



# State of Florida

## Wildfire Hazard Mitigation Plan Annex



Federal Emergency Management Agency

2011

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# Wildfire Hazard Mitigation Plan Annex

July 2011



This Wildfire Hazard Mitigation Plan Annex to the State of Florida Enhanced Hazard Mitigation Plan was developed through a collaborative effort between the:

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# 1. Introduction

In the last decade, there have been on average 3,361 wildfires a year throughout the State of Florida (Florida Forest Service, 2011). Although fire is a naturally occurring element in Florida ecosystems, the continued development of housing and infrastructure within wildland areas and forests presents a wildfire hazard that will continue to escalate as residential development continues to encroach on natural areas. Over the last several decades the State of Florida has worked to mitigate wildfire risk through a variety of programs, policies, and procedures implemented through a variety of agencies and organizations at the state, regional, and local levels. These mitigation measures have included immediate physical actions (such as fuel reduction plans), public education plans for citizen responsibility to reduce their own vulnerability, coordination procedures for better preparedness in wildfire response, staff training to increase capacity, building retrofit and landscaping, research and risk assessment, and planning policies and regulations that will systemically create more disaster-resilient communities. The State of Florida intends to continue to implement coordinated strategies to help reduce the potential for injury, loss of life, and impact to homes, businesses, and public infrastructure from wildfire.

## 1.1 Purpose

The Wildfire Hazard Mitigation Plan Annex (referred to as the Annex) to the State of Florida Enhanced Hazard Mitigation Plan (SHMP) was a coordinated effort led by the Florida Forest Service (FFS, formerly known as the Division of Forestry [DOF]) involving a wide variety of organizations throughout the State and funded by the Federal Emergency Management Agency (FEMA). The Annex is a comprehensive strategy for addressing the State of Florida's wildfire hazard and it expands upon the SHMP's discussion of pre- and post-disaster mitigation. The Annex was developed to serve as an expanded wildfire hazard mitigation plan that will enable the state and local governments to prioritize future projects to better prepare for and mitigate wildfire risk in their communities. It identifies high-risk areas of the State; describes available capacity for minimizing risk; and includes specific state, regional, and local strategies that are planned for implementation. The Annex was developed in accordance with the idea that improved mitigation planning will lead to a better understanding of risks and vulnerabilities. It was intended to provide a link between state and local mitigation programs.

## 1.2 Compliance

The Annex fulfills all of the requirements for Standard and Enhanced State Hazard Mitigation Plans under the Robert T. Stafford Disaster Relief and Emergency Assistance Act as amended by the Disaster Mitigation Act of 2000. Regulations for state's plans can be found in Title 44 of the Code of Federal Regulations (CFR). Specific requirements are referenced throughout the sections of the Annex.

In accordance with Requirement § 201.4(c)(7), the State of Florida complies with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with the 44 CFR 13.11(c). The State will also amend its plan whenever necessary to reflect changes in State or Federal laws and statutes as required in 44 CFR 13.11(d).

### 1.3 Adoption

Upon receipt of the FEMA's "approved pending adoption status," the State of Florida will seek formal adoption of the Wildfire Hazard Mitigation Plan Annex to the State of Florida Enhanced Hazard Mitigation Plan by the Governor in accordance with Requirement § 201.4(c)(6). Once formally adopted by the State, the Annex (along with the SHMP) will be submitted to FEMA for final review and approval.

--- Insert verification of formal adoption by the State of Florida and FEMA formal approval letter---

### 1.4 Sources Cited

Florida Forest Service (2011). *Fire Data Reports*. Retrieved from <http://tlhforweb03.doacs.state.fl.us/PublicReports/>

## 2. Planning Process

A coordinated planning process is essential in developing and maintaining a successful plan. **Section 2** responds to FEMA's Requirement § 201.4(c)(1) and provides a detailed overview of the planning process used to develop the Annex, including how it was prepared, who was involved in the process, and how other agencies participated. According to Requirement § 201.4(b), the mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, and interested groups and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

### 2.1 Interagency Working Group

The development of the Annex was guided by the Interagency Working Group (IWG), an assembly of experienced wildfire professionals with a range of public and private expertise at the local, State, and Federal levels. IWG's role was to participate in each phase of the planning process and direct the creation of the Annex. Invitations to participate were accepted by the following agencies:

- Alachua County Fire and Rescue;
- Federal Alliance for Safe Homes (FLASH);
- Federal Emergency Management Agency (FEMA);
- Florida Department of Community Affairs (DCA);
- Florida Division of Emergency Management (DEM);
- Florida Forest Service (FFS, formerly known as the Division of Forestry [DOF]);
- Georgia Forestry Commission;
- Pandion Systems, Inc.; and
- United States Forest Service, Southern Research Station.

Because IWG members are based in different locations, including some out of state, meetings were conducted via telephone conference call or web conferencing. The IWG kick-off conference call was held on October 22, 2009. That meeting served as an introduction to the Annex planning process and an overview of the project. It gave the IWG members a chance to make introductions and familiarize themselves with the project scope of work and schedule. A detailed summary of this and other IWG meetings is included **Appendix A**.

On March 10, 2010, the IWG convened to discuss the preliminary results of the new update to the Florida Wildland Fire Risk Assessment (FL FRAS) and the methodology of the Annex risk assessment. The goals and objectives were also finalized and approved at the March 2010 meeting. The State Capability Assessment was discussed during the January 6, 2011 conference call. IWG members had each been sent a draft copy of the assessment prior to the meeting and they shared their edits with the other group members during the meeting. A conference call was held on July 25, 2011 to give IWG members a

chance to share their comments and edits on a complete draft of the Annex. Their feedback was incorporated into the final plan.

## 2.2 Agency Coordination

Throughout the development of the State of Florida Enhanced Hazard Mitigation Plan (SHMP), the State recognized the importance of an integrated, comprehensive approach to disaster loss reduction, which was also considered a priority during the development of the Annex. During the planning process, an active level of coordination with local, State, and Federal agencies as well as other interested groups involved in hazard mitigation was maintained. This coordination was accomplished in two ways: 1) involving the IWG throughout the planning process and 2) requesting information and conducting personal interviews with agency representatives as a data collection method during drafting of the plan.

The IWG was formed by FFS with representation from a wide spectrum of agencies and organizations throughout the State of Florida that play a role in wildfire mitigation. Each member brought their own personal knowledge and expertise to the group and was encouraged to provide input throughout the process and during the drafting of the final plan. At meetings, members had a chance to discuss pertinent issues relevant to wildfire hazards throughout the State of Florida from a variety of perspectives. Participation from representatives with experience working to reduce risk in local communities such as Alachua County Fire and Rescue brought a unique expertise different from those with experience working with State agencies like DCA or DEM or private organizations like FLASH. Representatives from Federal agencies, including FEMA and the United States Forest Service, were invited to participate in the IWG to ensure that the mitigation strategies included in the Annex would appropriately correspond with Federal programs and funding opportunities when relevant. By including membership from a variety of agencies and organizations in the IWG, there is a greater chance that the Annex will comprehensively reflect the mitigation work that is being done across the State and increase the likelihood that the initiatives of the individual agencies will be coordinated in the future.

The drafting of the Annex was a coordinated effort led by FFS involving a wide variety of organizations throughout the State. During the preparation of several sections of the Annex, information requests were disseminated to individual agencies and organizations and their input was incorporated into the plan.

**Section 4** was written with feedback from the following agencies:

- Department of Community Affairs (DCA);
- Department of Education Office of Educational Facilities;
- Department of Environmental Protection (DEP) Division of State Lands;
- DEP Division of Recreation and Parks;
- DEP Office of Coastal and Aquatic Managed Areas (CAMA);
- DEP Office of Greenways and Trails (OGT);
- Department of Financial Services (DFS) Division of State Fire Marshall;

- Federal Alliance for Safe Homes (FLASH);
- Florida Fire Chiefs' Association (FFCA) Wildland Fire Committee;
- Florida Fish and Wildlife Conservation Commission (FWC);
- Florida Home Builders Association (FHBA) Disaster Contractors Network;
- Insurance Institute for Business and Home Safety (IBHS);
- Northwest Florida Water Management District (NFWWMD);
- South Florida Water Management District (SFWMD);
- Southwest Florida Water Management District (SWFWMD);
- St. Johns River Water Management District (SJRWMD);
- Suwannee River Water Management District (SRWMD); and
- The Nature Conservancy (TNC).

These agencies were also sent surveys enquiring about their plans for implementing wildfire mitigation projects between 2011 and 2016. Information from these requests was incorporated into **Appendix D**. **Appendix E** was compiled with input from the 15 FFS Wildfire Mitigation Specialists representing each of the individual FFS Field Units.

## 2.3 State Hazard Mitigation Plan Advisory Team

While the Annex was originally developed through the guidance of the IWG, the State Hazard Mitigation Plan Advisory Team (SHMPAT) was also involved in the planning process through periodic status updates and presentations. The role of SHMPAT is to bring together a cross-section of representatives from various sectors to evaluate, revise, and otherwise maintain the SHMP throughout the year. This group includes members from State agencies, local governments, regional planning councils, universities, nonprofit organizations, FEMA, and other federal or national entities. After the Annex has been integrated into the SHMP, SHMPAT in coordination with the State Hazard Mitigation Officer (SHMO) will be responsible for monitoring, evaluating, and updating the Annex. This process is described in more detail in **Section 6**.

## 2.4 Integration with Other Planning Initiatives

### 2.4.1 Comprehensive Emergency Management Plan

The Florida Comprehensive Emergency Management Plan (CEMP) is an operations-oriented plan that establishes a framework through which the State of Florida prepares for, responds to, recovers from, and mitigates the impacts of all hazards that could adversely affect people and property. SHMPAT has recommended that the SHMP be integrated into the State's CEMP as an appendix. It would be beneficial to include the Annex in this CEMP appendix to serve as a supporting document and a reference for State agencies, special districts, local governments, and voluntary agencies seeking guidance and information on statewide wildfire mitigation goals and objectives.

## 2.4.2 Florida Building Code

The State of Florida has a single statewide Florida Building Code that was adopted in 1998 to increase the efficiency of the local building process, bring safer products to the market, increase accountability, and decrease damage from natural disasters. On March 1, 2002, the Code superceded all local codes. It is updated every three years and may be amended annually to incorporate interpretations and clarifications. The Florida Building Code is a potential vehicle for integrating wildfire mitigation strategies locally throughout the State.

## 2.4.3 Integration with Concurrent State Planning Efforts

The Annex was developed between October 2009 and July 2011. During that same time period, FFS was also concurrently engaged in implementing several other wildfire mitigation projects. These projects included the update to the best development practices guidebook *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices (2011)*, the Statewide Community Wildfire Protection Plan (CWPP) Initiative, and the update to the FL FRAS. The concurrent timelines allowed for considerable staff collaboration. For example, while working on the development of the Annex, the IWG also provided input to the guidebook update, ensuring that both projects received consistent feedback from stakeholders. The Wildfire Risk Assessment included in **Section 3** of the Annex incorporates data and maps from the updated FL FRAS and the Statewide CWPP initiative uses the county-level information from the **Appendix C**. Additionally, the projects lists from the 10 county CWPPs from the Statewide CWPP initiative have been incorporated into **Appendix E** of the Annex.

## 2.4.4 Integration with FEMA Programs

The best development practices guidebook *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices (2011)* was funded through FEMA's Hazard Mitigation Grant Program (HMGP) and the FL FRAS update was funded with FEMA planning funding. As described above in **Section 2.4.3**, both of these programs were closely integrated with the development of the Annex.

A number of other FEMA programs are available to the State of Florida and local communities to implement wildfire mitigation activities. These programs are described in greater detail in **Section 4.4**:

- HMGP;
- Pre-Disaster Mitigation Grant Program (PDM);
- Assistance to Firefighters Grant (AFG);
- Fire Prevention and Safety Grant Program;
- National Fire Plan Grants;
- Assistance to Firefighters Station Construction Grants; and
- Staffing for Adequate Fire & Emergency Response Grants.

### **2.4.5 Integration into Local Planning Initiatives**

Local planning mechanisms such as the Local Comprehensive Plan, Local Mitigation Strategy, and CWPP can potentially provide opportunities to manage wildfire risk through policy-driven, strategic, and collaborative approaches. The integration of wildfire mitigation into local planning initiatives is described in greater detail in **Section 5**.

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## 3. Wildfire Risk Assessment

The risk assessment provides the factual basis for developing a wildfire mitigation strategy for the state. This section describes the statewide and county-level risk of wildfire to population and structures.

### 3.1 Overview

Wildfire is defined by the Florida Forest Service (FFS) as any fire that does not meet management objectives or is out of control. Wildfires occur in Florida every year and are part of the natural cycle of our fire-adapted ecosystems. Many of these fires are quickly suppressed before they can damage property. Prescribed or controlled fires have been used to replace the natural benefits that wildfires provide on many conservation and ranch properties across the state.

#### 3.1.2 Wildfire History

Despite the advancements of fire management across the state, many large and destructive wildfires still occur during severe droughts. The following outlines the history of major wildfires in Florida during the 20<sup>th</sup> century (Florida Department of Agriculture and Consumer Services, 2010).

#### Florida's Major 20<sup>th</sup> Century Wildfires

- The 1935 Big Scrub Fire burned 35,000 acres of the Ocala National Forest in four hours.
- The 1956 Buckhead Fire burned 100,000 acres between the Osceola National Forest and the Georgia line in a single spring day.
- In the early 1970s, several Everglades fires exceeded 50,000 acres in size.
- In 1981, Florida had 14,042 fires burning 587,404 acres.
- On May 17, 1985 – dubbed “Black Friday” – Florida experienced dozens of wind-driven fires in 29 counties, resulting in 400 houses lost that day. That year, Florida had 8,621 fires and 443,815 acres burned.
- In 1989, Florida experienced 7,291 fires that burned 645,331 acres.
- During the 1998 Florida wildfires there were fewer wildfires but they were larger due to extreme drought conditions. Over 2,200 fires burned nearly 500,000 acres, 100,000 residents were evacuated, two interstate highways were closed, 337 houses and 33 businesses were damaged or destroyed, \$133 million was spent in fire suppression, and over \$600 million in tourism and other revenues were lost.
- In 1999, Florida's drought continued and, as a result, the state was again stricken with a severe wildfire outbreak. 1999 saw nearly 4,500 wildfires burn more than 365,000 acres statewide.
- In May 2001, a smoldering lightning fire flared up into the Mallory Swamp Fire. It became one of the largest wildfires in Florida's history at that time, burning more than 60,000 acres and causing over \$10 million in timber losses, even though it did not burn any houses because of its remote location in Dixie and Lafayette Counties.

- The 2007 Bugaboo Scrub Fire raged from April to June, ultimately becoming the largest fire in both Georgia's and Florida's history and the largest fire complex ever recorded in the continental United States. The fire started in the Okefenokee Swamp and was fanned by the winds behind rainless subtropical storm Andrea. Before the fire was contained, it burned over 600,000 acres, forced the closure of three major highways, and blanketed areas from central Florida to Atlanta, Georgia, with heavy smoke.

