Welcome and Introductions

Wendy Kinser, Chair

II. Review of and Approval Meeting Minutes February 26, 2015.

III. Review and Scoring of Mitigation Projects

IV. Priority Ranking of All Mitigation Projects

V. Other Business

VI. Adjourn

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

April 16, 2015
2:00 PM Alachua County EOC
Minutes

Agenda

I.	**Welcome and Introductions**
II.	**Review of and Approval Meeting Minutes February 26, 2015.**
III.	**Review and Scoring of Mitigation Projects**
IV.	**Priority Ranking of All Mitigation Projects**
V.	**Other Business**
VI.	**Adjourn**

1. Meeting called to order at 2:35 PM by Chair Kinser. Ranking Task Force members present: Wendy Kinser (Newberry), Dave Donnelly (Alachua County EM), Hal Grieb (UF EM), Don Sessions (GFR). Dave McIntire (GFR) present as observer and GFR LMS representative in training.
2. Motion to approve February 26, 2015 minutes by Don Sessions, second by Dave Donnelly, motion carried.
3. The following mitigation projects were reviewed and scored by the Task Force: City of Gainesville Wildland Urban Interface Wildfire Mitigation Program [score of 27], City of Gainesville Hydraulic and hydrologic Model [28.5], Alachua County Meadowbrook/Hills of Santa Fe Stormwater Project [26], Alachua County Oak Crest/Eagle Point Stormwater Project [26], and Alachua County SW/NW 91st Street Stormwater Project [26].
4. The proposed mitigation projects that had been scored were ranked in priority order as follows:
    1. Newberry Fire Station Hardening [29.5]
    2. Micanopy Fire Station Hardening [29]
    3. Red Lobster/Doctor's Park Stormwater Project [Alachua County] [28.75]
    4. Gainesville Hydraulic and Hydrologic Model [28.5]
    5. Gainesville Wildland Urban Interface Wildfire Mitigation Program [27]
    6. Robin Lane Stormwater Project [Alachua County] [26.5]
    7. Meadowbrook/Hills of Santa Fe Stormwater Project [Alachua County] [26]
    8. Oak Crest/Eagle Point Stormwater Project [Alachua County] [26]
    9. SW/NW 91st Street Stormwater Project [Alachua County] [26]
    10. High Springs Branch Library Stormwater Project [25]

    For those projects that have the same scores the Task Force voted on the final priority rank order. In the case of the Alachua County stormwater/flood abatement projects the County Public Works Department had prioritized the stormwater/flood abatement projects. The Task Force followed this prioritization.
5. No Other Business.
6. Meeting adjourned at 4:20 PM.

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

February 19, 2015
2:00 PM Alachua County EOC

Agenda

VII. Welcome and Introductions

Wendy Kinser, Chair

VIII. Review of and Approval Meeting Minutes January 22, 2015.

IX. Distribution of Revised Critical Facilities List for TF Review

X. Review of Revised Project List
And Project Re-evaluation and Scoring

XI. Other Business

XII. Adjourn

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

February 19, 2015
2:00 PM Alachua County EOC
Meeting Minutes

Agenda

VII.	**Welcome and Introductions** Wendy Kinser, Chair
VIII.	**Review of and Approval Meeting Minutes January 22, 2015**
IX.	**Distribution of Revised Critical Facilities List for TF Review**
X.	**Review of Revised Project List** **And Project Re-evaluation and Scoring**
XI.	**Other Business**
XII.	**Adjourn**

I. Meeting called to order at 2:26 PM by Chair Kinser. Members present: Diane Morgan, Don Sessions. ACEM staff: Jeff Bielling

II. Minutes of the January 22, 2015 Task Force meeting were approved. Motion by Don Sessions, second by Diane Morgan.

III. Revised list of critical facilities distributed to Task Force. Some discussion of types of facilities to include on the list; was noted that facilities that may be part of mitigation project should be on the list.

IV. The revised project scoring worksheet was discussed at length and how to best proceed. It was suggested that those projects with incomplete information [such as estimated cost] be placed on the "Initiatives" list until complete information is obtained. These projects can then be priority ranked and included on the mitigation project list. The annual LMS update sent to DEM would then reflect any changes to the LMS or the project list since the 5-year update.

V. A general discussion of the LMS update process and the likely timeline was conducted.

VI. Meeting adjourned at 4:15 PM. Don Sessions motion to adjourn, Diane Morgan second.

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

January 22, 2015
2:00 PM Alachua County EOC

Agenda

XIII. Welcome and Introductions

Wendy Kinser, Chair

XIV. Review of:
Updated LMS
Revised Ranking TF Procedures
Revised Project Ranking Worksheet

XV. Review of Revised Project List
Discussion of Project Re-evaluation

XVI. Other Business

XVII. Adjourn

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

January 22, 2015
2:00 PM Alachua County EOC
Meeting Minutes

Agenda

I. **Welcome and Introduction** Wendy Kinser, Chair
II. **Review of Updated LMS, Revised Ranking TF Procedures, Revised Project Ranking Worksheet**
III. **Review Revised Project List and Discussion of Project Re-evaluation**
IV. **Other Business**
V. **Adjourn**

I. Meeting started at 2:15 PM in Chair Kinser's absence as she was detained. Ms. Kinser arrived at 2:45 PM
LMS Project Ranking members in attendance: Diane Morgan, Ellen Vause, Don Sessions,
ACEM staff: Jeff Bielling

II. Status of LMS update reviewed: LMS updated to reflect current existing land use patterns, using updated hazard analysis from CEMP, including Alachua County PW flooding study, Southern Wildfire Risk Assessment. TF will receive draft LMS update for their review prior to sending to full Work Group. Updated Ranking TF Procedures were provided to group. Revised Project Ranking Worksheet was reviewed by the group. Changes were suggested to clearly require project cost and completion information, clarify the population that would benefit from mitigation projects, and clarify requirements for a preliminary estimate of cost/benefit. Motion to approve revised Project Ranking Worksheet by D. Sessions, 2nd by Diane Morgan. Motion carried. Revised Worksheet will be sent to the TF for final review then forwarded to Work Group for their approval.

III. Current Project and the need to revise the list was discussed. Current list is missing required information such as project cost. It was determined that the Work Group would be contacted to determine which of the projects still had merit for completion, and who would sponsor [be POC for] the project. The projects that the Work Group members want to retain will be submitted for ranking on the revised Worksheet with up to date supporting information.

IV. Discussion of next steps in LMS update process: J. Bielling to search for original project files to assist review of project list. Next meeting of the Task Force will be after Work Group approves Project Worksheet revisions.

V. Meeting adjourned at 4:20 PM

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

February 26, 2015
2:00 PM Alachua County EOC

Agenda

XVIII. Welcome and Introductions

Wendy Kinser, Chair

XIX. Review of and Approval Meeting Minutes February 19, 2015.

XX. Review of Revised Project List
And Project Re-evaluation and Scoring

XXI. Other Business

XXII. Adjourn

Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

February 26, 2015
2:00 PM Alachua County EOC
Minutes

Agenda

XIII.	**Welcome and Introductions** Wendy Kinser, Chair
XIV.	**Review of and Approval Meeting Minutes February 19, 2015.**
XV.	**Review of Revised Project List** **And Project Re-evaluation and Scoring**
XVI.	**Other Business**
XVII.	**Adjourn**

I. Meeting called to order at 1:15 PM by Chair Kinser.
In attendance: Diane Morgan, Don Sessions, Dave Donnelly. ACEM staff Jeff Bielling

II. Minutes of February 19, 2015 meeting approved; Diane Morgan moved, Dave Donnelly Second.

III. Diane Morgan moved to accept revised project scoring guide; Dave Donnelly second. Motion carried. Projects for which cost estimates are available were scored by the Project Ranking Task Force using the revised scoring guide. Projects were; Newberry Fire Station Retrofit/Hardening [29.5], Micanopy Fire Station Retrofit/Hardening [29], Red Lobster/Tower Road Flooding Abatement [28.75], Robin Lane Flooding Abatement [26.5], High Springs Branch Library Stormwater System [25].

IV. The Task Force discussed the likely process for reviewing the mitigation projects for which cost information is not currently available. It was determined to put these projects on the "Initiatives List" for the near term to allow the sponsoring agencies time to gather the information or indicate that they no longer had an interest in pursuing these projects. The LMS could then be amended to reflect the changed mitigation project lists and included in the annual update to the State Division of Emergency Management at the end of 2015.

V. Meeting adjourned about 3:30 PM.

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center
April 29, 2015
2:00 PM

Agenda

I. Welcome and Introductions

Dave Donnelly, Chair

II. Approval of Minutes

November 21, 2013

III. Review of Updated LMS Plan

IV. Other Business

V. Adjourn

Local Mitigation Strategy (LMS) Work Group

Minutes Meeting of April 29, 2015
Alachua County Emergency Operations Center

Agenda

XVIII. Welcome and Introductions
Dave Donnelly, Chair

XIX. Approval of Minutes
November 21, 2013

XX. Review of Updated LMS Plan

XXI. Other Business

XXII. Adjourn

I. Meeting was called to order at 2:10 PM by Dave Donnelly, Work Group Chairman.
The following LMS Work Group members, staff and visitors were present: Don Sessions Gainesville, Jeff Bielling Alachua County EM, Jen Horner Alachua County EM, Mehdi Benkhatar Alachua County Growth Management, Stephen Hofstetter Alachua County Environmental Protection Department, Hal Grieb University of Florida Emergency Management, David McIntire Gainesville Fire Rescue, Dian Morgan City of Alachua, Andy Renshaw City of Gainesville Public Works, Micahel Fay Alachua County Public Works, Kathleen Pagan Alachua County Growth Management, Ludie Bond Florida Forest Service, Wendy Kinser City of Newberry, Management, Lalit Lalwani Alachua County Public Works.