### Wildfire Statistics for Florida

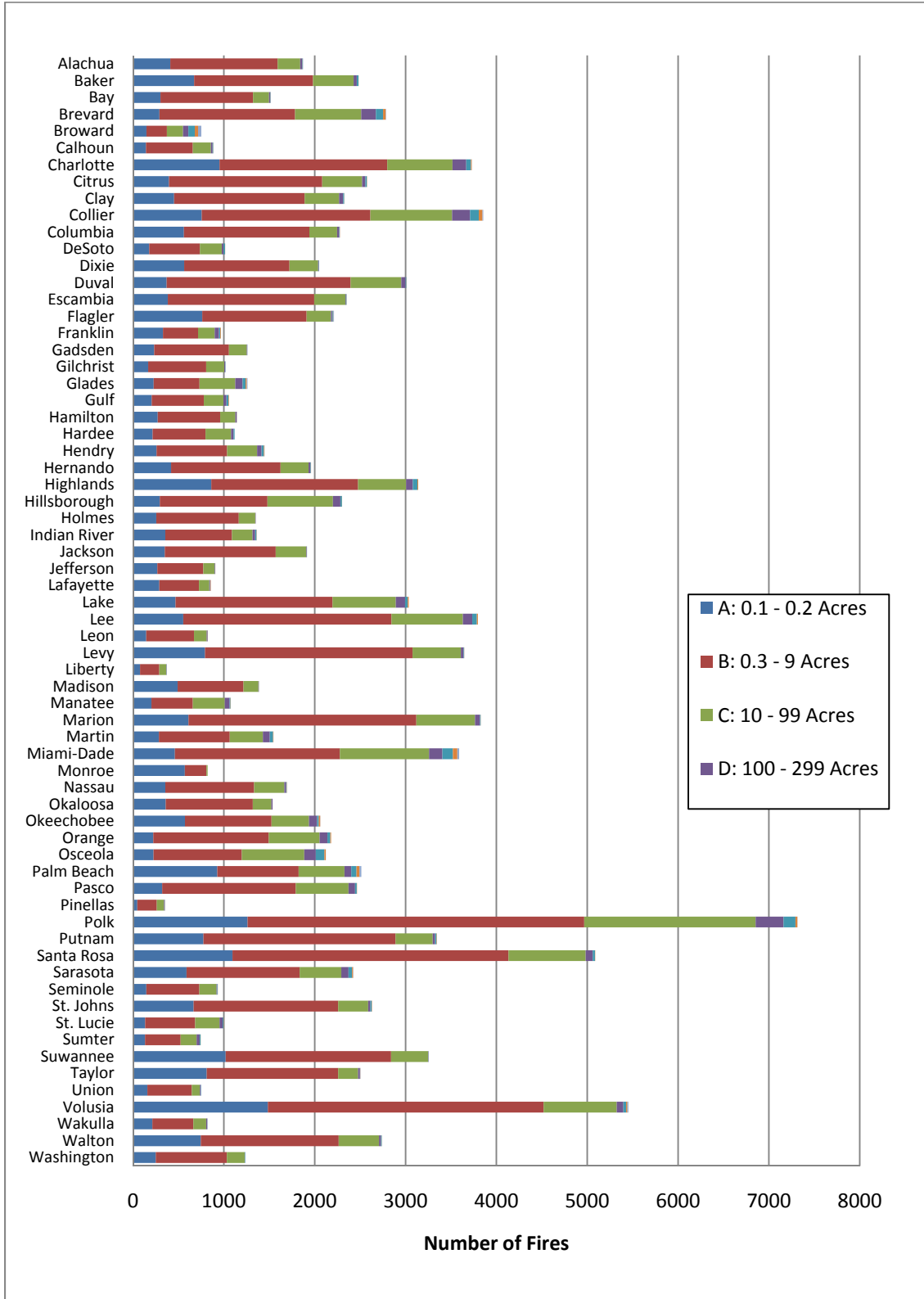
FFS maintains a Fire Activity Report database that includes information on all wildfires that FFS responded to dating back to 1980. It does not include brush fires that were suppressed by local firefighters without FFS assistance. According to these records, there have been 141,230 fires that have burned over 5 million acres in the past 30 years in Florida. **Table 3.1** shows that a majority of the wildfires were relatively small in size – between 0.3 and 9 acres. However, the 138 fires that grew to over 5,000 acres in size account for almost half of the statewide acres that have burned. **Figure 3.1** presents the number of wildfires for each county classified by fire size between 1981 and 2011. Polk County had the largest number of wildfires with 7,314 wildfires, followed by Volusia County with 5,453 wildfires.

**Table 3.1. Statewide Fires Classified by Fire Size, July 1981 – June 2011**

Fire Size (acres)	Number of Fires*	Acres Burned
0.1-0.2	30,259	3,462.30
	21.43%	0.06%
0.3-9	79,308	198,377.60
	56.16%	3.59%
10-99	26,500	750,618.10
	18.76%	13.59%
100-299	3,192	501,343.90
	2.26%	9.07%
300-999	1,403	678,565.60
	0.99%	12.28%
1,000-4,999	430	821,524.80
	0.30%	14.87%
≥5,000	138	2,570,651.60
	0.10%	46.53%
<b>Total</b>	<b>141,230</b>	<b>5,524,543.90</b>

Source: Florida Division of Forestry, 2011.

\* Values in shaded areas indicate percent of total number of fires or acres burned.

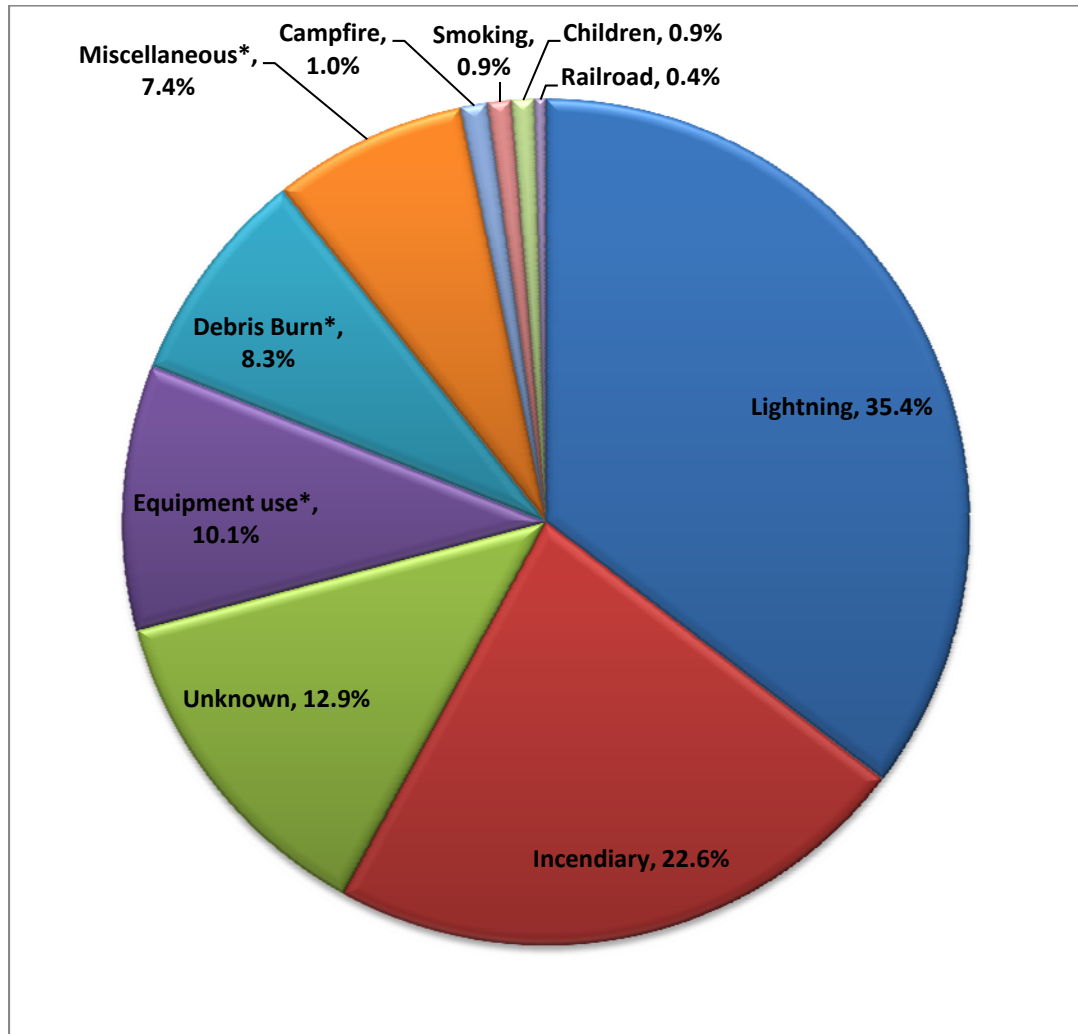


Source: Florida Division of Forestry, 2011.

**Figure 3.1. Number of Fires Classified by Fire Size, July 1981 – June 2011**

### Wildfire Causes

Lightening causes 35% of wildfires in the State on average (see **Figure 3.2**). A majority of the other sources of wildfire ignition are human-caused. Incendiary causes are the next largest cause, about 23% of the wildfires in a year averaged over the last 30 years.



\* Combination of several subcategories.  
 Source: Florida Division of Forestry, 2011.

**Figure 3.2. Annual Average Percent of Acres Burned Statewide by Wildfire Causes (1981-2011)**

## Wildfire Fuels

Florida’s long growing season, ample sunshine, and high annual rainfall produce large amounts of vegetation each year. In addition, decades of fire suppression have left some natural areas of the State with an increased build up of vegetation and trees, otherwise referred to as ‘fuels.’ Variation in the amount, type, and placement of fuels affects the probability that a wildfire event will occur and how the fire will behave. An increased fuel load increases the probability that fire events will become high intensity wildfires, damaging their natural environments. In many instances, reducing hazardous fuels also reduces the intensity of future wildfires (FDCA, 2004). **Table 3.2** shows the effect of different fuel characteristics on fire behavior.

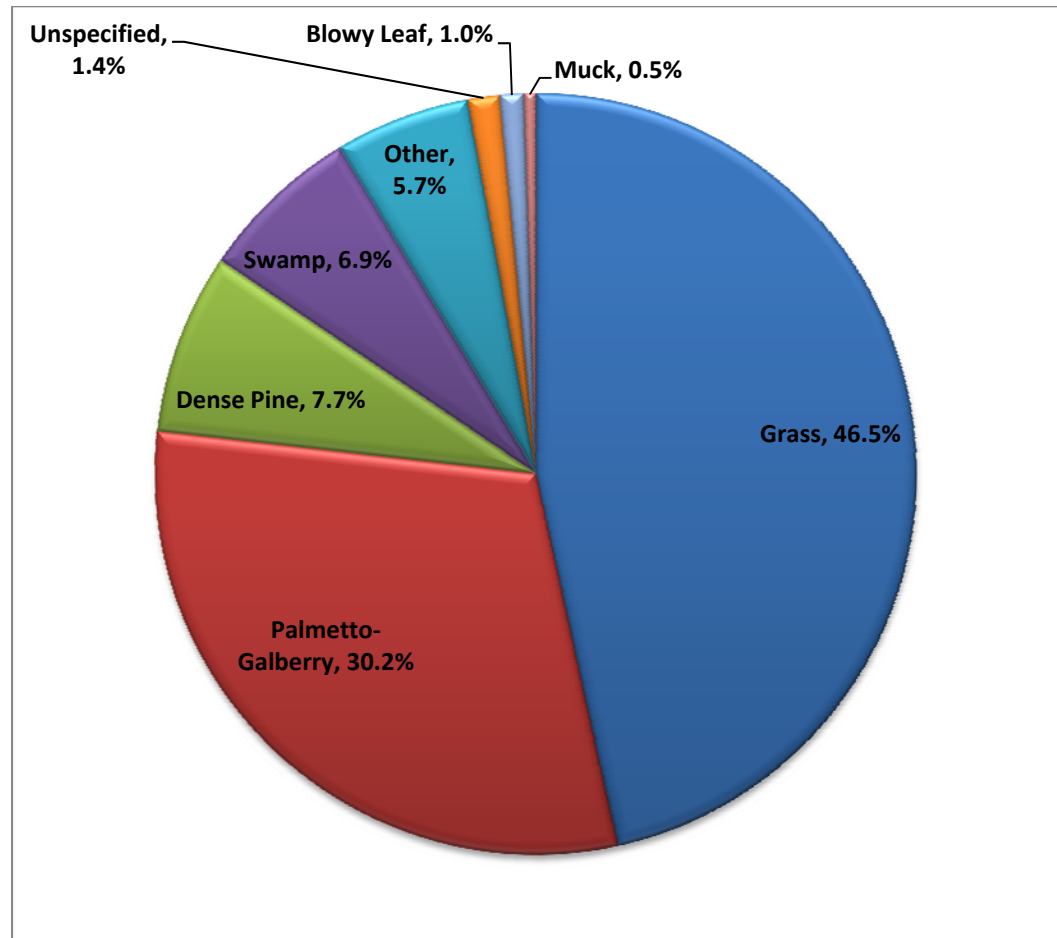
**Table 3.2. Characteristics of Fuels Related to Fire Behavior**

Fuel Characteristics	Relationship to Fire Behavior
Height of surface fuel (fuel depth) and total available fuel (fuel load)	If fuel depth and load are heavy, flames will be longer and more heat will be released. As fuel depth and load are reduced, the flame length and heat are reduced.
Fuel loading by fuel size class (size classes range from fine to large fuels)	Fine fuels (e.g., pine needles) ignite more readily and burn more quickly. Larger fuels (e.g., branches) burn more slowly but generate more heat energy and can be difficult to extinguish.
Compactness of fuels	Fuels that are tightly compacted will not burn as well. Fuels that are loosely compacted will burn better. Fuels that are very loose (e.g., sparse tree branches) may not be able to burn unless a nearby fire heats them.
Vertical continuity of fuels (presence or absence of vertical fuels, called "ladder fuels")	Vertically continuous fuels, such as vines or understory trees, can carry fire into the canopy (crowns of trees). Breaks in vertical continuity can prevent wildfire from getting into the canopy.
Dead-to-live fuels ratio	Although some of Florida's live fuels are very volatile, they generally only ignite and burn once they are heated by burning dead fuels. If the ratio of dead fuels to live fuels is high (as after a drought or killing frost), the fire behavior is more intense.

Source: Florida Department of Community Affairs/Florida Department of Agriculture & Consumer Services, 2004.

The type of vegetation is another significant factor affecting a fuel's ability to ignite. The size, shape, and chemical content of vegetation can affect how rapidly and with what intensity it burns. For example, finer fuels, such as pine needles, burn faster because there is more oxygen within the burning area. Larger fuels, such as tree branches, burn slower, but generate more heat. Generally, for a fire to grow it needs to be fed by the finer fuels in order for the larger fuels to ignite, similar to a campfire.

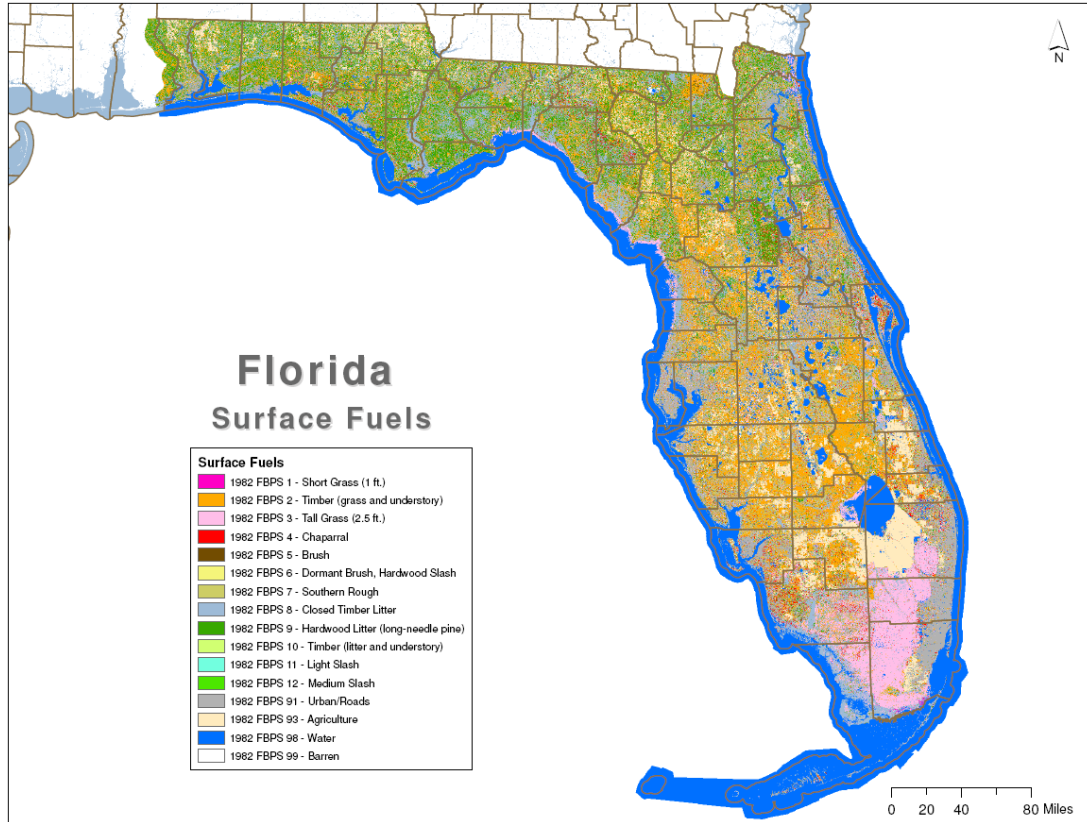
Much of Florida's vegetation is very flammable – many native plant species contain oils that are naturally combustible. Over the past 30 years, almost half of the acres burned statewide in wildfires have occurred in grass fuel habitats (**Figure 3.3**). Palmetto-Galberry fuels, which are typical of Florida Shrub ecosystems, account for 30% of wildfires in the state.



Source: Florida Division of Forestry, 2011.

**Figure 3.3. Percent of Wildfire Acres Burned Statewide by Fuel Type (1981 – 2011)**

**Figure 3.4** presents a statewide map of wildfire fuel types for the state. **Appendix C** provides surface fuel maps for each county. The fuels are mapped using the 13 Fire Behavior Prediction System (FBPS) Fuel Models that represent the four major fuel types: grass (Fuel Models 1-3); shrub (Fuel Models 4-7); timber litter (Fuel Models 8-10); and slash (Fuel Models 11-13).



Source: Sanborn Map Company, Inc., 2011.

**Figure 3.4. Wildfire Surface Fuels in Florida**

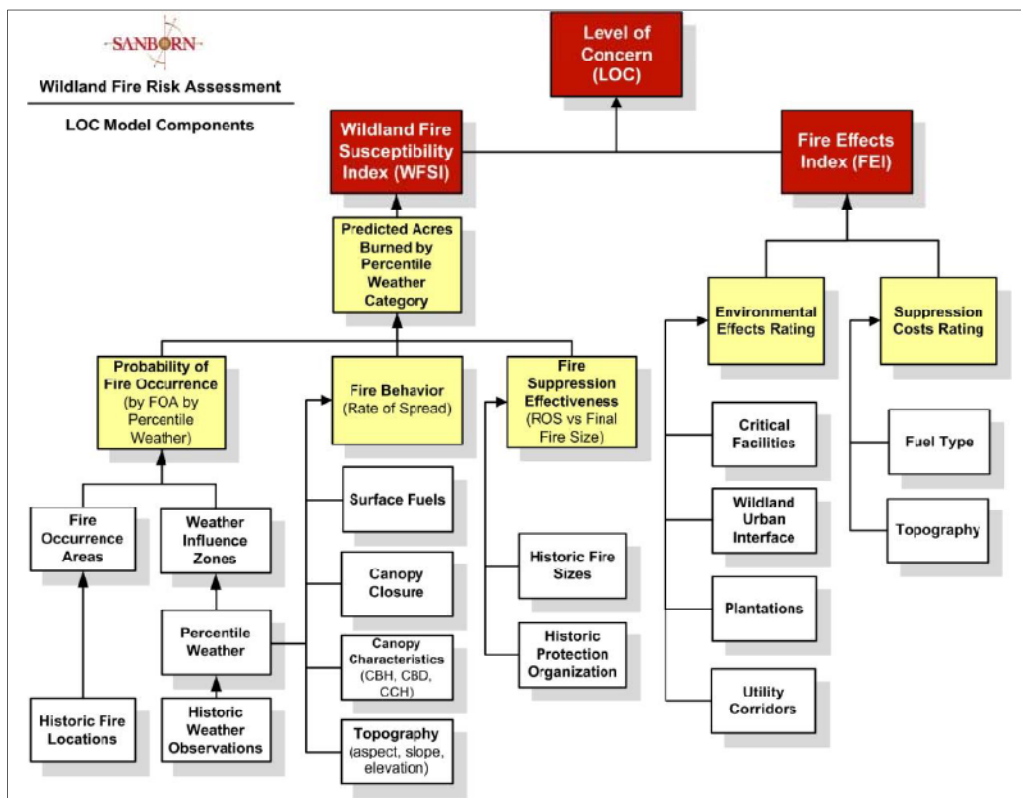
## 3.2 Wildfire Risk

### 3.2.1 Background

#### Florida Wildland Fire Risk Assessment

The FFS has developed a statewide wildland fire risk assessment using the FL FRAS. This report uses data from the 2011 update of FL FRAS for wildfire risk and parcel and assessor data obtained from the Florida Division of Revenue (DOR) to estimate vulnerability. FL FRAS provides up-to-date wildfire occurrence, hazard, and risk data in geographic information system (GIS) format. For this project, maps of Surface Fuels, Wildland Fire Susceptibility Index (WFSI), and Level of Concern (LOC) were generated for the State and each county. Tabulations of acres within each LOC were also generated. These outputs will be especially useful for local-level planning, including Local Mitigation Strategy updates and development or updates of Community Wildfire Protection Plans. The maps and vulnerability tables included in **Appendix C** have already been used in drafting 10 countywide Community Wildfire Protection Plans in Florida.

The LOC is the primary measure of wildfire risk used to create the vulnerability analysis for the Annex. As seen in **Figure 3.5**, it is calculated by multiplying the WFSI by the Fire Effects Index. The LOC is a value between 0 and 100 which is then categorized into 9 levels for communicating wildland fire management concerns (Sanborn Map Company, Inc., 2011).



Source: Sanborn Map Company, Inc., 2011.

**Figure 3.5. Level of Concern Model Components**

The following vulnerability assessment combined FL FRAS LOC outputs with parcel and assessor data obtained from the Florida DOR. Data were combined to generate summaries consistent with FEMA Hazard Mitigation Planning methodologies that defined:

- total population by wildfire risk zone in each county;
- total number of structures by wildfire risk zone in each county; and
- total value (\$) of structures by wildfire risk zone in each county.

The primary sources of data for this assessment were as follows:

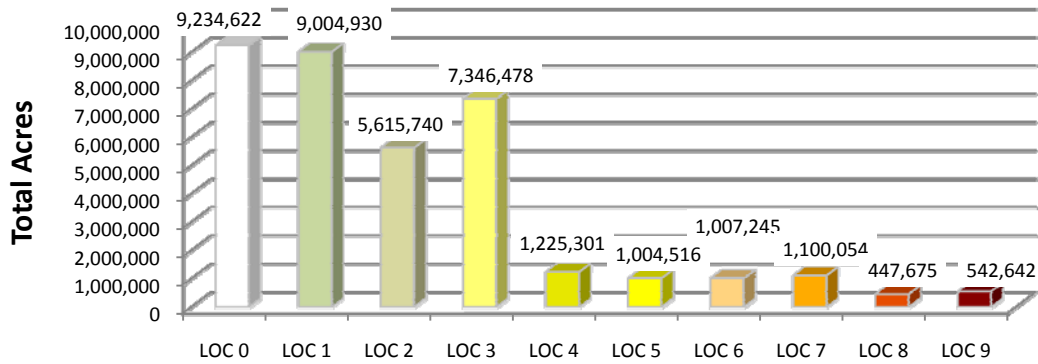
- FL FRAS, 2011 update;
- Parcel data – DOR, 2010;
- Assessor data – DOR, 2010; and
- Census data – Census Bureau, Summary File 1 (SF1) table, 2000 (2010 was not available at the time this analysis was conducted).



A full methodology is included as **Appendix B**.

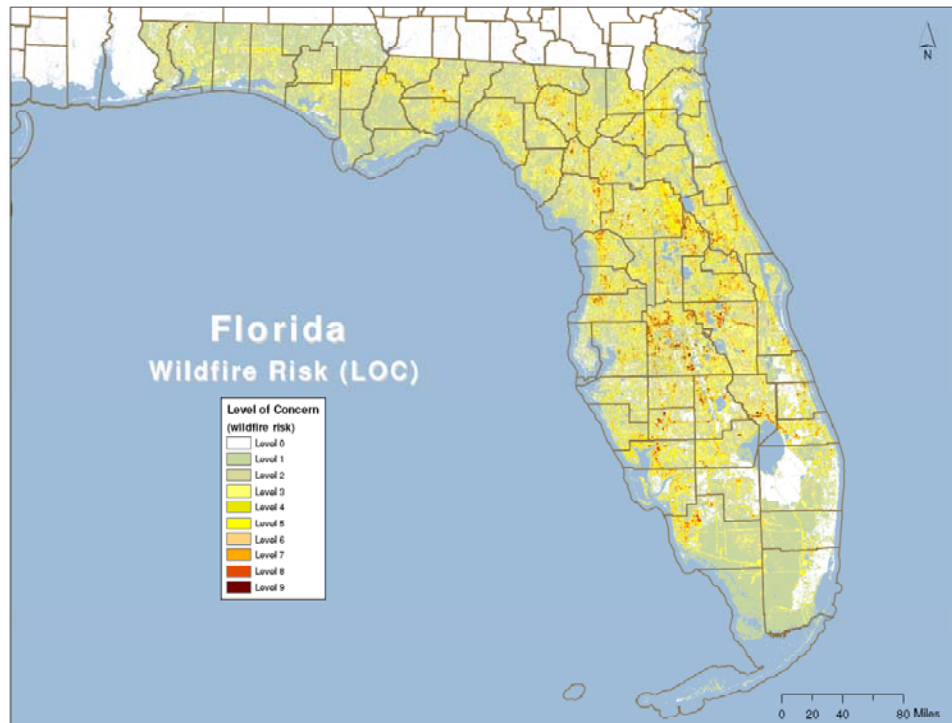
### State Summary Report

Approximately 5.3 million acres, 15% of Florida’s land area, is at medium (LOC 4-6) or high (LOC 7-9) risk from wildfire – see **Figure 3.6**. Concentrated areas of high risk LOCs are found in Central Florida as seen in **Figure 3.7**, although no county is without wildfire risk in Florida. **Appendix C** includes LOC maps and tabulations of acres by LOC for each county.



Source: Sanborn Map Company, Inc., 2011.

**Figure 3.6. Total Statewide Acres by Wildfire Level of Concern**

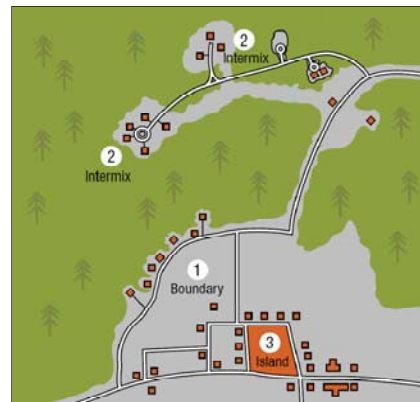


Source: Sanborn Map Company, Inc., 2011.

**Figure 3.7. Wildfire Risk in Florida by Level of Concern**

The wildland-urban interface (WUI) is defined in the National Fire Plan as the area where houses and wildland vegetation coincide. The WUI is best represented by LOC 4-9 using the FL FRAS. There are three types of WUI (DCA, 2004):

1. Boundary – areas where development is adjacent to public or private wildlands.
2. Intermix – structures are scattered and interspersed among wildland areas.
3. Island or occluded – area of wildland surrounded by development (i.e., a subdivision preserve).



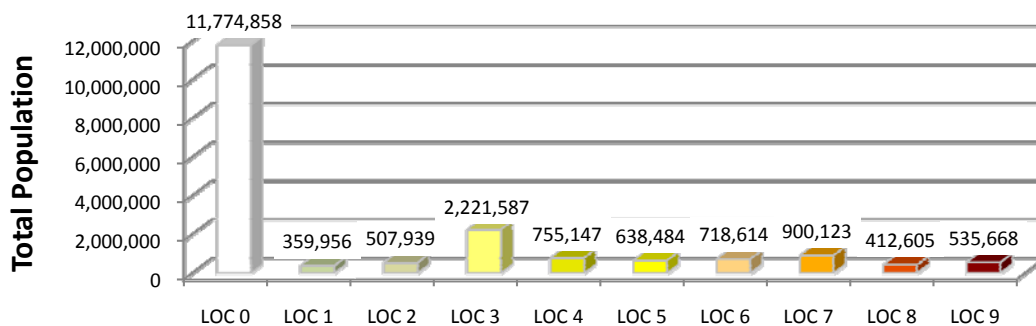
Types of Wildland-Urban Interface:  
 1) Boundary, 2) Intermix, and  
 3) Island or occluded

Areas mapped as low-risk (LOC 0-3) include urban areas and large agricultural properties that have a low probability of wildfire occurring and/or a high level of suppression capabilities. It should be noted that there still may be a localized risk for wildfire not shown in the larger scale LOC map, i.e., in urban or suburban developments that have an island WUI in the form of an unmanaged conservation easement, preserve, or vacant lot with high wildfire fuel loads.

### Population at Risk

Approximately 9.8% of the population of Florida (1,848,396 people) reside in an area of high wildfire risk (LOC 7-9). Another 11.2% of the state’s population (2,112,245 people) live in medium-risk wildfire areas denoted by LOC 4-6.

**Figure 3.8** provides a breakdown of statewide population by LOC. In a county comparison of wildfire risk, the five counties with the highest number of persons within LOC 7-9 are presented in **Table 3.3**. Orange, Polk, Duval, Volusia, and Osceola Counties account for 37% of the statewide population at high risk from wildfire. The counties with the highest percent of their countywide population at high risk from wildfire are: Desoto (40.6%), Flagler (39.7%), Charlotte (31.5%), Osceola (30.9%), and Hardee (29.9%). A comparison table of all Florida counties is included in **Appendix C**.



Source: Sanborn Map Company, Inc., 2011.

**Figure 3.8. Total Population in Florida by Wildfire Level of Concern**

**Table 3.3. Top Five Counties with Number of Persons at High Risk**

	Risk	ORANGE	POLK	DUVAL	VOLUSIA	OSCEOLA
Low	LOC 0	564,891	286,837	607,841	218,438	117,753
	LOC 1	17,761	11,184	8,829	5,970	1,448
	LOC 2	38,045	21,917	19,035	12,093	7,888
	LOC 3	122,648	76,638	111,315	70,962	18,634
	Subtotal	<b>743,345</b>	<b>396,576</b>	<b>747,020</b>	<b>307,463</b>	<b>145,723</b>
Medium	LOC 4	92,614	35,063	39,167	35,398	12,514
	LOC 5	93,202	32,824	31,546	30,173	14,120
	LOC 6	110,172	37,620	40,216	34,176	22,244
	Subtotal	<b>295,988</b>	<b>105,507</b>	<b>110,929</b>	<b>99,747</b>	<b>48,878</b>
High	LOC 7	116,560	63,737	54,781	46,681	42,186
	LOC 8	43,225	38,010	26,052	24,201	20,308
	LOC 9	47,772	58,067	42,105	32,738	24,486
	Subtotal	<b>207,557</b>	<b>159,815</b>	<b>122,938</b>	<b>103,620</b>	<b>86,980</b>
<b>TOTAL</b>		<b>1,246,890</b>	<b>661,898</b>	<b>980,887</b>	<b>510,830</b>	<b>281,581</b>

Source: Sanborn Map Company, Inc., 2011.

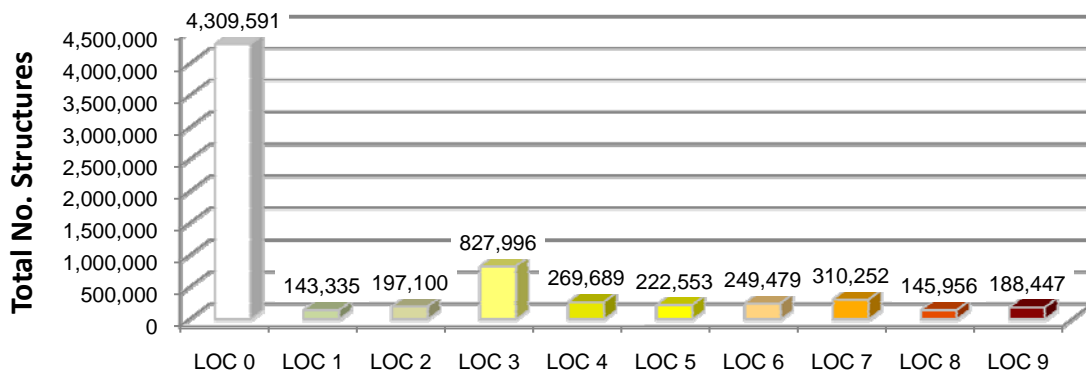
### Property at Risk

In Florida, there are approximately 1.3 million structures within medium to high wildfire risk areas (LOC 4-9). The number of structures by LOC is provided in **Figure 3.9**. County-level data included in **Appendix C** show that a majority of the structures located within medium to high risk areas are single-family homes.

In a county comparison of wildfire risk, the five counties with the highest number of structures within LOC 7-9 are presented in **Table 3.4**. Polk, Orange, Duval, Volusia, and Osceola Counties have the highest number of persons as well as structures at high risk from wildfire due to residential properties being disproportionately represented in high-risk wildfire areas compared to other structure types. These five counties have 214,576 structures within LOC 7-9. The counties with the highest percent of their countywide building stock at high risk from wildfire are: Desoto (39.0%), Flagler (37.6%), Osceola (31.0%), Charlotte (29.6%), and Baker (29.2%). A comparison table of all Florida counties is included in **Appendix C**.

**Figure 3.10** provides an estimate of the property value within each LOC. There is over \$298 billion in property value with a medium to high risk from wildfire. The estimates of property value include structure value as assessed by each county, but do not include the value of agriculture or silviculture that may be present on the property. A future enhancement of this vulnerability analysis could be to incorporate values for agricultural commodities.

In a county comparison of wildfire risk, the five counties with the highest property values within LOC 7-9 are presented in **Table 3.5**. Orange, Duval, Collier, Polk, and Osceola Counties have \$45 billion in property at high risk from wildfire. The counties with the highest percent of their countywide property value at high risk from wildfire are: Flagler (30.6%), Osceola (28.0%), Highlands (25.7%), Charlotte (25.6%), and Baker (25.3%). A comparison table of all Florida counties is included in **Appendix C**.



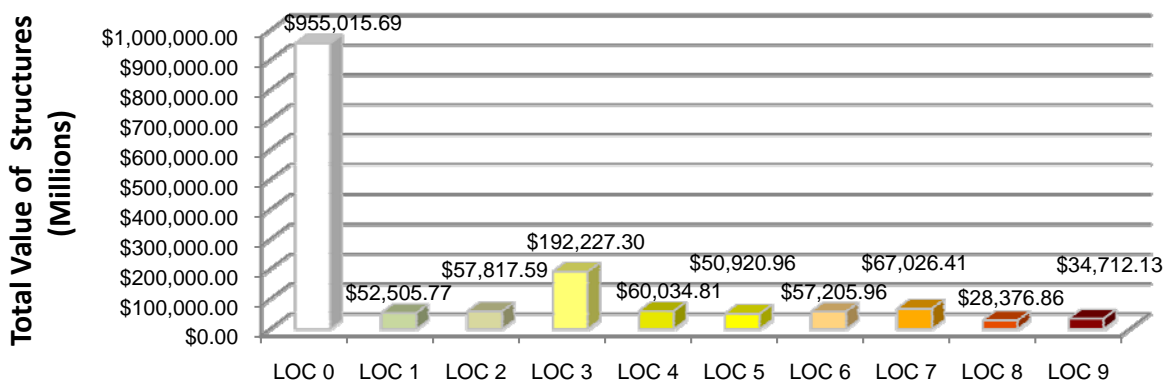
Source: Sanborn Map Company, Inc., 2011.