II. Minutes for November 21, 2013 meeting were approved by the Work Group. Motion by Don Sessions, second by Wendy Kinser.

III. A summary of the revised LMS Pan was provided by Jeff Bielling that outlined the primary changes from the 2010 LMS Plan [hazard assessment, changes to the mitigation project priority list and the initiatives list, completed projects]. Noted that review comments were received from Kathleen Pagan [Alachua County Growth Management], Stephen Hofstetter [Alachua County Environmental Protection], and Dave Donnelly [Alachua County Emergency Management]. No public comments have been received to date. Motion to transmit the revised LMS Plan to the Florida Division of Emergency Management for their review – pending inclusion of review comments received- made by Don Sessions, second by Wendy Kinser. Motion carried.

IV. Other Business: A brief discussion of the Community Rating System [CRS] and its relationship to the LMS ensued. It was noted that the revised LMS will likely need additional revisions to more fully comply with the requirements of the CRS Manual requirements. It was suggested that in light of Alachua County's ongoing sustainability efforts that the project score sheet include criteria for community resiliency. It was suggested that a representative from State Parks/Paines Priaire be solicited for membership on the LMS Work Group. Ludie Bond Florida Forest Service provided an overview of the Community Wildfire Protection Plan [CWPP] being prepared for Alachua County. When the CWPP is finalized it will be considered for inclusion in the LMS.

V. Motion to adjourn by Diane Morgan, second by Wendy Kinser. Meeting adjourned 2:55 PM.

Minutes prepared by Jeff Bielling, LMS Coordinator

Subject: LMS WorkGroup Meeting

Location: EOC

Start: Wed 4/29/2015 2:00 PM

End: Wed 4/29/2015 5:00 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Emergency Notification

Required Attendees: Adrienne Baker; Al Grieshaber; Amy Dalusio; Andy Renshaw; April Shuping; Barbara Thomas; Ben Buckner ; Bill Cuthbert; Bruce Gillingham ; Charles Griggs; Chris Cooper; Connie Goode; Dan Whitcraft; Dave Dickens; David Donnelly; David Thompson; Debbie Gonano; Diane Morgan; Dianne Dubberly; Donnie Sessions; Doug Dycus; Ed Booth; Ellen Vause; Geoff Sample; Gregory A. Ferrone; Hal Grieb; High Springs City Manager; Ivor Kincaid; James LaRue; Jamie Rittenhouse ; Jeffrey Peet; John Foltz; John Mayberry; Justin Tabor; Kathleen Pagan; Ken Allen; Kim Newsome; Kim Worley; LaKesha McGruder; Lalit Lalwani; Ludie Bond ; Marcian Brown; Mehdi Benkhatar; Michael Fay; Mike Brennan; Ramesh Buch; Rick E. Wolf; Rick Pisano; Rob Bonetti; Stephen Hofstetter; Teresa Scott; Thomas Panico; Wendy Kinser

Meet to review and discuss updated LMS Plan

From: Jeffery Bielling

Sent: Monday, April 13, 2015 4:58 PM

To: Adrienne Baker; Al Grieshaber; Amy Dalusio; Andy Renshaw; April Shuping; Barbara Thomas; Ben Buckner ; 'Bill Cuthbert'; Bruce Gillingham ; Charles Griggs; Chris Cooper; Connie Goode; Dan Whitcraft; Dave Dickens; 'David Donnelly'; David Thompson; Debbie Gonano; 'Diane Morgan'; Dianne Dubberly; Donnie Sessions; Doug Dycus; Ed Booth; 'Ellen Vause'; Geoff Sample; Gregory A. Ferrone; Hal Grieb; 'High Springs City Manager'; Ivor Kincaid; James LaRue; Jamie Rittenhouse ; Jeffrey Peet; John Foltz; John Mayberry; Justin Tabor; 'Kathleen Pagan'; Ken Allen; Kim Newsome; Kim Worley; 'LaKesha McGruder'; Lalit Lalwani; Ludie Bond ; Marcian Brown; Mehdi Benkhatar; 'Michael Fay'; Mike Brennan; 'Ramesh Buch'; Rick E. Wolf; Rick Pisano; Rob Bonetti; Stephen Hofstetter; Teresa Scott; Thomas Panico; 'Wendy Kinser'

Subject: Updated LMS Document

Hello LMS Work Group-

We are scheduled to adopt an updated Local Mitigation Strategy document later this year. To that end I have been revising the current LMS document and the Project Ranking Task Force has been revising the project ranking worksheet and reviewing projects for which we have complete information.

The Ranking Task Force will meet Thursday of this week to score a few remaining projects and then priority rank all of the projects. The only projects that will be on the priority list will be those projects for which we have updated cost estimates – as required by the state code provisions for LMS plans. The other projects that do not have complete information and that folks have indicated they have interest in pursuing will be placed onto the "Initiatives" list. If and when project cost information is obtained we can review these projects and add them to the priority list. And we will solicit new projects at the end of the year as in the past.

Please review the updated LMS Plan draft document and its attachments. I have placed these documents onto the Alachua County Emergency Management webpage for the Local Mitigation Strategy. The "2015 LMS Plan Update Review Draft" is the body of the LMS and has been significantly revised over the current version. If you have limited time to review these documents this is the one to focus upon. The web address where you will find all of the documents is http://www.alachuacounty.us/Depts/PublicSafety/em/Pages/LocalMitigationStrategy.aspx

I will post the list of priority ranked projects and the initiatives list when the Ranking Task Force has completed their work.

Please send me any comments that you may have on the revised LMS by Friday April 24, 2015 if possible. This is still a work in progress and so revisions can and will occur.

We have scheduled a meeting for the LMS Work Group on Wednesday April 29, 2015 here in the EOC from 2:00-5:00 PM for the Work Group to discuss the updated LMS and hopefully approve it for transmittal to the Florida Division of Emergency Management for their review.

Please let me know if you have any questions.

Thank you.

Jeff Bielling, AICP

Alachua County Emergency Management
Assistant Director
1100 SE 27th Street
P.O. Box 5038
Gainesville, Florida 32627
352-264-6520
FAX 352 264-6565

From: Jeffery Bielling
Sent: Monday, December 01, 2014 11:45 AM
To: Adrienne Baker; Al Grieshaber; Amy Dalusio; Andy Renshaw; April Shuping; Barbara Thomas; Ben Buckner (ben.buckner@ci.newberry.fl.us); 'Bill Cuthbert'; Bruce Gillingham (bgillingham@highsprings.us); Charles Griggs; Chris Cooper; Connie Goode; Dan Whitcraft; Dave Dickens; 'David Donnelly'; David Thompson; Debbie Gonano; 'Diane Morgan'; Dianne Dubberly; Donnie Sessions; 'Ebbin Spellman'; 'Ellen Vause'; 'High Springs City Manager'; James LaRue; Jamie Rittenhouse (jamie.rittenhouse@freshfromflorida.com); Jeffrey Peet; John Foltz; John Mayberry; Justin Tabor; 'Kathleen Pagan'; Ken Allen; Kim Newsome; Kim Worley; 'LaKesha McGruder'; Ludie Bond (Ludie.Bond@freshfromflorida.com); Marcian Brown; 'Michael Fay'; Mike Brennan; 'Ramesh Buch'; Rick Pisano; Rob Bonetti; Teresa Scott; Thomas Panico; 'Wendy Kinser'
Subject: WorkGroup Officers for 2015

Hello LMS Work Group-

Our LMS is due for a 5-year update next spring. We are scheduled to submit an updated LMS to the Florida Division of Emergency Management by the end of March 2015. So, over the next 4 months I will be sending you all revised drafts of the LMS for your review and comment.

For the sake of time and continuity I am suggesting – with their concurrence- that Dave Donnelly and Wendy Kinser remain as chair and vice-chair of the Work Group for the coming year as we work through the update process.

That is unless of course, someone else would like to shepherd the process. If so please let me know and I'll set about scheduling a meeting to elect officers.

Thank you.

Jeff Bielling, AICP

Alachua County Emergency Management
Assistant Director
1100 SE 27th Street
P.O. Box 5038
Gainesville, Florida 32627
352-264-6520
FAX 352 264-6565

From: Jeffery Bielling
Sent: Thursday, February 12, 2015 3:01 PM
To: David Donnelly; David Hoyt; Diane Morgan (dmorgan@cityofalachua.org); Donnie Sessions; Ellen Vause (evause@cityofhawthorne.net); Grieb,Hal R (hal.grieb@UFL.EDU); Wendy Kinser (Wendy.Kinser@ci.newberry.fl.us)
Subject:Meet Thursday 19FEB15 200 PM

Hello –

The general consensus from you all is that the project scoring worksheet is acceptable with some minor tweaks. After I get the last few comments and corrections I will finalize the revised worksheet and will send it to the Work Group Monday for their comment.

As you all -and a few other folks on the Work Group- are primarily the folks who give me feedback, let's assume that the Work Group will be OK with the revised worksheet and move forward. To that end lets meet at 200 PM Thursday Feb 19 to start reviewing and ranking the mitigation projects. I have heard back from most folks that have projects on the list and will continue to contact the non-responders.

At some point however, we may just have to go with what we have in the way of complete project proposals to get the revised LMS submitted more or less on time. We could put the other incomplete project proposals on the initiatives list. We can always amend the list throughout the year and catch up with the State folks at the next annual update in January 2016. So – a reasonable fallback position presents itself.

I hope to see you all next Thursday Feb 19, 200 PM, here in the EOC.