**Figure 3.9. Total Number of Structures in Florida by Wildfire Level of Concern**

**Table 3.4. Top Five Counties with Number of Structures at High Risk**

	Risk	POLK	ORANGE	DUVAL	VOLUSIA	OSCEOLA
Low	LOC 0	103,336	149,488	204,250	85,314	40,454
	LOC 1	4,133	6,043	3,212	2,314	526
	LOC 2	8,117	12,691	6,932	4,730	2,445
	LOC 3	26,941	42,409	39,672	28,636	6,578
	<b>Subtotal</b>	<b>142,528</b>	<b>210,631</b>	<b>254,066</b>	<b>120,994</b>	<b>50,003</b>
Medium	LOC 4	12,314	28,801	13,480	13,392	4,439
	LOC 5	11,794	25,840	10,948	11,175	5,104
	LOC 6	13,479	27,408	13,617	12,529	7,704
	<b>Subtotal</b>	<b>37,587</b>	<b>82,049</b>	<b>38,045</b>	<b>37,096</b>	<b>17,247</b>
High	LOC 7	22,584	27,703	18,021	17,344	14,143
	LOC 8	13,558	10,958	8,914	8,922	7,223
	LOC 9	20,809	10,346	13,469	11,771	8,811
	<b>Subtotal</b>	<b>56,951</b>	<b>49,007</b>	<b>40,404</b>	<b>38,037</b>	<b>30,177</b>
	<b>TOTAL</b>	<b>237,066</b>	<b>341,687</b>	<b>332,515</b>	<b>196,127</b>	<b>97,427</b>

Source: Sanborn Map Company, Inc., 2011.



Source: Sanborn Map Company, Inc., 2011.

**Figure 3.10. Total Property Value (millions of dollars) in Florida by Wildfire Level of Concern**

**Table 3.5. Property Value (millions of dollars) by Wildfire Level of Concern for the Top Five Counties at High Risk**

	Risk	ORANGE	DUVAL	COLLIER	POLK	OSCEOLA
Low	LOC 0	\$39,248.83	\$43,379.21	\$24,840.71	\$13,422.15	\$7,670.93
	LOC 1	\$1,987.23	\$1,502.42	\$1,736.52	\$674.97	\$456.54
	LOC 2	\$4,057.15	\$2,130.29	\$1,512.52	\$1,333.44	\$2,113.28
	LOC 3	\$11,896.77	\$9,783.41	\$3,389.90	\$3,850.35	\$3,188.99
	<b>Subtotal</b>	<b>\$57,189.98</b>	<b>\$56,795.33</b>	<b>\$31,479.65</b>	<b>\$19,280.91</b>	<b>\$13,429.74</b>
Medium	LOC 4	\$7,165.19	\$3,174.20	\$1,537.48	\$1,667.51	\$1,122.88
	LOC 5	\$6,763.66	\$2,536.18	\$1,949.47	\$1,622.05	\$1,309.55
	LOC 6	\$7,769.08	\$3,329.58	\$2,819.82	\$1,846.59	\$2,032.72
	<b>Subtotal</b>	<b>\$21,697.93</b>	<b>\$9,039.96</b>	<b>\$6,306.77</b>	<b>\$5,136.15</b>	<b>\$4,465.15</b>
High	LOC 7	\$7,880.73	\$4,417.56	\$4,166.87	\$2,905.63	\$3,384.62
	LOC 8	\$2,774.00	\$1,949.38	\$1,944.12	\$1,735.04	\$1,532.36
	LOC 9	\$3,006.70	\$2,856.10	\$2,458.76	\$2,652.65	\$2,055.77
	<b>Subtotal</b>	<b>\$13,661.43</b>	<b>\$9,223.04</b>	<b>\$8,569.75</b>	<b>\$7,293.32</b>	<b>\$6,972.75</b>
<b>TOTAL</b>		<b>\$92,549.34</b>	<b>\$75,058.33</b>	<b>\$46,356.17</b>	<b>\$31,710.38</b>	<b>\$24,867.64</b>

Source: Sanborn Map Company, Inc., 2011.

## County Summary Reports

**Appendix C** includes wildfire risk assessment summary reports for every county in Florida. Each report includes the following countywide maps and tabulations:

### County Report Maps

- Surface Fuels
- Wildfire Susceptibility Index (WFSI)
- Wildfire Risk (LOC)

### County Report Tabulations

- Total acres by wildfire risk (LOC)
- Population by wildfire risk (LOC) and land use
- Number of structures by wildfire risk (LOC) and land use
- Value of structures by wildfire risk (LOC) and land use

These county risk assessment summary reports can be used to update a county’s Local Mitigation Strategy or to develop or update a countywide Community Wildfire Protection Plan (CWPP). A recently approved CWPP for Polk County is included in **Appendix F** in order to demonstrate how the county wildfire risk assessment report can be the technical basis of a countywide CWPP.

### 3.3 Sources Cited

Florida Department of Agriculture and Consumer Services, Division of Forestry (2010). *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices*. Tallahassee, FL.

Florida Department of Community Affairs (DCA) and Florida Department of Agriculture and Consumer Services (2004). *Wildfire Mitigation in Florida*. Accessed April 2010. <[http://www.interfacesouth.org/fire/Wildfire\\_Mitigation\\_in\\_FL.pdf](http://www.interfacesouth.org/fire/Wildfire_Mitigation_in_FL.pdf)>

FLFRAS v9.3 User Guide. Accessed June 2011. [http://gis.sanborn.com/LinkClick.aspx?link=FLFRAS\\_faq.zip&tabid=157&mid=563](http://gis.sanborn.com/LinkClick.aspx?link=FLFRAS_faq.zip&tabid=157&mid=563)

Sanborn Map Company, Inc. (2011). *Florida Fire Risk Assessment System*.

## 4. Mitigation Strategy

The Mitigation Strategy was developed to provide the State of Florida with a comprehensive and cohesive plan to mitigate wildfire risk. This section contains goals and objectives meant to guide mitigation activities; a State capability assessment including Federal, State, and nongovernmental agencies involved in wildfire mitigation in Florida; and a summary of available funding and resources. Each of the subsections of **Section 4** was based on the 2010 State of Florida Enhanced Hazard Mitigation Plan (SHMP), but focuses specifically on wildfire mitigation in the State of Florida.

### 4.1 Goals and Objectives

Goals and objectives guide the selection of activities that mitigate hazards and reduce potential losses. SHMP contains a set of goals and objectives that meet requirements of § 201.4(c)(3)(i) and § 201.4(d). SHMP's goals and objectives address all hazards contained within the state plan, including wildfire. In recognizing the need for additional objectives to guide state and local wildfire mitigation activities as proposed in this annex (see **Appendices D and E**), new objectives are included in this section. These new objectives are in addition to, not in lieu of, the SHMP goals and objectives. All objectives will be considered to guide the selection of wildfire mitigation activities.

SHMP goals and objectives are provided below. New objectives for the Annex are designated with a 'WF' prefix.

- **Goal 1: Enhance and maintain state capability to implement a comprehensive statewide hazard loss reduction strategy**
  - Objective 1.1: Continue to provide training opportunities and encourage staff to pursue professional development so that qualified mitigation personnel can be retained
  - Objective 1.2: Pursue methodologies that will enhance mitigation success
  - Objective 1.3: Continue to integrate mitigation practices throughout state plans, programs, and policies
  - WF Objective 1.4: Maintain an accurate record of wildfire risk, history, and mitigation activities throughout the State of Florida to guide future plans, programs, and mitigation activities
- **Goal 2: Support the development and enhancement of local capability to practice hazard mitigation**
  - Objective 2.1: Continue to monitor and maintain up-to-date risk assessment information in cooperation with local communities
  - Objective 2.2: Continue active communication between state and local mitigation planners, providing technical assistance and training as needed to local governments for updating, enhancing, or implementing local mitigation strategies and sharing best practice efforts

- Objective 2.3: Assist in the integration of hazard mitigation concepts into other local planning efforts
  - Objective 2.4: Ensure that all communities are aware of available mitigation funding sources and cycles
  - Objective 2.5: Conduct all possible actions to mitigate severe repetitive loss properties. To include:
    - a. Annually review the state's repetitive loss and severe repetitive loss properties list to identify areas of highest risk and vulnerability. Base this upon historical claims data and estimated potential future losses. Offer technical assistance to evaluate and prioritize cost-effective, technically feasible, and environmentally sound mitigation actions in these areas.
    - b. Give high priority support to local communities that focus on implementing mitigation strategies specifically for repetitive loss and severe repetitive loss properties by working with local Local Mitigation Strategy (LMS) committees as needed. Prioritize funding for applications that address repetitive loss and severe repetitive losses.
    - c. Encourage local jurisdictions to work closely with regulatory agencies to seek ways of implementing area-wide mitigation programs that will reduce or eliminate future repetitive loss and severe repetitive loss claims in an area.
  - WF Objective 2.6: Ensure through the efforts of the Florida Division of Forestry Wildfire Mitigation Specialists that all communities are aware of available mitigation resources throughout the state to implement wildfire risk reduction strategies
  - WF Objective 2.7: Other state agencies will support the efforts of Florida Division of Forestry to work with communities to reduce wildfire risk throughout the state as applicable to their agency mission
  - WF Objective 2.8: Coordinate and foster local partnerships among local government agencies, land managers, and state agencies involved in wildfire mitigation activities – including fuel management, information, and educational activities designed to reduce wildfire risk – to improve local capabilities
  - WF Objective 2.9: Assist in the development of Community Wildfire Protection Plans (CWPPs), land development regulations, and Comprehensive Plan amendments that reduce wildfire risk by providing planning, information, resources, and technical assistance from applicable State agencies
- **Goal 3: Utilize education to increase public and private sector awareness and support for hazard mitigation in Florida**
- Objective 3.1: Use all available resources to increase awareness of mitigation concepts and opportunities
  - Objective 3.2: Work with other division bureaus to incorporate mitigation concepts and information into their outreach efforts



- Objective 3.3: Utilize relationships and resources associated with Florida's Emergency Support Function (ESF) 18 to educate Florida's private sector about mitigation concepts and opportunities
  - WF Objective 3.4: Utilize outreach efforts, such as the Florida Firewise Communities Program, to expand community awareness of wildfire hazard and strategies that can be utilized to improve community safety
  - WF Objective 3.5: Maximize education materials and resources, such as the *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices 2010* guidebook, to educate and engage planners, developers, decision-makers, community members, teachers, the general public, and other participants in wildfire hazard mitigation
- **Goal 4: Reduce Florida's hazard vulnerability through the application of scientific research and development**
- Objective 4.1: Continue to support Florida's public and private research institutes in their efforts to assess, understand, develop, apply, and educate about successful mitigation practices, policies, and programs
  - Objective 4.2: Collaborate with Federal Emergency Management Agency's (FEMA's) Emergency Management Institute and Florida's colleges and universities in the development of a higher education curriculum primarily designed to educate professionals in emergency management, as well as to integrate hazard mitigation curricula into existing career programs
  - Objective 4.3: Monitor climate change and sea level rise research; create a compendium of existing studies and data
  - WF Objective 4.4: Update the state's wildfire risk assessment as needed to provide the most accurate data for state and local decision makers
  - WF Objective 4.5: Apply wildfire research, best practices, and lessons learned as it becomes available to guide local and state plans, policies, and regulations to protect lives and property.
- **Goal 5: Protect the state's cultural, economic and natural resources**
- Objective 5.1: Support mitigation initiatives and policies that protect the state's cultural, economic and natural resources
  - Objective 5.2: Support land acquisition programs that reduce or eliminate potential future losses due to natural hazards and that are compatible with the protection of natural or cultural resources
  - Objective 5.3: Support the enhancement of natural resources wherein vulnerability to risk is reduced
  - Objective 5.4: Seek mitigation opportunities wherein losses will be reduced and opportunity exists for responsible economic growth
  - WF Objective 5.5: Support land management activities that reduce wildfire risk, such as prescribed burning and other appropriate fuel management techniques

- **Goal 6: Reduce vulnerability of state-owned facilities and infrastructure to natural hazards**
  - Objective 6.1: Seek opportunities to harden existing state-owned facilities
  - Objective 6.2: Develop a strategic partnership with agencies responsible for siting, design, and construction of state-owned facilities to establish practices that reduce losses from natural hazards
  - Objective 6.3: Investigate potential partnerships with risk management entities to enhance incentives for mitigation practices and viable insurance initiatives
  - WF Objective 6.4: Utilize the updated Florida Fire Risk Assessment to determine facilities and infrastructure highly vulnerable to wildfire hazard, including smoke effects, and assist with the evaluation of available mitigation options to address identified wildfire concerns. Include this information in CWPPs and LMSs
- **Goal 7: Foster interagency relationships for hazard mitigation across the state**
  - Objective 7.1: Work to better integrate mitigation policies, programs and practices between state agencies, public and private organizations for a comprehensive statewide approach to mitigation
  - Objective 7.2: Coordinate effective partnerships between state agencies for exemplary floodplain management of state-owned lands and facilities
  - WF Objective 7.3: Coordinate and foster partnerships between state agencies, public and private organizations, and other cooperating groups to improve, coordinate, and enhance wildfire hazard mitigation efforts

## 4.2 State Capability Assessment

This section of the Annex provides a detailed overview of Florida's capabilities to mitigate wildfire risk and guide development in hazard-prone areas in accordance with the goals and objectives included in **Section 4.1**. It responds to FEMA Requirement §201.4(c)(3)(ii), which indicates that the State Mitigation Strategy shall include the following:

*...[a] discussion of the state's pre-and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of state laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone areas [and] a discussion of state funding capabilities for hazard mitigation projects.*

The section has been organized as follows:

- **Section 4.2.1 Agency Capabilities** discusses those Federal, State, and nongovernmental agencies that participate in wildfire hazard planning, risk reduction, and/or mitigation and describes policies and programs aimed at wildfire hazard reduction.

- **Section 4.2.2 Plans, Policies, and Regulations** reviews new, updated, and existing legislation that is applicable to wildfire hazard mitigation and development in wildfire-prone areas.

Relevant information from Section 4.2 of the SHMP has been included in this section where applicable.

### 4.2.1 Agency Capabilities

There are many Federal, State, local government, and nongovernmental agencies that perform duties related to the mitigation, response, or suppression of wildfire hazards. The purpose of this section is to focus on those agencies that deliver primary support to wildfire mitigation activities, such as fuel management, education and outreach, or the implementation of plans and policies. An overview of Federal agencies involved in wildfire mitigation activities has been included for a better understanding of how their roles and responsibilities relate to and support state capabilities.

#### Federal Agencies and Councils

Wildfire mitigation is addressed by the Federal government through a comprehensive legislative framework. The Department of Homeland Security (DHS) FEMA offers a number of funding opportunities to implement state and local wildfire mitigation programs and actions.

Federal departments and agencies that have primary wildland fire management responsibilities are the United States Department of Agriculture (USDA) Forest Service (FS) and the Department of the Interior (DOI) Bureaus, including the Fish and Wildlife Service (FWS), National Park Service (NPS), Bureau of Land Management (BLM), and Bureau of Indian Affairs (BIA). These departments and agencies have the primary responsibility for addressing ongoing wildland management conditions such as those caused by ecosystem age, disease, or pest infestation spreading to and from the federal lands onto adjacent non-federal lands. While these and other Federal agencies have the primary authority to protect the watersheds, forests, soils, and timber resources and address forest management conditions, they also have authority to address fire threat reduction activities, such as hazardous fuels reduction, with primary attention to areas on or in the vicinity of federal lands.

Healthy Forests Restoration Act (HFRA) of 2003 (see **Section 4.2.2, Plans, Policies, and Regulations**) improved the capacity of the USDA and the DOI to conduct hazardous fuels reduction projects on National Forest System, BLM, BIA, NPS, and FWS lands aimed at protecting communities, watersheds, and certain other at-risk lands from catastrophic wildfire, to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape, and for other purposes.

Structural fire protection is the responsibility of tribal, State, and local governments. Federal agencies may assist with exterior structural protection activities under formal Fire Protection Agreements that specify the mutual responsibilities of the partners, including funding. Some Federal agencies have full structural protection authority for their facilities on lands they administer and may also enter into formal agreements to assist tribes, State, and local governments with full structural protection.

➤ **Department of Homeland Security**

**Federal Emergency Management Agency**

The Federal Emergency Management Agency of the DHS is authorized to provide funding for the purpose of reducing or eliminating risks to property and human life from future hazard events, including wildfire, through a number of programs including:

- Hazard Mitigation Grant Program (HMGP)
- Pre-Disaster Mitigation (PDM)
- Assistance to Firefighters Grant (AFG)
- Fire Prevention and Safety Grant
- Assistance to Firefighters Station Construction Grants
- Staffing for Adequate Fire & Emergency Response Grants

Additional information about the programs and services provided by FEMA can be found on the web at [www.fema.gov/](http://www.fema.gov/) and in **Section 4.5**.

➤ **United States Department of Agriculture**

**Forest Service**

The USDA implements its fire management policies through the Forest Service (FS). The FS provides state support for National Forests in Florida and its surrounding communities for wildfire suppression, hazardous fuel reduction, environmental rehabilitation, and restoration and community assistance. The FS provides technical and financial assistance to private landowners, State agencies, tribes, and community resource managers to help sustain the nation's urban and rural forests and to protect communities and the environment from wildland fires. The State of Florida is home to three federally-designated National Forests: Apalachicola, Osceola, and Ocala. Combined, National Forest lands in Florida cover more than 1.2 million acres in North and Central Florida. The FS also manages the 1,400-mile Florida National Scenic Trail.

***The National Forests in Florida, Land and Resource Management Plan (1999):***

The purpose of the National Forests in Florida, Land and Resource Management Plan (Forest Plan) is to provide guidance for the overall management of the National Forests in Florida for 10 to 15 years. The Forest Plan is a framework for decision-making, not a list of specific projects. Land use determinations, management practices, goals, objectives, standards, and guidelines are elements of the Forest Plan's management directions. The Forest Plan also

contains monitoring strategies to provide for an adaptive approach to management where adjustments can be made during implementation.

*2009 Annual Monitoring and Evaluation Report:* This report documents the results of monitoring the Forest Plan including how well goals and objectives of the Forest Plan have been met, and how closely management standards have been applied in Fiscal Year 2009 (October 2008 to September 2009). The 2009 Annual Monitoring and Evaluation Report is located at [www.fs.fed.us/r8/florida/apalachicola/resources/planning.php?p=1.1.7.1](http://www.fs.fed.us/r8/florida/apalachicola/resources/planning.php?p=1.1.7.1).

*Fire Suppression:* The FS is the largest wildland firefighting organization in the world. The FS brings a professionally trained firefighting force, under principal-guided leadership, to manage forest fires on national forest lands and with a cooperative interagency approach with other federal, state, local, and tribal governments to control fires and manage wildland fires on other lands.

*Fuel Reduction:* The FS uses prescribed burning, mechanical fuels removal, and habitat improvement activities to reduce fuel loading on National Forests in Florida and its surrounding communities. The goal of these activities is to reduce wildfire size and intensity.

*Community Wildfire Protection Plans:* The HFRA of 2003 provided communities with an opportunity to influence where and how Federal agencies implement fuel reduction projects on federal lands and, often more important to local communities, how funds are allocated for fuel management projects on non-federal lands. A Community Wildfire Protection Plan (CWPP) is an effective way to take advantage of this opportunity. Communities with CWPPs in place are given priority for funding of hazardous fuels reduction projects carried out under the auspices of the HFRA. In 2010, the State of Florida led an initiative, funded through the American Recovery and Reinvestment Act of 2009, to develop 10 countywide CWPPs. Additional details on this state initiative are located at [www.wildfiremitigation.com](http://www.wildfiremitigation.com) (See also Community Wildfire Protection Plans under **Department of the Interior**).

*Fire Prevention and Education Teams:* Federal and State wildland agencies support the need for wildfire loss prevention and mitigation by making technical specialists available for Fire Prevention and Education Team assignments to areas that are experiencing severe wildland fire indices. These teams coordinate with local agencies and communities to reduce loss of life and damage to property and resources, which reduces the cost of wildfire suppression and improves interagency capabilities. The teams consult with local residents to help reduce the number of human-caused fires and implement fire prevention and education programs. More information can be found at [www.fs.fed.us/r8/fireprevention/resources.php?p=1.1.3.4](http://www.fs.fed.us/r8/fireprevention/resources.php?p=1.1.3.4).

*State Fire Assistance Program:* The State Fire Assistance (SFA) Program provides financial and technical assistance to states and communities for wildland fire management. SFA helps ensure preparedness of the state and local firefighting resources, enabling them to effectively address all hazard events as well as respond to wildland fire situations. For more information, see **Section 4.5**.

➤ **Department of the Interior**

The Secretary of the Interior, through the Directors of the U.S. Fish and Wildlife Service (FWS), National Park Service (NPS), Bureau of Land Management (BLM), and the Deputy Commissioner of the Bureau of Indian Affairs (BIA) is responsible for wildland fire management activities for the Department of the Interior (DOI) (including such activities when contracted for, in whole or in part, with other agencies or tribes) under the statutes cited in DOI Departmental Manual Part 620 DM 1.1.

These land management activities assist state and local jurisdictions in efforts to protect the development in fire-prone areas in forests, rangelands, and grasslands. Land management activities include wildfire mitigation through prescribed burning and managing of public lands. The DOI can also bring additional capabilities for wildfire response and suppression as part of a larger federal response when requested by the state and approved by the Secretary of the Interior. The operational role of DOI agencies as partners in the wildland-urban interface include wildland firefighting, hazard fuels reduction, cooperative prevention and education, and technical assistance.

*Community Wildfire Protection Plans:* The HFRA of 2003 provided communities with an opportunity to influence where and how Federal agencies implement fuel reduction projects on federal lands and, often more important to local communities, how funds are allocated for fuel management projects on non-federal lands. A CWPP is an effective way to take advantage of this opportunity. Communities with CWPPs in place are given priority for funding of hazardous fuels reduction projects carried out under the auspices of the HFRA. (See also the description under **Forest Service**).

*Fire Prevention and Education Teams:* The DOI makes technical specialists available for Fire Prevention and Education Team assignments to areas that are experiencing severe wildland fire indices. These teams assist the local unit in preventing unwanted human-caused wildfires. (See also the description under **Forest Service**).

*Rural Fire Assistance Program:* The Rural Fire Assistance (RFA) program funds are appropriated by Congress annually. RFA is intended to increase local firefighter safety and enhance the fire protection capabilities of Rural Fire Departments by helping them meet accepted standards of wildland fire qualifications, training, and performance for initial and extended attack at the local level. The RFA program supports the overall goals of the National Fire Plan by improving the capacity and capability of local fire departments to protect their communities from the effects of wildland fire. More information can be found in **Section 4.5**.

*Fuel Management Programs:* The DOI uses a variety of types of hazardous fuel reduction treatments including mechanical, prescribed fire, wildland fire use, and other treatments which support fuels and fire management purposes. Treatments are planned and implemented within the wildland-urban interface community as well as outside the community in the surrounding ecosystem.

## **U.S. Fish and Wildlife Service**

The FWS is the Federal agency principally responsible for conserving, protecting, and enhancing fish, wildlife, and plants and their habitats.

*Fire Management Program*: The Fire Management Program administered as part of the National Wildlife Refuge System under the Division of Natural Resources – protects and manages burnable acres on all FWS lands to ensure healthier ecological conditions, lower future risk of damaging fire, and protect communities in wildland-urban interface areas. The program also provides mutual aid to other Federal, State, and local fire management agencies and is a member of the National Wildfire Coordinating Group, a consortium of federal and state fire managers that determines standards for wildland fire training and operations. The team of fire management professionals has significant expertise in fire planning and operations, as well as other scientific and technical areas.

## **National Park Service**

There are 11 areas administered by the NPS within the State of Florida. The Director of the National Park Service is responsible to the Secretary of the Interior for fire management programs on all public lands administered by the NPS (National Interagency Fire Center, 2010). Fire management activities include fire response, preparedness, wildland fire prevention, fuels management, fire monitoring, and air quality and smoke management (National Park Service Manual 18, 2008).

*NPS Wildland Fire Management Strategic Plan (2008-2012)*: This plan represents input from all levels and disciplines within the NPS wildland fire program, from parks to the national office, as well as the NPS natural resources program and interagency partners. The format used identifies the relationship among goals, objectives, critical success factors, barriers, and strategies. Action plans will be developed and updated on an annual basis to carry out strategies that support the objectives. The Strategic Plan can be found at [www.nps.gov/fire/download/fir\\_wil\\_strategic\\_plan\\_2008-2012.pdf](http://www.nps.gov/fire/download/fir_wil_strategic_plan_2008-2012.pdf).

*Fuels Management*: The NPS uses prescribed burning, nonfire fuel treatments, and debris burning to reduce fuel loading on public lands that are managed by the NPS. The goal of these activities is to reduce wildfire size and intensity. Fuel management activities should be planned through the Action Plan in the NPS Wildland Fire Management Strategic Plan.

## **Bureau of Land Management**

The BLM undertakes a broad range of activities to safely protect the public, the natural landscape, wildlife habitat, and recreational areas from wildfire. BLM activities include fire prevention and suppression, preparedness, predictive services, fuels management, fire planning, community assistance, and public education. In recent years, more resources have been allocated towards reducing the risk and consequence of wildland fires; however, suppression, operations, and safety continue to be the core of the overall BLM fire program.

*Community Assistance:* The community assistance and protection program focuses on mitigation/prevention, education, and outreach. Mitigation/prevention experts address reduction of wildland fire threats and losses to communities and natural resources by taking action before a fire starts. The BLM also facilitates Firewise and other workshops to help people live safely in the wildland-urban interface. Other specialists assist communities by completing comprehensive wildland-urban interface community risk assessments and plans.

*Fuels Management Program:* The BLM's Fuels Management Program focuses on protecting communities and natural resources. Assistance to communities is accomplished through the RFA program and through mitigation/prevention, education, and outreach. Other specialists assist communities with their CWPPs.

### **Bureau of Indian Affairs**

The BIA assists tribes in managing their forest inventory and management planning, including the development of Integrated Resource Management Plans, timber sales management, forest protection (trespass, forest insect, and disease management), forest development, woodland management, and wildland fire management.

*Wildland Fire and Aviation Management Program:* The Wildland Fire and Aviation Management Program is responsible for the development of policies and standards for firefighting safety and training and for the prevention, suppression, and use of wildland fires on Indian Trust Lands. The program's activities include wildfire mitigation, prescribed burns, fuel reduction, wildfire response and suppression, education outreach, assistance in the control of evasive species, and burned area rehabilitation projects.

*Seminole Tribe of Florida – Department of Fire Rescue, Wildland Division:* Although funded by the BIA, the Seminole Tribe of Florida's Fire Rescue Wildland Division is responsible for administering the Wildland Fire and Aviation Management Program on all Seminole Tribe of Florida forests and rangelands. The administrative change allows the Seminole Tribe of Florida to have more local control over wildfire mitigation activities including: prescribed burning, hazardous fuel reduction, establishing fire lines, burned area rehabilitation, and controlling invasive species. A significant portion of the Seminole Tribe of Florida lands is used for raising cattle and is vulnerable to smoke produced by prescribed burns. Strategic planning of prescribed burns has been essential for reducing wildfire risk while not harming the community's vulnerable assets.

### ➤ **Wildland Fire Leadership Council**

The Wildland Fire Leadership Council (WFLC) was established in April 2002 by the Secretaries of Agriculture and the Interior to provide an intergovernmental committee to support the implementation and coordination of Federal Fire Management Policy. A Memorandum of Understanding was signed in April 2010 by the Secretary of the Interior, Secretary of Agriculture, and Secretary of Homeland Security to authorize the continuation of the WFLC. The Council provides strategic oversight to ensure policy coordination, accountability, and



effective implementation of Federal Wildland Fire Management Policy (described in **Section 4.2.2**) and related long-term strategies to address wildfire preparedness and suppression, hazardous fuels reduction, landscape restoration and rehabilitation of the Nation's wildlands, and assistance to communities.

*National Cohesive Wildland Fire Management Strategy:* In response to requirements of the Federal Land Assistance, Management, and Enhancement (FLAME) Act of 2009, the WFLC directed the development of the National Cohesive Wildland Fire Management Strategy (Cohesive Strategy). The Cohesive Strategy is a collaborative process with active involvement of all levels of government and non-governmental organizations, as well as the public, to seek national, all-lands solutions to wildland fire management issues. The Cohesive Strategy will address the nation's wildfire problems by focusing on three key areas: Restore and Maintain Landscapes, Fire Adapted Communities, and Response to Fire. The Cohesive Strategy is being implemented in three phases, allowing stakeholders to systematically develop a dynamic approach to planning for, responding to, and recovering from wildland fire incidents. This phased approach is designed to promote dialogue between national, regional and local leadership. The Cohesive Strategy can be found at [www.forestsandrangelands.gov/strategy/documents/reports/1\\_CohesiveStrategy03172011.pdf](http://www.forestsandrangelands.gov/strategy/documents/reports/1_CohesiveStrategy03172011.pdf).

## State Agencies and Organizations

At the state level, there are a number of diverse agencies and organizations that are currently working to address wildfire mitigation including: the Department of Agriculture and Consumer Services (DACs) Florida Forest Service (FFS); Department of Business and Professional Regulation (DBPR); Department of Economic Opportunity (DEO); Division of Community Development (DCD); the Division of Emergency Management (DEM) Bureau of Mitigation; the Department of Environmental Protection (DEP) Divisions of State Lands, Office of Greenways and Trails (OGT), Recreation and Parks, Office of Coastal and Aquatic Managed Areas (CAMA); the Department of Financial Services (DFS) Division of State Fire Marshall; the Florida Fish and Wildlife Conservation Commission (FWC); Regional Planning Councils; and Water Management Districts.

### ➤ **Department of Agriculture and Consumer Services**

#### **Florida Forest Service**

The Florida Forest Service is housed within the DACs. Through Chapter 590 of the Florida Statutes (F.S.), the FFS is given the primary responsibility for prevention, detection, and suppression of wildfires wherever they may occur. This mandate requires the FFS to be capable of mitigating and suppressing wildfires on over 34 million acres of public and private lands. The FFS is also responsible for the management of 35 state forests, which total over 1,052,000 acres, and cooperates with other state and local agencies for the management of additional acreage.

The FFS's mitigation responsibilities and activities are applicable to both pre- and post-disaster situations, and include maintaining the Florida Wildland Fire Risk Assessment System (FL FRAS), conducting fuel management activities; establishing pre-suppression firelines, supporting the development of CWPPs, overseeing the implementation of the Florida Firewise Communities Program, and disseminating best practices and wildfire mitigation guidance through support of publications such as *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices 2010*. Programs are coordinated locally through mitigation specialists located in FFS field offices.

*Fire Prevention and Education Teams:* The FFS supports the need for wildfire loss prevention and mitigation by making technical specialists available for Fire Prevention and Education team assignments to areas that are experiencing severe wildland fire indices. These teams coordinate with local agencies and communities to reduce loss of life and damage to property and resources, which reduces the cost of wildfire suppression and improves interagency capabilities. The teams consult with local residents to help reduce the number of human-caused fires and implement fire prevention and education programs.

*Florida Firewise Communities:* This interagency planning and mitigation program led by the FFS targets the growing problem of wildfire property losses and damages in the wildland-urban interface. It educates citizens and community leaders on the threat of interface fires and promotes the inclusion of Florida citizens as partners with the fire service community in mitigation and fire prevention. The FFS coordinates Florida-specific workshops aimed at local planners, fire officials, emergency managers, developers, homeowners, insurance representatives, and elected officials. Workshops are held in local counties and municipalities so participants understand how to apply wildfire mitigation practices in their own neighborhoods. Communities are encouraged to implement wildfire mitigation actions and apply for national recognition as a Firewise Community/USA.

The Florida Firewise Communities website ([www.fl-dof.com/wildfire/firewise\\_index.html](http://www.fl-dof.com/wildfire/firewise_index.html)) maintained by the FFS represents a successful partnership of private and government agencies. Direct information on Firewise concepts involving landscaping, building, firefighter safety, and other topics are available online at [www.firewise.org](http://www.firewise.org). A brochure entitled "Are You Firewise Florida?" and posters relating to the Firewise program have been developed to increase awareness and understanding of the Florida Firewise Communities messages.