Thanks

Jeff Bielling, AICP
Alachua County Emergency Management
Assistant Director
1100 SE 27th Street
P.O. Box 5038
Gainesville, Florida 32627
352-264-6520
FAX 352 264-6565

From: Jeffery Bielling
Sent: Thursday, April 09, 2015 4:02 PM
To: David Donnelly; David Hoyt; Diane Morgan (dmorgan@cityofalachua.org); Donnie Sessions; Ellen Vause (evause@cityofhawthorne.net); Grieb,Hal R (hal.grieb@UFL.EDU); Wendy Kinser (Wendy.Kinser@ci.newberry.fl.us)
Subject:Meet Thursday April 16

Hello LMS Project Ranking Folks-

We have a few more projects that we need to score and then priority rank all of the projects. I have set aside next Thursday April 16, 2:00-5:00 PM here in the EOC for a Task Force meeting. Please let me know if you can attend then. We need three folks for a quorum.

Thanks

Jeff Bielling, AICP
Alachua County Emergency Management
Assistant Director
1100 SE 27th Street
P.O. Box 5038
Gainesville, Florida 32627
352-264-6520
FAX 352 264-6565

From: Bret Bostock on behalf of Mark Sexton
Sent: Monday, April 27, 2015 4:44 PM
To: Mark Sexton
Subject: Press Release: Five Year Update to Local Mitigation Strategy Plan

Communications Office - Media Release

CONTACT: Mark Sexton, Communications Coordinator
PHONE: (352) 374-5204; CELL (352) 283-2317
EMAIL: msexton@alachuacounty.us

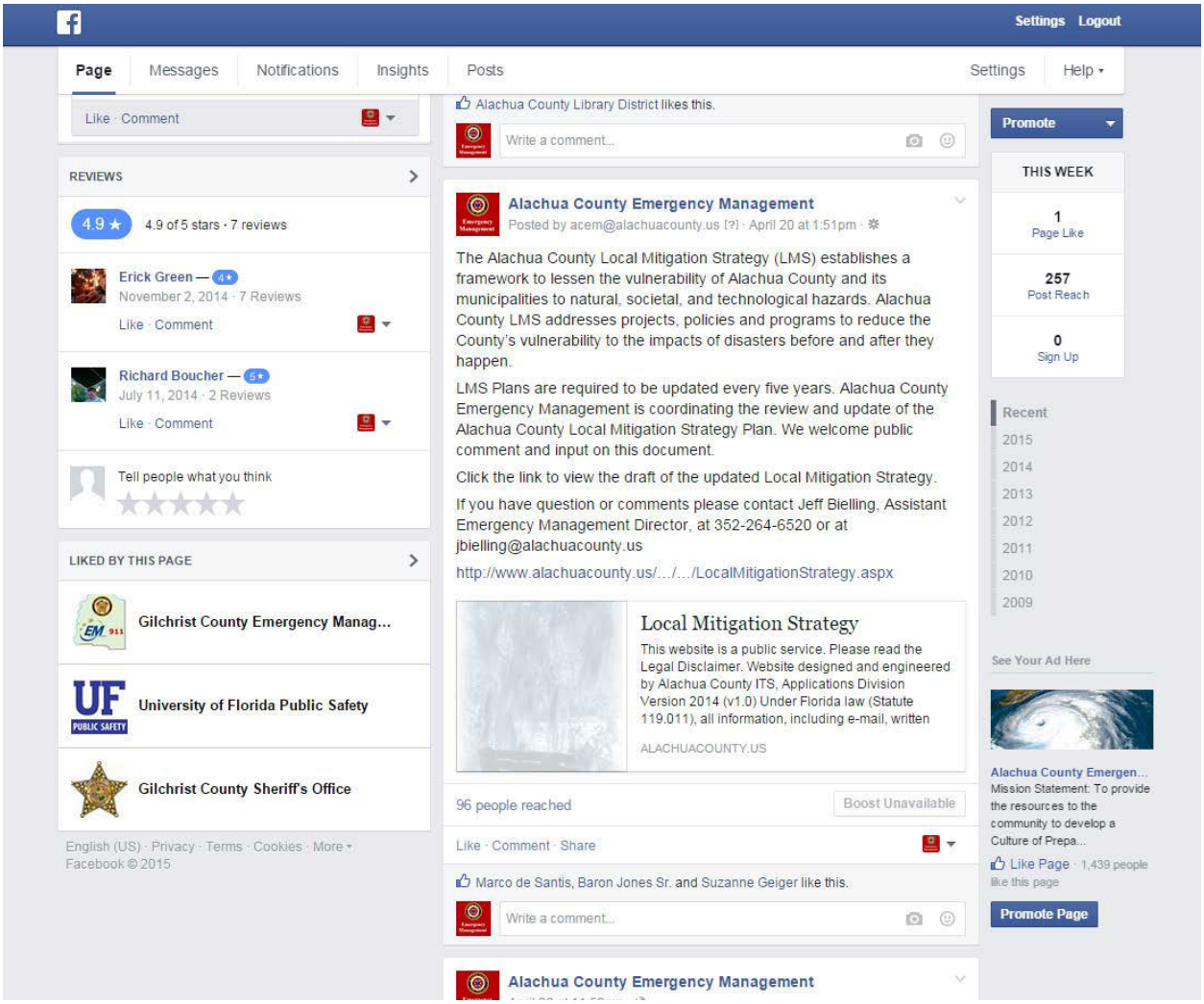
...stay engaged

For Immediate Release

Five Year Update to Local Mitigation Strategy Plan

April 27, 2015
4:45 p.m.
ALACHUA COUNTY, FL - The Local Mitigation Strategy Work Group is holding a public meeting to review and discuss the Five Year Update to the Local Mitigation Strategy Plan on Wednesday, April 29, 2015, at 2 p.m., at the Alachua County Emergency Operations Center (1100 SE 27th Street, Gainesville)
Alachua County Emergency Management is coordinating the update of the Alachua County Local Mitigation Strategy Plan with the Local Mitigation Strategy Work Group, which is composed of representatives of municipal, local, regional, and state agencies, as well as non-governmental entities that are present in Alachua County.
The Alachua County Local Mitigation Strategy establishes a framework to lessen the vulnerability of Alachua County
and its municipalities to hazards. The County can be vulnerable to a variety of hazards that present threats to its communities, businesses, and environment. These hazards could be natural, societal, or technological, and all have the capacity to have significant adverse human, environmental, or economic impacts on the community.
A review draft of the updated Local Mitigation Strategy Plan is posted on the Alachua County Emergency Management website.
For more information, contact Alachua County Assistant Emergency Management Director Jeff Bielling at 352-264-6520 or acem@alachuacounty.us.

If you have a disability and need an accommodation in order to participate in a County program, service or public meeting, please contact the Alachua County Equal Opportunity Office at (352)374-5275 at least 3 business days prior to the event. TTY users, please call 711 (Florida Relay Service).
-30-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Alachua County Emergency Management
Posted by acem@alachuacounty.us [?] · April 20 at 1:51pm
The Alachua County Local Mitigation Strategy (LMS) establishes a framework to lessen the vulnerability of Alachua County and its municipalities to natural, societal, and technological hazards. Alachua County LMS addresses projects, policies and programs to reduce the County's vulnerability to the impacts of disasters before and after they happen.
LMS Plans are required to be updated every five years. Alachua County Emergency Management is coordinating the review and update of the Alachua County Local Mitigation Strategy Plan. We welcome public comment and input on this document.
Click the link to view the draft of the updated Local Mitigation Strategy.
If you have question or comments please contact Jeff Bielling, Assistant Emergency Management Director, at 352-264-6520 or at jbielling@alachuacounty.us
http://www.alachuacounty.us/.../.../LocalMitigationStrategy.aspx
Local Mitigation Strategy
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Alachua County Local Mitigation Strategy is being updated and comment is welcomed. Draft plan is posted at tinyurl.com/muuduqn
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alc.ahasalerts.com/ActiveAlerts.a...
Dynamite timelapse views of Chile's erupting Calbuco volcano
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Local Mitigation Strategy (LMS)

Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

March 25, 2014
1:30 PM EOC Conference Room

Agenda

XXIII. Welcome and Introductions

Wendy Kinser, Chair

XXIV. Review of Revised Project Ranking Worksheet

XXV. Review of Revised Project List
Discussion of Project Re-evaluation

XXVI. Other Business

XXVII. Adjourn

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center
November 21, 2013
10:00 AM
Meeting Minutes

Agenda

XXIII. Welcome and Introductions
Ellen Vause, Chair
XXIV. Approval of Minutes
November 13, 2012
XXV. Election of Officers for 2014
XXVI. Appointment of Project Ranking Task Force
XXVII. Other Business
XXVIII. Adjourn

XXVIII. Welcome and Introductions

Ellen Vause, Chair called meeting to order at 10:05 AM.
Attendance: Ellen Vause, Hawthorne; Kenneth Allen, UF; Don Sessions, GFR; Al Grieshaber, Archer; David Hoyt, Alachua County Forever; Diane Morgan, Alachua; Wendy Kinser, Newberry; Dave Donnelly, Alachua County; Jeff Bielling, Alachua County.

XXIX. Approval of Minutes

Minutes of November 13, 2012 meeting were approved. Diane Morgan motion to approve, second by Dave Donnelly.

XXX. Election of Officers for 2014

Dave Donnelly elected as chair of the Work Group. Nominated by Diane Morgan, second by Ellen Vause.

XXXI. Appointment of Project Ranking Task Force

The following members were appointed to the LMS Project Ranking Task Force: Wendy Kinser, Chair; Diane Morgan, Dave Donnelly, Dave Hoyt, Donnie Sessions, Hal Grieb, Ellen Vause. Motion by Ellen Vause to approve, second by Dave Donnelly. As Chair of the Project Ranking Task Force Ms. Kinser also becomes Vice-Chair of the LMS Work Group.

XXXII. Other Business

Work Group discussed continuing work on revising the project list to include only mitigation projects, provide estimated project costs and project completion time frames, a simplified cost benefit analysis for purposes of ranking the projects, and rank the projects in priority order. The Project Ranking Task Force is to begin meeting in January 2014 to continue revisions to the Project List and ranking process. It was noted that the LMS must be updated and submitted to FEMA by September 2015. The Work Group was given information provided at a recent mitigation workshop conducted by the Florida Division of Emergency Management, Bureau of Mitigation. Work Group was made aware of wind mitigation and National Flood Insurance Program informational workshops being offered by the Florida Association of Counties.

XXXIII. Adjourn

Motion to adjourn by Ellen Vause, second by Wendy Kinser. Meeting adjourned 10:50 AM.

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center

November 13, 2012
11:00 AM
Meeting Minutes

Agenda

XXIX. Welcome and Introductions
Diane Morgan, Chair
XXX. Approval of Minutes
November 29, 2011
XXXI. Consideration of Project Ranking Task Force Recommendation
XXXII. Election of Officers for 2013
XXXIII. Other Business
Revisions to By-Laws: Project Ranking Task Force Quorum

XXXIV. Adjourn

I. Welcome and Introductions
Diane Morgan, City of Alachua – Work Group Chair called the meeting to order at 11:00 AM.

II. Change to Agenda – Other Business
Work Group revised By Laws to change Project Ranking Task Force Quorum from five to three members as Task Force was unable to meet twice due to lack of quorum. Motion by Ellen Vause [Hawthorne], second by Wendy Kinser [Newberry], motion carried.

III. Change to Agenda- At 11:05 AM the Work Group meeting was suspended so that the Project Ranking Task Force could consider the single project application for 2012. Ranking Task Force members present: Ellen Vause, Wendy Kinser, Ludie Bond [FDOF], Dave Donnelly [ACEM]. Motion by Dave Donnelly to place Newberry shelter generator proposal on the Initiatives List, second by Ludie Bond, motion carried. Short discussion of the need to revise and update the Project Priority List. Motion made by Wendy Kinser to recommend to the Work Group that the Project list be reviewed and updated [to include estimated costs], and that the proposed mitigation projects be prioritized, second Dave Donnelly, motion carried. Ranking Task Force meeting adjourned at 11:20 AM, Work Group meeting resumed.

IV. Approval of Minutes- November 29, 2011

V. Motion to approve minutes of November29, 2011 Work Group meeting by Dave Donnelly, second by Ellen Vause, motion carried.

VI. Consideration of Project Ranking Task Force Recommendation
Motion to accept recommendation of Ranking Task Force for Newberry Generator project, review and update of Ranked Project List [to include estimated project costs], and prioritize the project list. Motion by Dave Donnelly, second by Wendy Kinser, motion carried.

VII. Election of Officers for 2013
Dave Donnelly made the motion to nominate Ellen Vause, the current Vice Chair of the Work Group, as Chair, second by Ken Allen [UF], motion carried. Ellen Vause made the

motion to nominate Dave Donnelly as Vice Chair of the Work Group and Chair of the Ranking Task Force, second by Wendy Kinser, motion carried. The following Work Group members were appointed to the Project Ranking Task Force: Diane Morgan, Ludie Bond, Dave Donnelly, Ellen Vause, Wendy Kinser, Bruce Gillingham [HS]. It was left that the Ranking Task Force would tentatively meet in mid-January to begin the process of revising and updating the project lists.

VIII. Other Business

General Discussion Items: At the suggestion of Ellen Vause and Diane Morgan, Jeff Bielling to draft letter to be relayed by Diane Morgan at the Alachua League of Cities meeting on November 20, 2012. Letter to outline the LMS mitigation project process and the need for municipalities to participate in the LMS efforts. The LMS work Group membership will be sent an email concerning the forthcoming LMS Project list update and revision efforts. Short discussion of the recent recertification of Alachua County in the Community Rating System of the National Flood Insurance Program and how the LMS Plan and process was used to support the CRS effort. General discussion of the need to secure funding for projects that may fall outside of the usual mitigation funding sources.

IX. Meeting Adjourned at 12:15 PM.

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center

November 29, 2011

10:00 AM

Meeting Minutes

Agenda November 29, 2011

XXXV. Welcome and Introductions
XXXVI. Approval of Minutes
July 28, 2011
XXXVII. Election of Officers for 2012
XXXVIII. Selection of Project Ranking Task Force
XXXIX. Other Business
Project List, Completed Projects, By-Law Revisions
XL. Adjourn

I. Welcome and Introductions

Charles Kelley, Town of Micanopy and Work Group Chair, called the meeting to order at 10:15 AM, welcomed everyone and called the role. Members in attendance were: Diane Morgan, City of Alachua and Work Group Vice Chair; Rob Bonetti, City of Alachua; Ellen Vause, City of

Hawthorne; Wendy Kinser, City of Newberry; Dave Donnelly, Alachua County Emergency Management; Ludie Bond, Florida Forest Service; Ebbin Spellman, Alachua County Emergency Management; Erik Lewis, University of Florida; Jeff Bielling, Alachua County Emergency Management.

II. Approval of Minutes – July 28, 2011

Motion to approve minutes of July 28, 2011 Work Group meeting by Rob Bonetti. Seconded by Ellen Vause. Motion carried.

III. Election of Officers for 2012

Motion by Ellen Vause for Diane Morgan to serve as Work Group Chair for 2012. Seconded by Charles Kelley. Motion carried.
By consensus Ellen Vause was installed as Work Group Vice Chair.

IV. Selection of Project Ranking Task Force

By volunteering and conscription the following individuals were tasked for the Project Ranking Task Force: Bruce Gillingham, High Springs; Ludie Bond, Florida Forest Service; Wendy Kinser, City of Newberry; Dave Donnelly, Alachua County Emergency Management; Charles Kelley, Town of Micanopy. By consensus Ellen Vause was selected to chair the Project Ranking Task Force for 2012. Bruce Gillingham to serve as vice-chair.

V. Other Business

List of mitigation projects – updated to reflect 2011 additions- was distributed. Status of completed projects and review of draft summary of completed projects was reviewed. The Group determined that the Project List should be reviewed by the Ranking Task Force for projects that should be reconsidered for the list as not being mitigation projects or that would not be funded with mitigation grants.

The Work Group revised the bylaws to require a single annual meeting and other meetings to be scheduled as needed rather than required quarterly meetings. Motion made by Ellen Vause to do so, seconded by Erik Lewis.

VI. Adjourn

Meeting adjourned at 10:45 AM.

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center

July 28, 2011
10:00 AM

Meeting Minutes

Agenda July 28, 2011

XLI. Welcome and Introductions
XLII. Approval of Minutes
April 28, 2011 meeting
XLIII. Discussion of New Mitigation Projects and Ranking Process
XLIV. Other Business
XLV. Adjourn

XXXIV. Welcome and Introductions

Diane Morgan, City of Alachua,, Working Group Vice Chair, called meeting to order at 10:16 AM and welcomed everyone. In attendance were: Rob Bonetti City of Alachua, Kathleen Pagan Alachua County Growth Management, Linda Dixon University of Florida, Wendy Kinser City of Newberry, and Jeff Bielling Alachua County Emergency Management.

XXXV. Approval of Minutes

Motion to approve the minutes of the April 28, 2011 Working Group meeting was made by Rob Bonetti, seconded by Linda Dixon to approve the minutes of the April 28th meeting. Motion carried.

XXXVI. Discussion of New Mitigation Projects and Ranking Process

Diane Morgan, Chair Project Ranking Task Force, gave an overview of the project applications and the rank assigned by the Ranking Task Force. The three projects reviewed by the Task Force were: City of Gainesville Hydraulic and Hydrologic Model project, City of Hawthorne Towne (Johnson) Lake Drainage Improvement, City of Newberry Archery Center Window Retrofit – Shelter Hardening project. The City of Gainesville project was requested to be included on the LMS Project Initiative List. The consensus of the Task Force was to include the Project on the Initiative List. The City of Hawthorne Project was requested to be added to the Project Ranking List – the Task Force assigned a score of 31 to the project. The City Newberry Project was requested to be added to the Project Ranking List – the Task Force assigned a score of 28 to the project.

Motion was made by Linda Dixon to add these projects as ranked by the Task Force to the project initiative and ranked lists. Motion seconded by Rob Bonetti. Motion carried.

XXXVII. Other Business

The Work Group engaged in a discussion of the following items: noted the election of officers should occur at the next Work Group meeting tentatively slated for early November; Potential revision of the Work Group Bylaws to schedule Work Group meetings on an as needed basis rather than the required quarterly meetings; Review of the project ranking process with respect to determining the priority of ranked projects with the same numeric score.

XXXVIII. Adjourn

Meeting adjourned at 10:45 AM.

Local Mitigation Strategy (LMS) Project Ranking Task Force Meeting Minutes

Alachua County Emergency Operations Center
June 30, 2011
1:30 PM

Agenda

XLVI. Welcome
XLVII. Discussion of Proposed Projects
XLVIII. Status of Current Projects
XLIX. Other Business
L. Adjourn

I. Meeting called to order at 1:35 PM. Members in attendance: Diane Morgan, City of Alachua, Task Force Chair; Charles Kelley, Town of Micanopy, Task Force Vice-Chair; Ellen Vause City of Hawthorne, Wendy Kinser City of Newberry, Dave Donnelly and Jeff Bielling, Alachua County Emergency Management. Required quorum of five members was achieved.

II. Three proposed mitigation projects were considered by the Task Force: City of Gainesville Hydraulic and Hydrologic Model project, City of Hawthorne Towne (Johnson) Lake Drainage Improvement, City of Newberry Archery Center Window Retrofit – Shelter Hardening project. The City of Gainesville project was request to be included on the LMS Project Initiative List. The consensus of the Task Force was to include the Project on the Initiative List. [Motion by Wendy Kinser, Second by Charles Kelley] The City of Hawthorne Project was requested to be added to the Project Ranking List – the Task Force assigned a score of 31 to the project. The City Newberry Project was requested to be added to the Project Ranking List – the Task Force assigned a score of 28 to the project. Motion made by Ellen Vause to forward the scored projects to the LMS Work Group- seconded by Charles Kelley. Motion carried. The consensus of the group was that any new project proposals/applications that are received after this date will be held until the next ranking process is initiated.