The following lists the current nationally recognized Firewise Communities/USA in Florida as of July 2011 and the year that they were originally recognized:

- Baldwin, Baldwin 2010
- Blue Jordan Forest, Frostproof, 2010
- Buckhead Ridge, Okeechobee, 2009
- Caloosa, Palm Beach Gardens, 2005
- Canterbury Lakes, Hernando, 2007
- Country Place of Martin County, Palm City, 2006
- Cypress Knoll, Palm Coast, 2004
- DeBary Golf and Country Club, 2010
- Fiddler's Creek, Naples, 2010
- Grand Haven, Palm Coast, 2009
- Great Outdoors RV Nature & Gold Resort, Titusville, 2010
- Harbor Isles Manufactured Homes, Venice, 2007
- Indian Hammock, Okeechobee, 2006
- Indian Lake Estates, Indian Lake Estates, 2009
- Indian River Estates, Ft. Pierce, 2007
- Indianwood, 2010
- Key Marco, Marco Island, 2008
- La Casa Mobile Home Park, North Port, 2008
- Lakeport, Okeechobee, 2009
- Lakewood, Starke, 2003
- Lazy River Mobile Home Village, North Port, 2007
- Leisure Lakes, Lake Placid, 2008
- Moore Haven, Moore Haven, 2008
- Muse, LaBelle, 2005
- Nassau Oaks, Callahan, 2008
- Ortona, Moore Haven, 2009
- Palmdale, Moore Haven, 2008
- PGA Village of St. Lucie County, Port St. Lucie, 2008
- Pioneer Plantation, Hendry County, 2004
- Placid Lakes, Lake Placid, 2005
- Prairie Creek Park, Punta Gorda 2011
- Quail Ridge, Havana, 2008
- River Camps on Crooked Creek, Panama City Beach, 2004
- River Ranch Resorts, Phase 1, River Ranch, 2011
- Riverwood, Port Charlotte, 2010
- Sabalwood, New Port Richie, 2008
- Savanna Club of St. Lucie, Port St. Lucie, 2007
- Seven Lakes Association, Fort Myers, 2010
- South Gulf Cove, South Gulf Cove, 2007
- St. James Bay, Carrabelle, 2008
- Summer Camp, St. James Island, 2007
- Sun N Lakes of Sebring, Sebring, 2008
- Sweetwater, Sweetwater 2010
- Taylor, Sanderson, 2008
- The Resort on Carefree Boulevard, North Fort Myers, 2006
- The Tree Tops at Ranger Point, Port Charlotte, 2007
- The Village at Riverwalk, North Port, 2007
- Vanderbilt Country Club, Naples, 2009
- Verandah, Fort Myers, 2003
- Veronawalk, 2010
- Walden Woods, 2010
- Washington Park, Moore Haven, 2009
- Wedgefield, Orange County, 2002
- Westgate, River Ranch, 2010
- Woodland Estates, North Port, 2006

*Florida Wildland Fire Risk Assessment System:* The purpose of FL FRAS is to identify the potential for serious wildfires and prioritize areas for mitigation options. FL FRAS, the web-based Florida Fire Risk Assessment application, can be accessed at: [www.fl-dof.com/wildfire/wf\\_fras.html](http://www.fl-dof.com/wildfire/wf_fras.html). As of July 2011, FL FRAS is being updated to reflect current conditions and the addition of a canopy layer. Results can be used to:

- objectively measure relative wildfire risk in Florida communities;
- locate opportunities for interagency planning;
- identify opportunities for wildfire mitigation measures;
- facilitate communication among agencies to define priorities and improve emergency response to wildfires;
- develop a refined analysis of a complex landscape using GIS; and
- facilitate communication with local residents to address community priorities and needs.

An assessment of community wildfire risk is an essential part of the hazard mitigation process and is required to obtain Firewise Community/USA recognition. As more communities participate in the Florida Firewise Communities Program, more neighborhoods will be looking to the FFS, as well as other local and State agencies, for assistance in completing wildfire risk assessments. FL FRAS mapping technology allows communities to identify areas susceptible to wildfire and is a great resource for determining a community's wildfire risk and identifying those areas in need of fuel management or other risk reduction activities.

*Fuel Management:* The FFS uses prescribed fire and mechanical methods to reduce hazardous fuel loading on public and privately owned lands. The goal of these activities is to reduce wildfire size and intensity. The FFS also provides technical assistance to communities contracting for fuel management and often provides fuel management activities at little or no cost to homeowners. The FFS has four regional Fire Management Teams equipped to provide fuel management services. Local FFS Center and District Field Units also have this ability.

*Information and Education:* The FFS uses various media outlets such as television, newspapers, radio, billboards, movie theaters, and local flyer distribution to inform the public about current wildfire conditions, wildfire suppression progress, actions homeowners can take to lower risk, and wildfire prevention activities. This information, in addition to wildfire risk reduction information, is updated and available on the FFS website at [www.fl-dof.com](http://www.fl-dof.com).

FFS Center and District Field Units also engage local governing bodies and LMS working groups to alert them to measures they could implement to improve resiliency such as developing CWPPs or changing or instituting local comprehensive plans, ordinances, and codes that can effectively reduce wildfire risk. They assist with the development of the wildfire section of the LMSs.

*Fireline Establishment:* At the request of landowners, the FFS will plow pre-suppression firelines in locations designated by landowners or their agents for a specified rate. In many conditions, pre-suppression firelines may reduce residential wildfire risk. Well-maintained firelines may reduce chances wildfire will reach populated areas as well as reduce time needed to contain a wildfire. This helps ensure the most effective and efficient use of resources.

*Response to Wildfires:* In the State of Florida, there is a partnership effort between the FFS and local fire agencies. When a wildfire occurs, the notification is processed through the local 911 system or FFS dispatch. In the event that the fire is reported through the 911 system, the local fire department responds and the FFS is notified. As the first responder, the local department may arrive on scene first and determine the need for forestry resources to continue. In some instances, the FFS, or the appropriate Federal agency on federal property, may be dispatched and arrive first and determine the need for additional resources.

The FFS has statutory responsibility for all wildfires wherever they may occur within the State of Florida. Local fire agencies have responsibility for structure fire suppression/protection within their jurisdictional boundaries. Using the National Incident Management System (NIMS) model, the first arriving agency will establish a command structure for the incident. Command responsibility for the incident can be transferred and/or modified as necessary as additional units or agencies arrive on the scene. In many cases of wildfire the FFS will assume command of the incident. However, there is often joint responsibility to combat the spread of these fires by both the local agencies and the FFS. In some wildfire incidences, a unified command between the local fire department and the FFS may be established; all agencies must work together and support each other in a unified command operation to provide the most efficient use of resources.

Additional information about the programs and services provided by the FFS can be found on the FFS website at [www.fl-dof.com](http://www.fl-dof.com).

➤ **Department of Business and Professional Regulation**

The Department of Business and Professional Regulation (DBPR) administers statewide building codes. Under the umbrella of DBPR is the Florida Building Commission, a 23-member body responsible for developing, maintaining, and interpreting the Florida Building Code. The Florida Building Code became effective on March 1, 2002, and replaced more than 400 local and state building codes. The Florida Building Code incorporates the building, electrical, plumbing, mechanical, and administrative codes, as well as the accessibility, energy, coastal, manufactured buildings and State agency codes into a single set of documents to direct public and private building throughout the state. The code focuses on public safety, increases local enforcement powers, and incorporates state-of-the-art hurricane protection. Although applicable statewide, local governments now have the authority to both interpret and enforce the code and may amend the code to be more stringent when justified by local conditions. Local governments have the authority to conduct plan reviews and inspections of state-owned buildings, except for correctional and health care facilities. Local school boards, community colleges, and universities may opt to use their local

government as the code enforcement authority or may continue to enforce the code themselves.

➤ **Department of Economic Opportunity**

The Department of Community Affairs (DCA) along with the Agency for Workforce Innovation and Office of Tourism, Trade and Economic Development merged in 2011 into the Department of Economic Opportunity (DEO). The Division of Community Planning and the Division of Housing and Community Development have become the Division of Community Development (The Division) as a part of this re-organization. The DEO, Division of Community Development is Florida's land planning agency responsible for guiding the state's growth and development. Many of the housing and community development programs and activities implemented through the department have direct and indirect impacts on the state's risk to wildfire.

**Division of Community Development**

The Division of Community Development (DCD) plays a lead role in implementing the state's planning activities. DCD can facilitate discussions between local government planning officials and emergency management planners regarding mitigation priorities and the use of comprehensive planning and land use strategies to avoid development in hazardous areas and to reduce future damage to property and public facilities.

DCD provides technical assistance for the evaluation of the risks and vulnerabilities facing communities, and assists with integration of hazard mitigation into local planning documents for local governments. In cooperation with DACS, in 2004 the Department of Community Affairs produced a best development practices guidebook entitled *Wildfire Mitigation in Florida: Land Use Planning Strategies and Best Development Practices*, which is currently being updated by the FFS. The guidebook, newly re-titled *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices (2010)*, will reflect up-to-date information and resources to help decision-makers understand and limit the vulnerability of life and property to wildfires throughout Florida. The guidebook deals specifically with activities that can be implemented by developers, individual homeowners, neighborhoods, communities, and local governments. The activities identified both reduce wildfire risk and maximize ecological benefits. To facilitate implementation by local governments, the guidebook includes model language for comprehensive plan policies and for land development codes.

DCD also invests in communities in ways that affect their strength and economic viability. DCD administers grants and programs to meet the needs of local governments and the citizens of Florida. A number of their programs are related to disaster assistance, recovery, and mitigation, including: Florida Small Cities Community Development Block Grant Program, Community Development Block Grant Disaster Recovery Program, and Community Assistance Programs.

Grants/programs that could support wildfire mitigation include land acquisition programs, recovery programs, funds for weatherization, and funding for recreational space. The Weatherization Assistance Program provides grants to community action agencies, local governments, tribes, and nonprofit agencies to fund energy-saving repairs to low-income homes throughout the state. The grants may be used for insulation, weather stripping, water heater wraps, and the reduction of air infiltration. The program may also fund the repair or replacement of inefficient heaters and air conditioners.

➤ **Division of Emergency Management**

The State Emergency Management Act gives the Division of Emergency Management (DEM) responsibility to create and maintain a comprehensive statewide program of emergency management. The statewide emergency management program must ensure that the state can adequately prepare for, respond to, recover from, and mitigate all hazards to which the state is vulnerable.

The Division prepares and implements the SHMP and the Florida Comprehensive Emergency Management Plan and also routinely conducts extensive exercises to test state and county emergency response capabilities.

**Bureau of Mitigation**

DEM's Bureau of Mitigation acts as a functional unit to execute risk-reduction projects on behalf of local communities. Grant specialists research appropriate funding sources to leverage dollars effectively for maximum mitigation efforts. Sometimes this includes working with other agencies on joint projects or separating projects into smaller eligible components that individually solve mitigation problems and enable a community to more effectively utilize multiple grant programs.

**Hazard Mitigation Grant Program:** The overall goal of the Hazard Mitigation Grant Program (HMGP) is to fund cost effective measures that reduce or eliminate the long-term risk of damage from natural hazards. Although the HMGP is federally funded, the program is administered through a partnership arrangement with the DCA. DEM is the lead state administrative agency but it is supported by the Divisions of Housing and Community Development and Community Planning, as well as the Florida Housing Finance Corporation, Florida Coastal Management Program, and the Florida Communities Trust Program. More information can be found in **Section 4.5**.

**Pre-Disaster Mitigation Program:** Pre-Disaster Mitigation (PDM) is a competitive federal grant program developed to assist state, local, and tribal governments to plan and implement cost-effective hazard mitigation activities. The intent of the program is to reduce overall risk to people and property while also minimizing the cost of disaster recovery. DEM is responsible for applying to FEMA for funding under this program although local governments are encouraged to submit projects to DEM who can apply for funding on their behalf. DEM reviews submitted projects to verify appropriateness, consistency with state and local mitigation strategies, cost-benefit, eligibility, technical feasibility, and

completeness before submitting the project to FEMA. More information can be found in **Section 4.5**.

***Mitigation Planning Unit:*** The mitigation-planning unit is responsible for reviewing Local Mitigation Strategies, mitigation components of other plans such as local Comprehensive Emergency Management Plans, and various state strategies and submitted mitigation projects for eligibility. The unit also works on the continuous update of the SHMP, implements outreach activities, fosters local partnerships, and oversees mitigation planning and education grants.

***Fiscal Unit:*** The fiscal unit manages all financial aspects of pre and post-disaster mitigation grant programs. This unit has been strengthened in recent years to provide a more comprehensive tracking system for mitigation efforts statewide.

### ➤ **Department of Environmental Protection**

The Department of Environmental Protection (DEP) is the lead state agency for environmental protection. DEP also has program components involved with resource management and stewardship activities. DEP administers regulatory programs and issues permits for air, water, and waste management. It also oversees the state's land acquisition and water management programs. DEP additionally manages the Florida Park Service.

Housed within DEP are a number of divisions and offices that implement a variety of programs that promote wildfire mitigation. They include: the Division of State Lands, the Office of Greenways and Trails, the Division of Recreation and Parks, and the Office of Coastal and Aquatic Managed Areas.

#### **Division of State Lands**

The Division of State Lands is responsible for acquiring, administering, and disposing of state lands owned by the State Board of Trustees of the Internal Improvement Trust Fund. In addition, the Division of State Lands maintains records and data for these lands.

***Florida Forever Program:*** In 1999, the Florida Legislature enacted the current Florida Forever Program for the acquisition of lands, water areas, and related resources for outdoor recreation and natural resource conservation purposes. The public acquisition of land and conservation easements avoids future developments in timberlands, wetlands, and coastal areas, which in turn reduces or eliminates potential impacts of wildfire. The upland lands purchased through the Florida Forever Program are owned and managed by a variety of public agencies. These agencies employ a variety of wildfire mitigation methods in reducing fuel loads thus minimizing the potential of wildfires. In years past, the Florida Forever program also funded the Florida Recreation Development Assistance grant program, the Rural and Families Lands Program in the Department of Agriculture, and the Florida Communities Trust grants programs, however, funding was severely cut in 2009 and 2010.



*Florida Communities Trust Program:* The Florida Communities Trust is a state land acquisition grant program that provides funding to local governments and eligible nonprofit environmental organizations for the acquisition of community-based parks, open space, and greenways that further outdoor recreation and natural resource protection needs identified in local government comprehensive plans. The program is administered by DEP and funded through the Florida Forever Program. The program is unique in that local governments and nonprofit organizations hold title and manage lands purchased with Florida Communities Trust funds. Funding for the Florida Forever Program was severely cut in 2009 and 2010.

### **Office of Greenways and Trails**

The Office of Greenways and Trails (OGT) serves as a clearinghouse for the growing greenways and trails system in Florida and plays the leading role in implementing the Statewide System of Greenways and Trails. It serves as staff to the Florida Greenways and Trails Council; provides technical assistance to communities, developers, and landowners; provides information regarding recreational opportunities on greenways and trails in Florida; and develops information and publications to educate the public about the benefits of greenways and trails.

The OGT manages the natural resources within statewide greenways and trails and on the Marjorie Harris Carr Cross Florida Greenway, which includes prescribed burning of forest areas to reduce naturally occurring fuels within the areas. Reduction of forest fuels reduces the risk and loss associated with major wildfires.

### **Division of Recreation and Parks**

The state park system includes 160 parks and covers more than 704,000 acres throughout the state. Of the total managed acres, over 258,000 acres are actively managed through the application of prescribed fires. The Division of Recreation and Parks utilizes prescribed burns to restore and/or enhance natural communities and to reduce undergrowth and fuel loads to minimize the potential of wildfires. Other mitigation and land management activities include mechanical treatments to overgrown fire-type natural communities prior to prescribed burning, mechanical and/or chemical treatments to exotic plants, and public outreach and interpretation to build public understanding.

### **Office of Coastal and Aquatic Managed Areas**

The Office of Coastal and Aquatic Managed Area's (CAMA) mission is to protect, conserve, and manage Florida's coastal and aquatic ecosystems through environmental education, resource management, research, environmental monitoring, and partnerships. In addition to managing over 4 million acres of submerged land, CAMA is also the lead manager for thousands of acres of uplands and employs prescribed burning to enhance habitat restoration and public safety by effectively managing excessive fuel loads on their land. CAMA conducts annual public workshops regarding the use of prescribed fire as a tool for ecological restoration and wildfire mitigation within communities, distributes

Florida Firewise publications to local landowners, and hosts FFS training classes for prescribed burners.

➤ **Department of Financial Services**

The Florida Department of Financial Services is responsible for overseeing the state's finances, collecting revenue, paying state bills, auditing state agencies, regulating cemeteries and funerals, and handling fires and arsons. The Department has 13 divisions; the most relevant division to wildfire mitigation is the Division of State Fire Marshall.

**Division of State Fire Marshall**

The mission of the Division of State Fire Marshall is “to reduce the loss of life and property to fire and other disasters statewide through internal and external leadership, standards and training, prevention and education, and fire and arson investigation.” The State Fire Marshall has authority to implement rules that conform to the standards of fire safety to protect Floridians from fire hazards.

The Division’s main office is located in Tallahassee and there are numerous field offices located throughout Florida. The Division has four bureaus:

- Bureau of Fire Prevention
- Bureau of Fire and Arson Investigations
- Bureau of Fire Standards and Training
- Bureau of Forensic Fire and Explosive Analysis

The Bureau of Fire Prevention administers the Florida Fire Prevention Code. The code is adopted by the State Fire Marshall at three-year intervals as required by § 633.0215, F.S.

The Florida Fire Prevention Code is adopted by operation of law in every local jurisdiction with fire safety responsibilities according to the provisions of subsection 633.025(1), F.S. Fire code provisions are enforced by the local fire official within each county, municipality, and special fire district in the state. The Division inspects over 14,000 state and over 16,000 public and private buildings a year for safety, and reviews construction plans and documents for new construction, alterations, and renovations on all state-owned and state-leased buildings for Florida Fire Prevention Code compliance.

The Division houses the Office of Fire and Emergency Incident Reporting section. This section collects over 1,800,000 fire and emergency reports per year. Florida’s reports are also used to form the basis for the State Fire Marshall's Annual Report "Florida Fires." The Florida Fire Incident Reporting System (FFIRS) is a means for fire departments to report and maintain computerized records of fires and other fire department incidents in a uniform manner. The Florida fire data along with other states fire data are entered into a national database known as National Fire Incident Reporting System.

The Division of State Fire Marshall is the primary agency responsible for ESF 4 – Firefighting. Supporting agencies are the FFS and the Florida Fire Chiefs' Association. The purpose of ESF 4 is to provide state support to local governments and to describe the use of state resources to detect and suppress urban, rural, and wildland fires resulting from or occurring coincidentally with a significant disaster condition or event.