III. No new information was presented by the Task Force on the current status of LMS projects.

IV. Meeting was adjourned about 3:30 PM.

Minutes

Local Mitigation Strategy (LMS) Work Group Meeting

Alachua County Emergency Operations Center
April 28, 2011
10:00 AM

Agenda

LI. Welcome and Introductions
Charles Kelly, Chair
Diane Morgan, Vice Chair

LII. Approval of Minutes
February 3, 2011

LIII. Discussion of New Mitigation Projects and Ranking Process
Project Ranking Task Force – Diane Morgan, Chair

LIV. Other Business

LV. Adjourn

I. Chairman Kelly called the meeting to order at 10:15 AM and welcomed everyone. Introductions were made. Present were: Charles Kelly [Micanopy], Chair; Diane Morgan [City of Alachua], Vice Chair; Charles Griggs, SFCC; Rob Bonetti [City of Alachua]; Jamie Rittenhouse [DOF]; Kathleen Pagan [Alachua County GM]; Dave Donnelly [Alachua County EM]; Wendy Kinser [City of Newberry]; Jeff Bielling, [Alachua County EM].

II. Minutes of the February 3, 2011, meeting of the LMS Work Group were approved.

III. Diane Morgan gave a brief summary of the April 21, 2011, meeting of the LMS Project Ranking Task Force: a quorum of Task Force members [3] was not achieved [Diane Morgan, Charles Kelly, Jeff Bielling present], no new projects received by deadline of April 15, 2011, was discussion of project ranking process and how new projects and projects on the initiative list but not ranked should be considered on an annual basis, and the need to provide a status report of ranked projects. The Work Group decided to accept new mitigation project proposals until June 28, 2011 [Motion by Diane Morgan, 2nd by Ken Allen, carried unanimously]. After some discussion it was determined that the LMS Project Ranking Task Force would meet on June 30, 2011 at 10:00 AM to consider new mitigation project proposals.

IV. Jamie Rittenhouse, Division of Forestry, gave an update on the activities of the Wildfire Mitigation Task Force.

V. Meeting adjourned at 10:50 AM.

Minutes

Local Mitigation Strategy (LMS) Project Ranking Task Force Meeting

Alachua County Emergency Operations Center

April 21, 2011

10:00 AM

Agenda

LVI. Welcome
LVII. Discussion of Proposed Projects
LVIII. Status of Current Projects
LIX. Other Business
LX. Adjourn

V. Meeting called to order 10:15 AM. Members in attendance: Diane Morgan, Task Force Chair; Charles Kelley, Task Force Vice-Chair; Jeff Bielling, Alachua County Emergency Management. Required quorum of three Task Force members was not achieved.

VI. No new projects have been submitted. Informal discussion centered on process for updating the Project Initiative List and the need to conduct such update on at least an annual basis. Brief review and discussion of Project Ranking Task Force Procedures led those present to the conclusion that the process for an annual update to the ranking list may need to be refined. In particular the procedures could be modified to clarify the annual update process with respect to ranking all projects whenever new projects are added to the Initiative List.

VII. Meeting was adjourned at 11:00 AM.

Meeting Minutes

Local Mitigation Strategy (LMS) Work Group Meeting
Alachua County Emergency Operations Center
February 3, 2011
10:00 AM

Agenda

I. **Welcome and Introductions**
II. **Approval of Minutes**
III. **LSM Discussion**
IV. **New Mitigation Projects**
Project Ranking Task Force
Develop work plan and schedule
Wildfire Mitigation Project Revision
V. **Other Business**

Adjourn

I. Meeting called to order at 10:15 AM by Charles Kelley, Chair. Work Group members introduced themselves. Present were: Kenneth Allen University of Florida, Jamie Rittenhouse Division of Forestry, Michael Fay Alachua County, Dave Donnelly Alachua County, Charles Kelley Town of Micanopy, James Link Suwannee River Water Management District, Rob Bonetti City of Alachua, Kathleen Pagan Alachua County, Ellen Vause City of Hawthorne, Wendy Kinser City of Newberry.
II. The minutes from the September 2, 2010 meeting were approved by the Group. K. Allen motioned, J. Rittenhouse seconded. The minutes from the November 4, 2010 meeting were approved. R. Bonetti motioned, K. Allen seconded.
III. The group discussed the need for the jurisdictions with outstanding resolutions to submit them to Jeff. Additionally, no further scrivener's errors were collected.
IV. The process to submit New Mitigation Projects was discussed. Ms. Vause stated she would take Ed Smith's place on the Project Ranking Task Force. Additionally, the Cost-Benefit Analysis issue was brought up in light on the pending CBA workshop. The question was asked "If the training was not delivered, do we still retain the CBA as a criterion on the Project Worksheet?" Dave Donnelly asked whether or not the Wildfire Mitigation Projects from Alachua County and DOF could be combined. Jamie Rittenhouse could not advise to either. Dave Donnelly mentioned that the next Post Disaster Redevelopment Plan meeting was February 9, 2011 6 PM at the Alachua County Health Department's Auditorium. A motion was made by Wendy Kinser to move the deadline for project submission to April 15th in order to be able to attend the CBA training. It was seconded by Ellen Vause and approved by the group.
V. Under other business, Jamie Rittenhouse briefed the group on the Wildfire Mitigation Task Force work in Cross Creek. They met with residents on January 25th. They also were conducting a

Firewise Workshop at Cross Creek Fire Department on February 8th. Additionally, meetings were being set up for Windsor and Hawthorne. It was mentioned the Smokey the Bear was now on Facebook.

VI. Mr. Kelley suggested that the Project Ranking Task Force meet on April 21st at 10 AM at the EOC, to accommodate project changes due to the CBA training. This was barring any conflicts with the Task Force chair, Diane Morgan. He also proposed the Work Group meet the week after on April 28th 10 AM. The EOC was not available and Michael Fay state Public Works may be available.

VII. Next meeting was tentatively set for April 28, 2011

Meeting was adjourned at 11 AM.

Appendix M: Previous Occurrence of Weather Related Hazard Events

Historical River Level Elevations (NGVD 1929)

SRWMD	Flood Stage	River Mile	Low	Low Mo-Yr	April 1948	March 1959	Sept. 1964	April 1973	April 1984	Feb. 1986	March 1991	March 1998	2004/2005	April 2009	Jun/Jul 2012	Spring 2013	Spring 2014
Suwannee River																	
White Springs	77	171	49.28	Jun-11	85.19	83.14	84.36	**88.56**	85.36	80.67	79.79	84.73	84.01	76.40	85.38	69.08	*81.60*
Suwannee Springs	67	150	35.87	Sep-11	76.80*	72.30**	73.60*	**78.91**	74.38	69.78	68.45	72.14	71.30	67.64	70.41	57.54	*69.26*
Nobles Ferry	57	135	30.87	Nov-11	**71.20***			69.9*				65.4*		66.19	51.63	57.45	61.33
Ellaville	54	128	28.35	Sep-11	**68.10**	59.04	56.89	64.97	60.72	61.79	60.84	61.67	58.63	63.82	42.99	54.52	*56.88*
Dowling Park	50	113	*20.82*	*Jan-12*	**61.46***	52.00**	-	58.90	53.55	54.36	53.52	54.07	50.55	54.95	36.33	45.49	*49.01*
Luraville	N/A	98	*16.74*	*Jan-12*	**53.50***	44.33*	41.14*	49.44	46.54	46.30	45.40	47.09	43.83	46.80	30.60	37.77	*42.34*
Branford	29	76	*6.38*	*May-12*	**38.88**	32.30	30.17	35.57	33.69	33.07	32.61	34.04	31.44	32.76	23.30	26.91	*30.63*
Rock Bluff	N/A	57	3.68	Nov-11	**31.03**	24.80**	-	27.40**	26.28	23.20	22.92	25.12	22.12	22.34	17.74	18.30	*21.23*
Wilcox	11	34	-1.08	Sep-99	**21.79**	15.35	14.96	18.03	16.53	15.10	14.91	16.84	14.14	14.23	9.35	9.74	*13.24*
Manatee Springs	10	24	-1.09	Jan-08	**16.00***	11.40	-	13.00*	12.65	11.00	10.91	12.41	10.42	10.46	6.71	6.98	*9.75*
Fowlers Bluff	5.5	15	*-1.49*	*Feb-12*	**10.80****	-	-	8.80**	-	-	8.02	8.61	6.90	7.20	4.50	4.65	*6.31*
Santa Fe River																	
Worthington Springs	N/A	49	48.42	Jul-07	67.34	64.99	**71.14**	63.90	62.63	61.73	63.24	66.43	64.74	57.72	67.64	61.25	*58.75*
Near I-75 in O'Leno	N/A	37	35.70	May-12	-	-	-	-	-	-	-	-	-	-	**55.12**	45.54	*46.34*
O'Leno State Park	N/A	35	31.40	Jul-01	-	-	-	-	45.87	42.67	46.07	50.57	49.76	35.82	**52.46**	40.48	
US 441 Bridge	N/A	28	30.15	May-12	-	-	-	-	-	-	-	-	42.90	32.22	**46.10**	34.11	35.58
Near Ft. White	24	18	20.92	Dec-07	34.98	31.21	**36.20**	31.12	30.29	27.98	27.90	33.01	30.41[P]	26.60	32.03	23.63	*25.74*
3 Rivers Estates	19	7	*6.65*	*May-12*	**34.20**	-	-	30.80	29.51	27.82	27.47	29.92	26.58	26.81	23.23	21.41	*25.36*
129 Bridge	21	2	*5.15*	*May-12*	**37.67**	31.17	27.11	-	29.14	27.55	27.33	29.54	26.34	26.85	21.45	20.65	*25.37*
Withlacoochee River																	
Quitman			85.80	Jun-00	116.00	-	-	-	-	-	-	113.82	109.90	**118.90**	88.40	115.57	*107.90*
Pinetta	79	22	*53.12*	*Oct-11*	85.85	-	82.28	82.31	83.41	85.41	84.04	83.38	78.27	**88.50**	55.65	83.87	*76.61*
Alapaha River																	
Statenville	101	30	77.31	Oct-99	106.57	-	-	104.19	104.37	-	105.65	106.22	104.60	**108.28**	82.40	106.09	*103.15*
Jennings	N/A	20	61.27	Oct-06	-	-	-	-	89.20	90.06	-	-	89.44	**94.00**	71.80	90.76	*88.43*
Aucilla River																	
Lamont	51.9	34	43.50	Jun-55	-	55.86	56.19	**59.47**	57.43	56.89	57.76	56.72	56.08	56.38	53.04	53.75	*55.31*

* Historical levels obtained from flood marks

** Estimated peak stages obtained from U.S. Army Corps of Engineers, 1974

L Limit of gage

Bold indicates historical peak

Italicized indicates provisional data

NWS Flood Data 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DEATHS_DIRECT	INJURIES_DIRECT	SOURCE	FLOOD_CAUSE
276305	ALACHUA	PHIFER	2/7/2011	1712	Flood	0	0	Emergenc	Heavy Rai
399455	ALACHUA	ROCKY PT	8/21/2012	1227	Flood	0	0	Emergenc	Heavy Rai
532551	ALACHUA	HAWTHORNE	7/5/2014	1715	Flood	0	0	Law Enfor	Heavy Rai

NWS Hail Data 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	EVENT_TYPE	MAGNITUDE	DEATHS_DIRECT	INJURIES_DIRECT	DAMAGE_CROPS_NUM
218691	ALACHUA	GAINESVILLE WEST	4/25/2010	Hail	0.88	0	0	0
218781	ALACHUA	SANTA FE LAKE	4/30/2010	Hail	1	0	0	0
221159	ALACHUA	AIR BASE	5/21/2010	Hail	0.75	0	0	0
221160	ALACHUA	GAINESVILLE EAST	5/21/2010	Hail	1	0	0	0
234693	ALACHUA	ORANGE HGTS	7/15/2010	Hail	1	0	0	0
276298	ALACHUA	NEWBERRY	2/2/2011	Hail	0.75	0	0	0
281795	ALACHUA	SANTA FE LAKE	3/31/2011	Hail	1	0	0	0
281797	ALACHUA	HAINESWORTH	3/31/2011	Hail	1.5	0	0	0
281798	ALACHUA	LA CROSSE	3/31/2011	Hail	1	0	0	0
304236	ALACHUA	ALACHUA	6/13/2011	Hail	1	0	0	0
304237	ALACHUA	HIGH SPGS SKY RD ARP	6/13/2011	Hail	1	0	0	0
305446	ALACHUA	SANTA FE	6/14/2011	Hail	0.88	0	0	0
308541	ALACHUA	LA CROSSE	6/15/2011	Hail	1	0	0	0
308404	ALACHUA	SANTA FE	6/15/2011	Hail	1.75	0	0	0
308406	ALACHUA	SANTA FE	6/15/2011	Hail	0.88	0	0	0
308407	ALACHUA	RHIFER	6/15/2011	Hail	0.75	0	0	0
308408	ALACHUA	MICANOPY	6/15/2011	Hail	0.88	0	0	0
330089	ALACHUA	NEWBERRY	7/26/2011	Hail	1.75	0	0	0
372382	ALACHUA	PHIFER	3/14/2012	Hail	0.88	0	0	0
372383	ALACHUA	PHIFER	3/14/2012	Hail	1.25	0	0	0
372384	ALACHUA	GAINESVILLE NORTH	3/14/2012	Hail	0.75	0	0	0
372385	ALACHUA	PHIFER	3/14/2012	Hail	1	0	0	0
372390	ALACHUA	ARREDONDA	3/14/2012	Hail	0.88	0	0	0
372386	ALACHUA	ARREDONDA	3/14/2012	Hail	0.75	0	0	0
372387	ALACHUA	ARREDONDA	3/14/2012	Hail	0.88	0	0	0
372388	ALACHUA	ARREDONDA	3/14/2012	Hail	1	0	0	0
372389	ALACHUA	PEACH ORCHARD	3/14/2012	Hail	1	0	0	0
398848	ALACHUA	GAINESVILLE NORTH	7/10/2012	Hail	0.75	0	0	0
453201	ALACHUA	WACAHOOTA	5/20/2013	Hail	0.75	0	0	0
453897	ALACHUA	ARCHER FLYING TEN AR	6/26/2013	Hail	0.88	0	0	0
491843	ALACHUA	DAYVILLE	2/23/2014	Hail	0.75	0	0	0
508487	ALACHUA	ARCHER FLYING TEN AR	5/11/2014	Hail	0.75	0	0	0

453897	ALACHUA CO.	ARCHER FLYING TEN AR	6/26/2013	Hail	0.88	0	0	0
491843	ALACHUA CO.	DAYVILLE	2/23/2014	Hail	0.75	0	0	0
508487	ALACHUA CO.	ARCHER FLYING TEN AR	5/11/2014	Hail	0.75	0	0	0
513944	ALACHUA CO.	LA CROSSE	5/25/2014	Hail	0.75	0	0	0
537918	ALACHUA CO.	ARREDONDA	8/22/2014	Hail	1	0	0	0
571118	ALACHUA CO.	PHIFER	6/1/2015	Hail	0.75	0	0	0
571119	ALACHUA CO.	HAGUE	6/1/2015	Hail	1.75	0	0	0
571120	ALACHUA CO.	NEWBERRY	6/1/2015	Hail	0.88	0	0	0

NWS Lightning Data 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DEATHS_DIRECT	INJURIES_DIRECT	DAMAGE_PROPERTY_NUM	DAMAGE_CROPS_NUM	WFO
270381	ALACHUA	ARCHER	1/25/2011	1545	Lightning	0	0	200000	0	JAX
398846	ALACHUA	GAINESVILLE NORTH	7/10/2012	1520	Lightning	0	0	1000	0	JAX
508505	ALACHUA	GAINESVILLE NORTH	5/15/2014	1000	Lightning	0	0	10000	0	JAX
525617	ALACHUA	NEWBERRY	6/8/2014	1917	Lightning	0	0	0	0	JAX

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	MAGNITUDE	DEATHS_DIRECT	INJURIES_DIRECT	DAMAGE_PROPERTY_NUM
218698	ALACHUA CO.	GAINESVILLE NORTH	4/25/2010	1230	Thunderstorm Wind	50	0	0	2000
218712	ALACHUA CO.	ISLAND GROVE	4/25/2010	1315	Thunderstorm Wind	50	0	0	0
218717	ALACHUA CO.	WINDSOR	4/25/2010	1413	Thunderstorm Wind	50	0	0	0
218716	ALACHUA CO.	NEWBERRY	4/25/2010	1413	Thunderstorm Wind	50	0	0	0
218791	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	0	0	3000
218784	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2130	Thunderstorm Wind	61	0	0	0
218785	ALACHUA CO.	GAINESVILLE WEST	4/30/2010	2130	Thunderstorm Wind	61	0	0	0
218786	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	0	0	0
218787	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	0	0	0
218790	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2130	Thunderstorm Wind	61	0	0	0

218794	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2135	Thunderstorm Wind	61	0	0	5000
218789	ALACHUA CO.	AIR BASE	4/30/2010	2140	Thunderstorm Wind	50	0	0	1000
218793	ALACHUA CO.	AIR BASE	4/30/2010	2140	Thunderstorm Wind	52	0	0	1000
218792	ALACHUA CO.	CROSS CREEK	4/30/2010	2155	Thunderstorm Wind	61	0	0	8000
227416	ALACHUA CO.	GROVE PARK	6/11/2010	1940	Thunderstorm Wind	50	0	0	0
228253	ALACHUA CO.	ROCHELLE	6/21/2010	1510	Thunderstorm Wind	50	0	0	0
228998	ALACHUA CO.	ARREDONDA	6/30/2010	2000	Thunderstorm Wind	22	0	0	1000
237894	ALACHUA CO.	LA CROSSE	7/28/2010	1605	Thunderstorm Wind	50	0	0	0
237895	ALACHUA CO.	GAINESVILLE NORTH	7/28/2010	1649	Thunderstorm Wind	45	0	0	3000
237906	ALACHUA CO.	GAINESVILLE NORTH	7/31/2010	1530	Thunderstorm Wind	50	0	0	0
237907	ALACHUA CO.	BUNKER	7/31/2010	1535	Thunderstorm Wind	50	0	0	0
237909	ALACHUA CO.	PHIFER	7/31/2010	1545	Thunderstorm	50	0	0	0

237908	ALACHUA CO.	ARREDONDA	7/31/2010	1545	Wind Thunderstorm Wind	50	0	0	0
288016	ALACHUA CO.	HAGUE	4/5/2011	520	Thunderstorm Wind	50	0	0	0
288015	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	532	Thunderstorm Wind	50	0	0	0
288014	ALACHUA CO.	EAST ALACHUA	4/5/2011	533	Thunderstorm Wind	50	0	0	0
288013	ALACHUA CO.	PHIFER	4/5/2011	535	Thunderstorm Wind	50	0	0	0
288010	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	543	Thunderstorm Wind	50	0	0	0
288009	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	545	Thunderstorm Wind	50	0	0	0
288008	ALACHUA CO.	SANTA FE LAKE	4/5/2011	600	Thunderstorm Wind	50	0	0	0
287844	ALACHUA CO.	ARCHER FLYING TEN AR	4/20/2011	1535	Thunderstorm Wind	50	0	0	0
294542	ALACHUA CO.	ARREDONDA	5/14/2011	1300	Thunderstorm Wind	50	0	0	0
294543	ALACHUA CO.	MICANOPY	5/14/2011	1318	Thunderstorm Wind	50	0	0	0