The State Fire Marshall office issues over 3,000 basic fire fighter certifications a year. Students attend one of 41 recognized training centers located across the state or the Florida State Fire College. The State Fire College trains over 6,000 students per year in a variety of certification and professional development programs that include Pump Operator, Fire Officer, Fire Investigator, hazardous materials (HAZMAT), and more.

➤ **Florida Fish and Wildlife Conservation Commission**

The Florida Fish and Wildlife Conservation Commission (FWC) is a Florida Government agency whose mission is to manage fish and wildlife resources for their long-term well-being and the benefit of the people. FWC partners with private landowners, nongovernmental organizations, businesses, universities, and Federal, State, and local governmental agencies. One of FWC's primary funding partners is the U.S. Fish and Wildlife Service through the Federal Aid Program.

FWC is involved in managing more than 150 Wildlife Management Areas (WMA) and Wildlife Environmental Areas across the state encompassing more than 5.9 million acres of public and private land. FWC is the lead managing agency for more than 1.4 million acres while the remaining acreage is primarily managed by other Federal, State or local government agencies, private landowners, and nongovernmental organizations. FWC acts as a cooperator on these lands and is responsible for public hunting administration, law enforcement, and wildlife technical assistance. In addition to public land management, FWC has a Landowner's Assistance Program (LAP). This program provides technical assistance and funds to interested landowners for the purpose of managing fish and wildlife resources on their lands.

FWC uses a variety of methods to manage the lead WMAs and encourages the use of these methods through the LAP. To the extent possible, prescribed fire is used to restore and maintain appropriate ecosystems. FWC burns are authorized by the FFS. Other mitigation and land management activities include mechanical treatments to overgrown scrub prior to prescribed fire, mechanical and/or chemical means to treat exotic plants, and public outreach and education to build public understanding.

➤ **Regional Planning Councils**

There are 11 Regional Planning Councils (RPCs) in Florida. Each RPC includes members from counties and municipalities located within its boundaries as well as gubernatorial appointees who represent the state. RPCs provide technical

assistance to plan for and coordinate intergovernmental solutions to growth-related problems.

RPCs' role in wildfire mitigation is linked to planning and coordination. RPCs are positioned to plan for and coordinate intergovernmental solutions to growth-related problems on larger issues. This can include planning and development decisions related to the wildland-urban interface. RPCs also provide technical assistance to local governments, which can include post-disaster redevelopment planning and hazard mitigation policy on issues such as wildfire.

### ➤ **Water Management Districts**

DEP has “general supervisory authority” over Water Management Districts, which are regional government entities (F.S. Ch. 373). There are five districts in the state, with boundaries determined by watersheds and other natural, hydrologic, and geographic features. Each works with the state to manage and protect water resources in times of crisis or emergency, as well as to manage and protect those same resources for the short and long term. In 1972, with the Florida Water Resources Act (F.S. Ch. 373), the state expanded the responsibilities of water management districts to include regional water resource management and environmental protection as well as flood control and water supply.

In terms of their role in wildfire mitigation activities, water management districts closely monitor drought conditions and develop water management plans for water shortages. When necessary, districts will issue burn bans on district lands open for recreation (e.g., recreational campfires, etc.) and/or water restrictions for the affected area.

## **Nongovernmental Organizations**

Nongovernmental organizations play a significant role in wildfire mitigation in Florida especially in regards to public education, services for industry professionals, and interagency collaboration. Active organizations and committees include:

- Florida Fire Chiefs' Association (FFCA) Wildland Fire Committee;
- Federal Alliance for Safe Homes (FLASH);
- Florida Home Builders Association (FHBA);
- Disaster Contractors Network;
- The Nature Conservancy (TNC); and
- Insurance Institute for Business and Home Safety (IBHS).

### ➤ **Florida Fire Chiefs' Association**

The Florida Fire Chiefs' Association (FFCA) is a professional association that specializes in promoting and supporting excellence in fire and emergency services management through leadership, education, and advocacy. FFCA programs help members maintain and develop their management and leadership

skills. FFCA represents over 2,200 members who are involved in fire and emergency services.

### **Wildland Fire Committee**

This FFCA committee develops educational material and training programs for use throughout Florida. The purpose of the committee is to educate professionals and the public relating to hazards of the wildland-urban interface and planning for life and property protection.

### ➤ **Federal Alliance for Safe Homes**

Federal Alliance for Safe Homes (FLASH) is a nonprofit 501(c)3 organization committed to promoting life, safety, and property protection. The organization includes an alliance of private, public, and nonprofit partners dedicated to protecting families and homes from natural and manmade disasters, including wildfire.

The FLASH mission is to help reduce deaths, injuries, suffering, property damage, and economic losses caused by natural and manmade disasters. FLASH uses a social marketing philosophy to deliver disaster safety information. By creating awareness and fostering understanding, FLASH works to bring about acceptance and behavior change to both the public and disaster safety professionals. Initiatives combine current, reliable information about the latest tools and techniques to create safer, better-built homes while offering free consumer resources and referrals. Some FLASH initiatives include:

**Blueprint for Safety®:** This education program provides the latest in disaster-safe construction techniques for new and existing residential structures. It details code-plus best practices to harden residences and increase resiliency to disasters including wildfire. The program tools include classroom training courses, printed materials, contractor's field manual, CD-ROMs, interactive online tools, and free technical assistance through a toll-free hotline (1-877-221-SAFE).

**FLASH Cards:** This print campaign offers promotional cards featuring disaster safety information about a variety of topics including wildfire. The cards are easily co-branded for widespread distribution and are available in English and Spanish. They contain information about mitigation techniques and provide resource lists for more detailed and technical data.

**FLASH Insurance Guide:** An insurance guide available in English and Spanish presents a national overview of insurance coverage by peril coupled with relevant mitigation tips and techniques.

**Risk Mitigation Leadership Forum Series:** These collaborative events provide an organized setting for the exchange of ideas for disaster mitigation. Attendees include elected officials and representatives from corporate banking, insurance, academic, and research sectors as well as new nontraditional allies interested in disaster mitigation. The forum events helped facilitate a first-ever alignment of

environmental proponents and green stakeholders in the disaster mitigation movement.

➤ **Florida Home Builders Association**

The Florida Home Builders Association (FHBA) is a trade association representing the residential construction industry in Florida with 10,000 corporate members. FHBA is actively engaged in governmental affairs, political action, and legal defense programs designed to promote and protect homeownership opportunities in Florida. Numerous other services provided by FHBA to its members include continuing education, insurance, leadership training, and research and networking opportunities. Some of FHBA's education programs support implementation of structural mitigation including a series of courses on the building/structural component of the Unified Florida Building Code.

**Disaster Contractor's Network**

The Disaster Contractors Network (DCN) provides services and training to building professionals and is jointly supported by: the FHBA; the Associated Builders and Contractors of Florida (ABC); Florida Roofing, Sheet Metal and Air Conditioning Contractors Association (FRSA); Association of General Contractors (AGC); the Center for Disaster Risk Policy at Florida State University; Florida Department of Community Affairs; Florida Department of Business and Professional Regulation; and FEMA Region IV. The DCN provides online training offered through the Center for Disaster Risk Policy at Florida State University, which covers year-round mitigation activities and incentives.

➤ **The Nature Conservancy**

The Nature Conservancy (TNC) works to maintain fire's natural role in Florida landscapes in order to protect human needs and conserve the rich diversity of life in Florida's ecosystems. Working with partners, TNC engages in integrated fire management as an approach to addressing the problems and issues posed by both damaging and beneficial fires within the context of the natural environments and socioeconomic systems in which they occur. This is done by evaluating and balancing the relative risks posed by fire with the beneficial or necessary ecological and economic roles that it may play in a given conservation area, landscape, or region.

*Florida Fire Program:* TNC's Florida Fire Program utilizes a combination of site-based fire crews and Ecosystem Support Teams (structured to offer fire and upland restoration assistance to many partners) in order to perform prescribed fires in an attempt to restore and maintain ecologically appropriate fire regimes within a wide variety of ecosystems. This also helps keep nonnative, invasive species in check and natural areas from becoming overgrown. Regular prescribed fires, may reduce the intensity of a wildfire by reducing fuel loads. Members of the Conservancy's Florida Fire Program are highly skilled and experienced professionals that are National Wildfire Coordinating Group (NWCG) qualified and adhere to strict safety procedures to ensure the safety of the crew, nearby residents and private property.

➤ **Insurance Institute for Business and Home Safety**

The Insurance Institute for Business and Home Safety (IBHS) has developed a publication entitled *Guide to Protect Your Property from Wildfire: Florida Edition* to educate Florida's property owners about wildfire risks. The guide can be downloaded at [www.disastersafety.org/content/data/file/WLF\\_Florida.pdf](http://www.disastersafety.org/content/data/file/WLF_Florida.pdf) and contains a property assessment form, including a cost estimate tool, which will help home and business owners assess their wildfire risk and prioritize necessary retrofit projects.

## 4.2.2 Plans, Policies, and Regulations

### Federal Policies

➤ **The Federal Wildland Fire Management Policy**

The Federal Wildland Fire Management Policy was developed in 1995 and was further evaluated and updated in the 2001 Review and Update of the Federal Wildland Fire Management Policy. The 1995 Policy was created in response to the 1994 fire season to shift Federal agencies' philosophy toward fire from one of suppression to also include mitigation and prevention. The policy mandates that all federal lands with burnable vegetation have a fire management plan that includes fuel reduction strategies, and sets firefighter and public safety as the first priority. The 2001 update added that all fire management plans be based on sound science and that they incorporate mitigation, fuel maintenance, and rehabilitation that contribute to ecosystem sustainability.

The National Wildfire Coordinating Group (NWCG) is charged with implementing the final action items in the Interagency Strategy for the Implementation of the Federal Wildland Fire Management Policy, and provides operational clarification regarding specific policy items.

➤ **National Fire Plan**

The National Fire Plan (NFP) was developed in August 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities while ensuring sufficient firefighting capacity for the future. The NFP addresses five key points: Firefighting, Rehabilitation, Hazardous Fuels Reduction, Community Assistance, and Accountability. The USDA Forest Service and the Department of the Interior are responsible for implementing the NFP. The NFP provides technical, financial, and resource guidance and support for wildland fire management across the United States.

➤ **10-Year Implementation Plan**

At its inception in August 2001, the 10-Year Strategy and subsequent Implementation Plan was adopted by Federal agencies and western governors, in collaboration with county commissioners, tribal officials and other stakeholders. The Implementation Plan established a framework for protecting

communities and the environment and was developed in part, due to an awareness that the development of unnaturally dense, diseased or dying forests, and treatment of wildland fire had contributed to more severe wildland fires and created widespread threats to communities and ecosystems.

This plan brings together science, collaboration, and a clear roadmap to forest and rangeland health. It provides goals and measures so that progress on improving forest health and reducing risks to communities can be tracked. The 10-Year Strategy reinforces goals and updates tasks to reflect the current environmental and social challenges.

➤ **Healthy Forests Restoration Act**

The HFRA of 2003 was enacted to improve the Federal Government's capacity to conduct hazardous fuels reduction projects on public lands to protect communities, watersheds, and certain other at-risk lands from catastrophic wildfire, to enhance efforts to protect watersheds and address threats to forest and rangeland health, including catastrophic wildfire, across the landscape. HFRA provides the legislative framework for communities to develop CWPPs.

➤ **Federal Land Assistance, Management and Enhancement Act of 2009**

The FLAME Act of 2009 establishes an account to pay for fighting large, complex wildland fires. The legislation provides a separate budget for fighting the largest fires, so that adequate funding is available and so that the agencies' land management functions are not shorted.

➤ **Disaster Mitigation Act of 2000**

Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-390) provides new and revitalized approaches to mitigation planning. The DMA of 2000 is another example of federal guidance that can be used in support of wildfire mitigation. DMA 2000 requires local governments to adopt plans that include four main elements: 1) a planning process, 2) an assessment of risks, 3) a mitigation strategy, and 4) maintenance and updating process. A LMS implements requirements of DMA 2000 by addressing all hazards to which a county is at risk.

## State Statutes and Rules

➤ **2010 Florida Statutes, Chapter 590 – Forest Protection**

Chapter 590, Forest Protection, was enacted to define the FFS's powers, authority, and duties. The FFS's primary responsibility is to prevent, detect, and suppress wildfires wherever they occur. The FFS shall provide leadership and direction in the evaluation, coordination, allocation of resources, and monitoring of wildfire management and protection. The FFS shall also promote natural resource management and fuel reduction through the use of prescribed fire and other fuel reduction methods. The FFS may prescribe a burn of any area of



wildland within the State of Florida that is reasonably determined to be in danger of wildfire following proper notification of the property owner according to procedures specified in F.S. 590.125(4).

Chapter 590 authorizes the Commissioner of Agriculture to declare a severe drought emergency to affected areas throughout the State of Florida. A Severe Drought Declaration, by the Commission of Agriculture, outlaws any person within the State of Florida to set fire to, or cause fire to be set to, any wildlands, campfire, debris, or trash unless a written permit is obtained from the FFS.

➤ **Open Burning, Florida Administrative Code 5I-2.003-006, 2008**

Chapter 5I-2 Florida Administrative Code (F.A.C) – Open Burning establishes criteria for determining which types of open burning activities are allowed or prohibited within the State of Florida. Review Chapter 5I-22, F.A.C. – Open Burning for the comprehensive list of burning activities allowed and not allowed within the State of Florida at

[www.flrules.org/gateway/ChapterHome.asp?Chapter=5I-2](http://www.flrules.org/gateway/ChapterHome.asp?Chapter=5I-2).

➤ **Open Burning and Frost Protection Fires, Florida Administrative Code 62-256.100-800, 2008**

Chapter 62-256, F.A.C. – Open Burning and Forest Protection Fires defines and prohibits open burning activities for the State of Florida. Burning activities covered within Chapter 62-256, F.A.C. include:

- Agriculture and Silviculture Fires
- Burning for Cold or Frost Protection
- Land Clearing
- Industrial, Commercial, Municipal, and Research Open Burning
- Yard Trash Burning

Review Chapter 62-256, F.A.C. – Open Burning and Frost Protection Fires for the comprehensive list of burning activities covered in the administrative code at [www.dep.state.fl.us/air/rules/fac/62-256.pdf](http://www.dep.state.fl.us/air/rules/fac/62-256.pdf).

➤ **2011 Florida Statutes, Chapter 163, Part II – The Community Planning Act**

The Community Planning Act (Section 163.3167, F.S.) requires counties and municipalities to adopt a Comprehensive Plan. Current legislation does not require Florida communities to address wildfire hazard in their Comprehensive Plan. The Comprehensive Plan, however, lends itself well to addressing wildfire hazard issues through its ability to guide land uses and development patterns. Allowing development in wildfire-prone areas without considering alternative development patterns or mitigation increases wildfire risk to persons and property in a community. In addition, the inclusion of wildfire hazard issues in the Comprehensive Plan will strengthen support for future wildfire mitigation actions.

Both the Future Land Use Element (FLUE) and Future Land Use Map (FLUM) have great potential for protecting future development from wildfire. The FLUE designates the general distribution, location, and extent of future land uses for residential, commercial, industrial, agricultural, recreational, conservation, education, public, and other uses of land [Subsection 163.3177(6)(a), F.S., Florida Community Planning Act]. The FLUM graphically identifies the specific purposes for which land may be used and is based on a suitability analysis of existing vacant and undeveloped land.

➤ **2010 Florida Statutes, Chapter 252, Part 1 – Florida Military Affairs and Related Matters Emergency Management**

2010 Florida Statutes, Chapter 252, provide definitions of disaster-related incidents and emergency management activities. Activities authorized to the Division of Emergency Management include assistance in the prevention or mitigation of emergencies, which may be caused or aggravated by inadequate planning for, and regulation of, public and private facilities and land use. For additional information of Chapter 252, please refer to the Florida legislature's website at

[www.leg.state.fl.us/Statutes/index.cfm?App\\_mode=Display\\_Statute&URL=0200-0299/0252/0252ContentsIndex.html&StatuteYear=2010&Title=-%3E2010-%3EChapter%20252](http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0200-0299/0252/0252ContentsIndex.html&StatuteYear=2010&Title=-%3E2010-%3EChapter%20252).

➤ **1999 Florida Statutes, Chapter 633 – Fire Prevention and Control**

1999 F.S., Chapter 633 mandates that the State Fire Marshall enact the Florida Fire Prevention Code and the Life Safety Code which shall operate in conjunction with the Florida Building Code. The Florida Fire Prevention Code and Life Safety Code shall be adopted by each municipality, county, and special district with fire safety responsibilities. The minimum fire safety codes shall not apply to buildings and structures subject to the uniform fire safety standards under § 633.022, F.S. and buildings and structures subject to the minimum fire safety standards adopted pursuant to § 394.879, F.S. For additional information of Chapter 633, refer to the Florida legislature's website at

[www.leg.state.fl.us/statutes/index.cfm?App\\_Mode=Display\\_Statute&Search\\_String=&URL=Ch0633/Sec025.htm&StatuteYear=1999](http://www.leg.state.fl.us/statutes/index.cfm?App_Mode=Display_Statute&Search_String=&URL=Ch0633/Sec025.htm&StatuteYear=1999).