294544	ALACHUA CO.	SANTA FE LAKE	5/14/2011	1329	Thunderstorm Wind	50	0	0	0
305400	ALACHUA CO.	PHIFER	6/6/2011	1445	Thunderstorm Wind	50	0	0	0
305414	ALACHUA CO.	BUNKER	6/6/2011	1645	Thunderstorm Wind	50	0	0	0
308413	ALACHUA CO.	LA CROSSE	6/15/2011	1955	Thunderstorm Wind	50	0	0	0
308502	ALACHUA CO.	AIR BASE	6/17/2011	1432	Thunderstorm Wind	56	0	0	0
308676	ALACHUA CO.	LA CROSSE	6/23/2011	1352	Thunderstorm Wind	50	0	0	0
308675	ALACHUA CO.	MICANOPY	6/23/2011	1435	Thunderstorm Wind	50	0	0	0
318712	ALACHUA CO.	LA CROSSE	7/24/2011	1642	Thunderstorm Wind	50	0	0	0
330087	ALACHUA CO.	LA CROSSE	7/24/2011	1646	Thunderstorm Wind	50	0	0	0
329667	ALACHUA CO.	ARCHER FLYING TEN AR	8/12/2011	1710	Thunderstorm Wind	50	0	0	0
329824	ALACHUA CO.	MICANOPY	8/23/2011	1435	Thunderstorm Wind	50	0	0	0
333739	ALACHUA CO.	HIGH SPGS	9/5/2011	1720	Thunderstorm	50	0	0	0

340324	ALACHUA CO.	CLARK	9/21/2011	1700	Wind Thunderstorm Wind	50	0	0	0
399457	ALACHUA CO.	ORANGE HGTS	8/21/2012	1145	Thunderstorm Wind	50	0	0	0
411643	ALACHUA CO.	HAILE	10/7/2012	2015	Thunderstorm Wind	50	0	0	0
411645	ALACHUA CO.	NEWBERRY	10/7/2012	2049	Thunderstorm Wind	50	0	0	0
416801	ALACHUA CO.	CAMPVILLE	12/10/2012	1650	Thunderstorm Wind	50	0	0	0
419328	ALACHUA CO.	WACAHOOTA	12/29/2012	255	Thunderstorm Wind	50	0	0	0
429111	ALACHUA CO.	GAINESVILLE NORTH	2/26/2013	840	Thunderstorm Wind	50	0	0	0
429112	ALACHUA CO.	GAINESVILLE NORTH	2/26/2013	845	Thunderstorm Wind	50	0	0	0
439117	ALACHUA CO.	ROCHELLE	3/24/2013	935	Thunderstorm Wind	45	0	0	1000
439119	ALACHUA CO.	GAINESVILLE	3/24/2013	940	Thunderstorm Wind	45	0	1	5000
439149	ALACHUA CO.	ROCHELLE	3/24/2013	1132	Thunderstorm Wind	45	0	0	3000

453206	ALACHUA CO.	WACAHOOTA	5/20/2013	1630	Thunderstorm Wind	50	0	0	0
453580	ALACHUA CO.	NEWBERRY	6/10/2013	1529	Thunderstorm Wind	50	0	0	0
453902	ALACHUA CO.	GAINESVILLE NORTH	6/26/2013	1705	Thunderstorm Wind	50	0	0	0
466997	ALACHUA CO.	SANTA FE LAKE	7/22/2013	1210	Thunderstorm Wind	50	0	0	0
467015	ALACHUA CO.	CADILLAC	7/31/2013	1512	Thunderstorm Wind	50	0	0	0
467016	ALACHUA CO.	SANTA FE	7/31/2013	1515	Thunderstorm Wind	50	0	0	0
467012	ALACHUA CO.	NEWMANS LAKE	7/31/2013	1600	Thunderstorm Wind	50	0	0	0
472051	ALACHUA CO.	ISLAND GROVE	8/17/2013	1715	Thunderstorm Wind	50	0	0	0
472247	ALACHUA CO.	LAKE LOCHLOOSA	9/6/2013	1550	Thunderstorm Wind	50	0	0	0
515173	ALACHUA CO.	GAINESVILLE NORTH	5/25/2014	1630	Thunderstorm Wind	50	0	0	0
522500	ALACHUA CO.	DAYVILLE	6/8/2014	1702	Thunderstorm Wind	50	0	0	0
522503	ALACHUA CO.	BLAND	6/8/2014	1705	Thunderstorm	50	0	0	0

522502	ALACHUA CO.	ROCKY PT	6/8/2014	1705	Wind Thunderstorm Wind	50	0	0	0
522506	ALACHUA CO.	DAYVILLE	6/8/2014	1715	Thunderstorm Wind	50	0	0	0
522505	ALACHUA CO.	DAYVILLE	6/8/2014	1715	Thunderstorm Wind	50	0	0	0
522510	ALACHUA CO.	NEWBERRY	6/8/2014	1915	Thunderstorm Wind	50	0	0	0
522508	ALACHUA CO.	NEWBERRY	6/8/2014	1915	Thunderstorm Wind	50	0	1	0
525199	ALACHUA CO.	(GNV)GAINESVILLE ARP	6/16/2014	1615	Thunderstorm Wind	50	0	0	0
525415	ALACHUA CO.	HIGH SPGS	6/22/2014	1510	Thunderstorm Wind	50	0	0	0
532552	ALACHUA CO.	ARCHER FLYING TEN AR	7/5/2014	1650	Thunderstorm Wind	50	0	0	0
537915	ALACHUA CO.	CAMPVILLE	8/21/2014	1720	Thunderstorm Wind	50	0	0	0
537916	ALACHUA CO.	MICANOPY	8/21/2014	1730	Thunderstorm Wind	50	0	0	0
537919	ALACHUA CO.	FAIRBANKS	8/22/2014	1650	Thunderstorm Wind	45	0	0	1000

537934	ALACHUA CO.	GAINESVILLE NORTH	8/23/2014	1745	Thunderstorm Wind	50	0	0	0
537935	ALACHUA CO.	GAINESVILLE NORTH	8/23/2014	1800	Thunderstorm Wind	50	0	0	0

NWS Thunderstorm Wind Data 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	MAGNITUDE	DAMAGE_PROPERTY_NUM
218698	ALACHUA CO.	GAINESVILLE NORTH	4/25/2010	1230	Thunderstorm Wind	50	2000
218712	ALACHUA CO.	ISLAND GROVE	4/25/2010	1315	Thunderstorm Wind	50	0
218717	ALACHUA CO.	WINDSOR	4/25/2010	1413	Thunderstorm Wind	50	0
218716	ALACHUA CO.	NEWBERRY	4/25/2010	1413	Thunderstorm Wind	50	0
218786	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	0
218791	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	3000
218790	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2130	Thunderstorm Wind	61	0
218787	ALACHUA CO.	PHIFER	4/30/2010	2130	Thunderstorm Wind	61	0
218785	ALACHUA CO.	GAINESVILLE WEST	4/30/2010	2130	Thunderstorm Wind	61	0
218784	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2130	Thunderstorm Wind	61	0

218794	ALACHUA CO.	GAINESVILLE NORTH	4/30/2010	2135	Thunderstorm Wind	61	5000
218793	ALACHUA CO.	AIR BASE	4/30/2010	2140	Thunderstorm Wind	52	1000
218789	ALACHUA CO.	AIR BASE	4/30/2010	2140	Thunderstorm Wind	50	1000
218792	ALACHUA CO.	CROSS CREEK	4/30/2010	2155	Thunderstorm Wind	61	8000
227416	ALACHUA CO.	GROVE PARK	6/11/2010	1940	Thunderstorm Wind	50	0
228253	ALACHUA CO.	ROCHELLE	6/21/2010	1510	Thunderstorm Wind	50	0
228998	ALACHUA CO.	ARREDONDA	6/30/2010	2000	Thunderstorm Wind	22	1000
237894	ALACHUA CO.	LA CROSSE	7/28/2010	1605	Thunderstorm Wind	50	0
237895	ALACHUA CO.	GAINESVILLE NORTH	7/28/2010	1649	Thunderstorm Wind	45	3000
237906	ALACHUA CO.	GAINESVILLE NORTH	7/31/2010	1530	Thunderstorm Wind	50	0
237907	ALACHUA CO.	BUNKER	7/31/2010	1535	Thunderstorm Wind	50	0
237908	ALACHUA CO.	ARREDONDA	7/31/2010	1545	Thunderstorm Wind	50	0
237909	ALACHUA CO.	PHIFER	7/31/2010	1545	Thunderstorm Wind	50	0
288016	ALACHUA CO.	HAGUE	4/5/2011	520	Thunderstorm Wind	50	0
288015	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	532	Thunderstorm Wind	50	0

288014	ALACHUA CO.	EAST ALACHUA	4/5/2011	533	Thunderstorm Wind	50	0
288013	ALACHUA CO.	PHIFER	4/5/2011	535	Thunderstorm Wind	50	0
288010	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	543	Thunderstorm Wind	50	0
288009	ALACHUA CO.	GAINESVILLE NORTH	4/5/2011	545	Thunderstorm Wind	50	0
288008	ALACHUA CO.	SANTA FE LAKE	4/5/2011	600	Thunderstorm Wind	50	0
287844	ALACHUA CO.	ARCHER FLYING TENAR	4/20/2011	1535	Thunderstorm Wind	50	0
294542	ALACHUA CO.	ARREDONDA	5/14/2011	1300	Thunderstorm Wind	50	0
294543	ALACHUA CO.	MICANOPY	5/14/2011	1318	Thunderstorm Wind	50	0
294544	ALACHUA CO.	SANTA FE LAKE	5/14/2011	1329	Thunderstorm Wind	50	0
305400	ALACHUA CO.	PHIFER	6/6/2011	1445	Thunderstorm Wind	50	0
305414	ALACHUA CO.	BUNKER	6/6/2011	1645	Thunderstorm Wind	50	0
308413	ALACHUA CO.	LA CROSSE	6/15/2011	1955	Thunderstorm Wind	50	0
308502	ALACHUA CO.	AIR BASE	6/17/2011	1432	Thunderstorm Wind	56	0
308676	ALACHUA CO.	LA CROSSE	6/23/2011	1352	Thunderstorm Wind	50	0
308675	ALACHUA CO.	MICANOPY	6/23/2011	1435	Thunderstorm Wind	50	0

318712	ALACHUA CO.	LA CROSSE	7/24/2011	1642	Thunderstorm Wind	50	0
330087	ALACHUA CO.	LA CROSSE	7/24/2011	1646	Thunderstorm Wind	50	0
329667	ALACHUA CO.	ARCHER FLYING TENAR	8/12/2011	1710	Thunderstorm Wind	50	0
329824	ALACHUA CO.	MICANOPY	8/23/2011	1435	Thunderstorm Wind	50	0
333739	ALACHUA CO.	HIGH SPGS	9/5/2011	1720	Thunderstorm Wind	50	0
340324	ALACHUA CO.	CLARK	9/21/2011	1700	Thunderstorm Wind	50	0
399457	ALACHUA CO.	ORANGE HGTS	8/21/2012	1145	Thunderstorm Wind	50	0
411643	ALACHUA CO.	HAILE	10/7/2012	2015	Thunderstorm Wind	50	0
411645	ALACHUA CO.	NEWBERRY	10/7/2012	2049	Thunderstorm Wind	50	0
416801	ALACHUA CO.	CAMPVILLE	12/10/2012	1650	Thunderstorm Wind	50	0
419328	ALACHUA CO.	WACAHOOTA	12/29/2012	255	Thunderstorm Wind	50	0
429111	ALACHUA CO.	GAINESVILLE NORTH	2/26/2013	840	Thunderstorm Wind	50	0
429112	ALACHUA CO.	GAINESVILLE NORTH	2/26/2013	845	Thunderstorm Wind	50	0
439117	ALACHUA CO.	ROCHELLE	3/24/2013	935	Thunderstorm Wind	45	1000
439119	ALACHUA CO.	GAINESVILLE	3/24/2013	940	Thunderstorm Wind	45	5000

439149	ALACHUA CO.	ROCHELLE	3/24/2013	1132	Thunderstorm Wind	45	3000
453206	ALACHUA CO.	WACAHOOTA	5/20/2013	1630	Thunderstorm Wind	50	0
453580	ALACHUA CO.	NEWBERRY	6/10/2013	1529	Thunderstorm Wind	50	0
453902	ALACHUA CO.	GAINESVILLE NORTH	6/26/2013	1705	Thunderstorm Wind	50	0
466997	ALACHUA CO.	SANTA FE LAKE	7/22/2013	1210	Thunderstorm Wind	50	0
467015	ALACHUA CO.	CADILLAC	7/31/2013	1512	Thunderstorm Wind	50	0
467016	ALACHUA CO.	SANTA FE	7/31/2013	1515	Thunderstorm Wind	50	0
467012	ALACHUA CO.	NEWMANS LAKE	7/31/2013	1600	Thunderstorm Wind	50	0
472051	ALACHUA CO.	ISLAND GROVE	8/17/2013	1715	Thunderstorm Wind	50	0
472247	ALACHUA CO.	LAKE LOCHLOOSA	9/6/2013	1550	Thunderstorm Wind	50	0
515173	ALACHUA CO.	GAINESVILLE NORTH	5/25/2014	1630	Thunderstorm Wind	50	0
522500	ALACHUA CO.	DAYVILLE	6/8/2014	1702	Thunderstorm Wind	50	0
522502	ALACHUA CO.	ROCKY PT	6/8/2014	1705	Thunderstorm Wind	50	0
522503	ALACHUA CO.	BLAND	6/8/2014	1705	Thunderstorm Wind	50	0
522505	ALACHUA CO.	DAYVILLE	6/8/2014	1715	Thunderstorm Wind	50	0

522506	ALACHUA CO.	DAYVILLE	6/8/2014	1715	Thunderstorm Wind	50	0
522508	ALACHUA CO.	NEWBERRY	6/8/2014	1915	Thunderstorm Wind	50	0
522510	ALACHUA CO.	NEWBERRY	6/8/2014	1915	Thunderstorm Wind	50	0
525199	ALACHUA CO.	(GNV)GAINESVILLE ARP	6/16/2014	1615	Thunderstorm Wind	50	0
525415	ALACHUA CO.	HIGH SPGS	6/22/2014	1510	Thunderstorm Wind	50	0
532552	ALACHUA CO.	ARCHER FLYING TENAR	7/5/2014	1650	Thunderstorm Wind	50	0
537915	ALACHUA CO.	CAMPVILLE	8/21/2014	1720	Thunderstorm Wind	50	0
537916	ALACHUA CO.	MICANOPY	8/21/2014	1730	Thunderstorm Wind	50	0
537919	ALACHUA CO.	FAIRBANKS	8/22/2014	1650	Thunderstorm Wind	45	1000
537934	ALACHUA CO.	GAINESVILLE NORTH	8/23/2014	1745	Thunderstorm Wind	50	0
537935	ALACHUA CO.	GAINESVILLE NORTH	8/23/2014	1800	Thunderstorm Wind	50	0
558378	ALACHUA CO.	DAYVILLE	2/26/2015	210	Thunderstorm Wind	50	0
568577	ALACHUA CO.	CAMPVILLE	4/19/2015	1420	Thunderstorm Wind	40	2000
571088	ALACHUA CO.	PHIFER	5/31/2015	1700	Thunderstorm Wind	40	500
571090	ALACHUA CO.	HIGH SPGS	5/31/2015	1735	Thunderstorm Wind	50	0

571089	ALACHUA CO.	HIGH SPGS	5/31/2015	1735	Thunderstorm Wind	50	0
583796	ALACHUA CO.	PHIFER	6/24/2015	1439	Thunderstorm Wind	50	0
583833	ALACHUA CO.	GAINESVILLE NORTH	6/30/2015	2003	Thunderstorm Wind	45	1000
592587	ALACHUA CO.	GAINESVILLE WEST	7/2/2015	1149	Thunderstorm Wind	45	1000
592588	ALACHUA CO.	GAINESVILLE WEST	7/2/2015	1155	Thunderstorm Wind	45	500
593292	ALACHUA CO.	GAINESVILLE EAST	7/5/2015	1437	Thunderstorm Wind	45	0
593312	ALACHUA CO.	GAINESVILLE EAST	7/5/2015	1448	Thunderstorm Wind	50	0
593307	ALACHUA CO.	GAINESVILLE EAST	7/5/2015	1450	Thunderstorm Wind	50	0
593311	ALACHUA CO.	GAINESVILLE EAST	7/5/2015	1450	Thunderstorm Wind	50	0
593308	ALACHUA CO.	HAWTHORNE	7/5/2015	1454	Thunderstorm Wind	50	0
595833	ALACHUA CO.	GAINESVILLE EAST	7/17/2015	1545	Thunderstorm Wind	40	1000
595837	ALACHUA CO.	HIGH SPGS	7/20/2015	1335	Thunderstorm Wind	40	500
598362	ALACHUA CO.	DAYVILLE	8/3/2015	1810	Thunderstorm Wind	50	0
598363	ALACHUA CO.	ARREDONDA	8/3/2015	1820	Thunderstorm Wind	50	0
598897	ALACHUA CO.	EVINSTON	8/13/2015	1420	Thunderstorm Wind	45	500

598900	ALACHUA CO.	BLAND	8/13/2015	1600	Thunderstorm Wind	50	0	
598901	ALACHUA CO.	HIGH SPGS	8/13/2015	1618	Thunderstorm Wind	50	0	
598906	ALACHUA CO.	PHIFER	8/17/2015	1430	Thunderstorm Wind	50	0	
599088	ALACHUA CO.	HIGH SPGS	9/12/2015	1150	Thunderstorm Wind	45	500	
599086	ALACHUA CO.	PHIFER	9/12/2015	1210	Thunderstorm Wind	50	0	
599087	ALACHUA CO.	GAINESVILLE NORTH	9/12/2015	1210	Thunderstorm Wind	50	0	

NWS Data Tornado 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	TOR_F_SCALE	DEATHS_DIRECT	INJURIES_DIRECT	DAMAGE_PROPERTY_NUM
372403	ALACHUA CO.	CADILLAC	3/24/2012	1340	Tornado	EF0	0	0	8000

NWS Wildfire Data 2010-2015

EVENT_ID	CZ_NAME_STR	BEGIN_DATE	EVENT_TYPE	DEATHS_DIRECT	INJURIES_DIRECT	DAMAGE_PROPERTY_NUM	CZ_FIPS	WFO	INJURIES_INDIRECT	DEATHS_INDIRECT
266541	ALACHUA (ZONE)	12/21/2010	Wildfire	0	0	0	36	JAX	0	0
287854	ALACHUA (ZONE)	4/20/2011	Wildfire	0	0	0	36	JAX	0	0
308910	ALACHUA (ZONE)	6/1/2011	Wildfire	0	0	0	36	JAX	0	0
356780	ALACHUA (ZONE)	1/29/2012	Wildfire	0	0	0	36	JAX	18	11
372419	ALACHUA (ZONE)	3/31/2012	Wildfire	0	0	0	36	JAX	0	0
387590	ALACHUA (ZONE)	5/26/2012	Wildfire	0	0	0	36	JAX	0	0
439350	ALACHUA (ZONE)	4/7/2013	Wildfire	0	0	0	36	JAX	0	0

Appendix N: Alachua County Stormwater Management Master Plan

(This appendix contained in a separate document due to file size)