### 4.3 State and Regional Mitigation Projects

In accordance FEMA Requirement § 201.4(c)(3)(iii), **Appendix D** of this Annex includes the identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering. The State and Regional Mitigation Projects listed in **Appendix D** are specifically tailored to address wildfire risk throughout the State and are planned to be implemented by the following agencies: DEO, DCP, DEP Division of Recreation and Parks, DEP CAMA, DEP OGT, FFS, FWC, Northwest Florida Water Management District, South Florida Water Management District, Southwest Florida Water Management District, St. Johns River Water Management District, and Suwannee River Water Management District.

## 4.4 Local Capability Assessment

Local communities in Florida have a number of planning mechanisms already in place including Local Comprehensive Plans, LMSs, and CWPPs that can serve as opportunities to implement wildfire mitigation policy and programs. These initiatives are described in **Section 5.3** along with a general analysis of the effectiveness of each mechanism and the potential for mitigation initiatives to be incorporated within.

## 4.5 Funding Opportunities and Resources

This section provides information on funds and resources available to implement and/or support state and local wildfire mitigation activities in Florida. For additional information and details on hazard mitigation funding opportunities, see the SHMP Section 4.5, Funding Sources.

**Table 4.1. Overview of Funding Opportunities for Wildfire Mitigation Activities in Florida**

Funding or Resource Opportunity	Source	
	Federal	State
1. Hazard Mitigation Grant Program (HMGP)	X	--
2. Pre-Disaster Mitigation Grant Program (PDM)	X	--
3. Assistance to Firefighters Grant (AFG)	X	--
4. Fire Prevention and Safety Grant Program	X	--
5. National Fire Plan Grants	X	--
6. Assistance to Firefighters Station Construction Grants	X	--
7. Staffing for Adequate Fire & Emergency Response Grants	X	--
8. Secure Rural Schools and Community Self-Determination Act – Title III	X	--
9. State Fire Assistance (SFA)	X	--
10. Rural Fire Assistance Program (RFA)	X	--
11. Florida Division of Forestry Annual Budget	--	X
12. Emergency Management Preparedness and Assistance (EMPA) Competitive Grant Program	--	X

### 4.5.1. Federal Funding

#### ➤ Hazard Mitigation Grant Program

Description: The HMGP provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable

mitigation measures to be implemented during the immediate recovery from a disaster. A local match of 25% is required.

For wildfire mitigation projects, FEMA Mitigation Policy MRR-2-0801 adopted September 8, 2008, provides specific eligible activities for HMGP and PDM Grant Programs. Eligible activities include the following:

- Creating defensible space around structures
- Structural protection through ignition-resistant construction on new or existing structures
  - The project must be able to document that the structure already has defensible space or defensible space activities must be included in the application
  - The construction techniques should be in conformance with applicable fire codes such as International Wildland-Urban Interface Code or NFPA codes 1144,1141,703, and 914
- Hazardous fuel reduction activities within 2 miles from structures
  - Cannot be on federal lands (or adjacent to federal lands if a duplication of project funding would occur)
  - Prescribed fire is not an eligible method of fuel reduction
  - Maintenance activities, creation of fire breaks or access roads, and purchase of equipment are not eligible

Website: [www.fema.gov/government/grant/hmgp/](http://www.fema.gov/government/grant/hmgp/); for detailed guidance on FEMA Mitigation Policy MRR-2-0801 visit [www.fema.gov/government/grant/hma/policy.shtm](http://www.fema.gov/government/grant/hma/policy.shtm)

### ➤ **Pre-Disaster Mitigation**

Description: The PDM program is a nationwide competitive grant program administered through FEMA. It was created to assist state and local governments, including tribal governments, to implement cost-effective hazard mitigation activities prior to disasters. The intent of this program is to reduce overall risk to people and property, while also minimizing the cost of disaster recovery. A local match of 25% is required.

See the description under **Section 4.4.1, Hazard Mitigation Grant Program** for specific information about eligible activities for HMGP and PDM Grant Programs as detailed in FEMA Mitigation Policy MRR-2-0801.

Website: [www.fema.gov/government/grant/pdm/](http://www.fema.gov/government/grant/pdm/)

### ➤ **Assistance to Firefighters Grant (AFG)**

Description: The Assistance to Firefighters Grant (AFG) program awards grants directly to fire departments to enhance their ability to protect the health and safety of the public and firefighting personnel, with respect to fire and fire-related hazards. Grants are awarded on a

competitive basis to applicants that address AFG program priorities, demonstrate financial need, and demonstrate the benefit to be derived from their projects. Projects can include operations and firefighter safety, firefighting vehicle acquisition, personal protective equipment, wellness and fitness activities, and modifications to fire stations and facilities. Match ranges from 5% to 20% depending on the size of population served.

Website: [www.firegrantsupport.com/content/html/afg/](http://www.firegrantsupport.com/content/html/afg/)

### ➤ **Fire Prevention and Safety Grant**

Description: The Fire Prevention and Safety Grants (FP&S) are part of the AFG, and are under the purview of the Grant Programs Directorate in FEMA. FP&S Grants support projects that enhance the safety of the public and firefighters from fire and related hazards. The primary goal is to target high-risk populations and reduce injury and prevent death. In 2005, Congress reauthorized funding for FP&S and expanded the eligible uses of funds to include Firefighter Safety Research and Development.

Examples of projects supported by FP&S include fire prevention and public safety education campaigns, juvenile fire-setter interventions, media campaigns, and arson prevention and awareness programs.

Website: [www.firegrantsupport.com/content/html/fps/](http://www.firegrantsupport.com/content/html/fps/)

### ➤ **National Fire Plan Grant Funds**

Description: Congress appropriates annual funding to support implementation of the National Fire Plan. Funds are allocated to the states. In Florida, a portion of the funds received from the National Fire Plan are retained for statewide projects and a portion is allocated for use in the state's four operational regions. The objective of the grant is to implement the National Fire Plan by increasing firefighter safety and enhancing the knowledge and fire protection capability of rural fire departments by providing assistance in education and training, protective clothing and equipment purchase, and support to public education efforts on a cost share basis.

Website: [www.fs.fed.us/r1/nfp/](http://www.fs.fed.us/r1/nfp/)

### ➤ **Assistance to Firefighters Station Construction Grants**

Description: The Department of Homeland Security's Assistance to Firefighters Fire Station Construction Grants (SCG) provides financial assistance directly to fire departments on a competitive basis. The goal of the grants is to build new or modify existing fire stations in order for departments to enhance response capabilities and protect the community from fire and fire-related hazards.

Website: [www.firegrantsupport.com/content/html/scg/](http://www.firegrantsupport.com/content/html/scg/)

➤ **Staffing for Adequate Fire & Emergency Response Grants**

Description: The Staffing for Adequate Fire and Emergency Response Grants (SAFER) was created to provide funding directly to fire departments and volunteer firefighter interest organizations in order to help them increase the number of trained "front line" firefighters available in their communities. The goal of SAFER is to enhance the local fire departments' abilities to comply with staffing, response, and operational standards established by the NFPA and OSHA (NFPA 1710 and/or NFPA 1720 and OSHA 1910.134).

Website: [www.firegrantsupport.com/content/html/safer/default.aspx](http://www.firegrantsupport.com/content/html/safer/default.aspx)

➤ **Secure Rural Schools and Community Self-Determination Act – Title III**

Description: The recently updated Secure Rural Schools and Community Self-Determination Act – Title III includes specific language regarding the Firewise Communities program and funds can be used to:

1. Carry out activities under the Firewise Communities program to provide homeowners in fire-sensitive ecosystems education on and assistance with implementing techniques in home siting, home construction, and home landscaping that can increase the protection of people and property from wildfires.
2. Reimburse the participating county for search and rescue and other emergency services including firefighting that are performed on federal land after the date on which the use was approved or paid for by the participating county.
3. Develop a CWPP in coordination with the appropriate Secretary concerned.

Website: [www.firewise.org/usa/files/SRS\\_Act\\_facts.pdf](http://www.firewise.org/usa/files/SRS_Act_facts.pdf)

➤ **State Fire Assistance (SFA)**

Description: SFA was developed in the Cooperative Forestry Assistance Act of 1978 to provide financial and technical assistance to states and communities for wildland fire management. SFA is the only federal fire program that is designed to provide funding for fuel reduction on non-federal lands, regardless of their proximity to federal lands. SFA helps communities develop CWPPs and educates homeowners on fire safety through the Firewise program.

Website: <http://wilderness.org/files/SFA-Fact-Sheet-FY2009.pdf>

➤ **Rural Fire Assistance Program**

Description: The RFA program is intended to increase local firefighter safety and enhance the fire protection capabilities of Rural Fire Departments by helping them meet accepted standards of wildland fire qualifications, training, and performance for initial and extended attack at the local level. The RFA program supports the overall goals of the National Fire Plan by improving the capacity and capability of local fire departments to protect their communities from the effects of wildland fire. RFA funds are appropriated by Congress annually. (More information can be found at

Website: [http://www.raconline.org/funding/funding\\_details.php?funding\\_id=1421](http://www.raconline.org/funding/funding_details.php?funding_id=1421)

## 4.5.2 State Funding

➤ **Florida Forest Service Annual Budget**

Description: Each year the Florida legislature provides the FFS an annual budget allocation to perform the duties required under Florida Statutes. Included in this budget allocation are funds to carry out mitigation activities and fund several of the positions associated with wildfire mitigation activities. Funding under this state allocation is limited and is used to fund fuel management activities completed by FFS personnel in high-risk wildfire areas across the state.

Website: [www.fl-dof.com](http://www.fl-dof.com)

➤ **Emergency Management Preparedness and Assistance Competitive Grant Program**

Description: Emergency Management Preparedness and Assistance Competitive Grant Program's eligible projects include: promoting public education on disaster preparedness and recovery issues; enhancing coordination of relief efforts of statewide private sector organizations, including public-private business partnership efforts; improving the training and operations capabilities of agencies assigned lead or support responsibilities in the state comprehensive emergency management plan; further state and local emergency management objectives which have been designated by the State of Florida as priorities in the applicable notice of fund availability.

Website: [www.floridadisaster.org/grants/index.htm#CompetitiveGrant](http://www.floridadisaster.org/grants/index.htm#CompetitiveGrant)

### 4.5.3 Additional Funding and Information Sources

#### ➤ **Fire Grants Help for Florida**

Description: A resource with grant listings, information, and assistance aimed at members of the Fire Service.

Website: [www.firegrantshelp.com/search-grants/bystate/15/](http://www.firegrantshelp.com/search-grants/bystate/15/)

#### ➤ **The Financial and Technical Assistance for Florida Municipalities**

Description: This resource, available through the Florida League of Cities, provides updated information on grants, loans, technical assistance, and other resources available to Florida municipalities. It also includes information on various programs for topics such as community development and redevelopment, economic development, emergency management, capital facilities, coastal management, environmental, historic preservation, housing, and infrastructure.

Website: [www.flcities.com/membership/grant](http://www.flcities.com/membership/grant)

#### ➤ **The Grants and Resources Page of the Firewise Communities Website**

Description: The Firewise program does not provide grants but its website does provide a review of resources that may help those with an interest in Firewise concepts find the assistance they need to take action to become safer from wildfire.

Website: [www.firewise.org/usa/grant\\_funding\\_sources.htm](http://www.firewise.org/usa/grant_funding_sources.htm)

## 4.6 Mitigation Success Stories

The State of Florida has extensive experience implementing a wide variety of successful programs to reduce wildfire risk in local communities. These programs have enabled the State to achieve its wildfire mitigation goals while promoting healthier, more resilient conditions in their neighborhoods and surrounding forests. In accordance with Requirement § 201.5(b)(3), this section includes several specific examples of successful wildfire mitigation projects.

### 4.6.1 Best Practices Guidebook

In 2003, the Department of Community Affairs and the DACS received HMGP funding to develop a best development practices guidebook entitled *Wildfire Mitigation in Florida: Land Use Planning Strategies and Best Development Practices* which was published in April 2004. The guidebook identified a number of wildfire mitigation strategies that local Florida communities found helpful in reducing wildfire risk. A number of different methods are described in the guidebook including planning initiatives, development guidelines and standards,



neighborhood design, building construction, and landscaping. Elected officials, planners, architects, landscapers, developers, and other community stakeholders have found the guide to be a helpful resource when addressing wildfire issues in their communities.

In 2009, the FFS was awarded additional HMGP funding from FEMA to update the guidebook which has been newly re-titled *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices* and due to be printed in 2011. The updated version reflects up-to-date information and resources to help decision-makers understand and limit the vulnerability of life and property to wildfires throughout Florida. The guidebook deals specifically with activities that can be implemented by developers, individual homeowners, neighborhoods, communities, and local governments. The activities identified both reduce wildfire risk and maximize ecological benefits. To facilitate implementation by local governments, the guidebook includes model language for comprehensive plan policies and for land development codes.

#### **4.6.2 Chaffee Trail Elementary School Mechanical Fuel Reduction Project**

Chaffee Trail Elementary School is a new school located west of downtown Jacksonville in Duval County. The area in which the school is located has experienced several wildfires over the last three years that routinely threaten homes and businesses including the Alcoy Fire in 2007. The project area was selected due to fire history and the large amount of wildland-urban interface. Through the Federal American Recovery & Reinvestment Act, the FFS received funds to conduct mechanical fuel reduction projects with local private contractors. The Chaffee Trail mitigation work was done over a 3-week period and completed on June 4, 2010. RC Markham Tractor Service was contracted to mow 39 acres of a tract of land located south of the elementary school and along the north boundary of a new subdivision, Adam's Lake. The majority of the project area was planted slash pine plantation with medium to heavy rough palmetto and gallberry fuels. The work was completed with a Brown Tree Cutter attached to a farm tractor. The goal of the project was to reduce hazardous fuels that if ignited could endanger homes and the school by mowing in-between the rows of pine trees. The result of this mowing will reduce the risk of a large wildfire by making control efforts easier. More than 80 homes and a school valued at over \$21,540,000 were protected with this work.

On June 23, 2011, at 4:17 p.m. a lightning-caused wildfire was reported to the FFS by Jacksonville Fire Rescue at the Adams Lake Subdivision. By the time the forestry tractor got to the scene, the fire department had already extinguished the fire with water and required only a security line by the dozer. The operator called the fire contained at 6:34 p.m. Because of the mechanical fuel reduction efforts on the property 12 months prior, only 0.2 acre burned during the fire, which was quickly brought under control without damaging nearby homes (Winter, 2011).

### 4.6.3 Taylor Community Wildfire Protection Plan

Taylor is a small, unincorporated community located in Baker County in north central Florida. It is surrounded by heavily forested federal, state, and private/industrial timber lands. The community has an active recent wildfire history, including the 34,000 acre Impassable Bay Fire (2004) and the 4,800 acre Suwannee Road One Fire (2004), which burned into the community. Area land managers rely heavily on prescribed burning to reduce wildfire risk.

The Taylor CWPP was initiated in 2006 to address the community's wildfire hazard. Planning participants included a FFS Wildfire Mitigation Specialist, a FFS Forest Area Supervisor, a USFS Forester from the Osceola National Forest, the Baker County Fire Chief, an individual timber company representative (Rayonier Timber), and representatives from the Sheriff's Office and Emergency Management. In addition, the captain from the Taylor Volunteer Fire Department and a pastor from a local church played key roles in fostering community participation. The CWPP working group conducted collaborative community risk assessment of Taylor in four meetings over 6 months.

The group created a CWPP that focuses on increasing fuel management, increasing suppression capacity by upgrading water resources, enhancing wildland firefighter training for all volunteer firefighters in Baker County, and enhancing community education. The CWPP group also held a *Living on the Edge in Florida* educational workshop for members of the community. Homeowners learned how to increase the probability that their homes could survive a wildfire disaster and were given an opportunity to comment on the completed CWPP. Homeowners and emergency managers hold Firewise events twice each year and many community partnerships have been formed for wildfire prevention and protection.

Among the committee's specific wildfire protection objectives was the establishment of a 25- to-30-ft-wide control line (or Community Protection Zone) around Taylor. This control line serves as a fuel break between pine forests and residential areas, a strategic base for firefighting operations, and a targeted location for conducting prescribed fire and other fuel management projects. The FFS and the USFS Osceola National Forest staff collaboratively created the 11-mi long control line, which crosses state, federal, and private industrial forest land.

The control line was tested during the Florida Bugaboo Wildfire on May 8, 2007. A strong wind pushed the wildfire through the bordering John Bethea State Forest. Two hundred houses were evacuated in the community of Taylor. The fast moving wildfire flanked the boundaries of the Taylor community for more than 4 days. The Baker County Fire Chief, FFS, and USFS supervisors attribute their successful containment efforts to the control line, which allowed quick and safe access around the edges of the community. Because the control line was already clear of vegetation and debris, back-firing operations could be immediately conducted. Fire personnel also could safely patrol the area during mop up operations. The CWPP activities effectively redirected the fire around

the community and prevented the loss of any houses in Taylor (Florida Department of Agriculture and Consumer Services, 2010).

#### **4.6.4 Lehigh Acres Mechanical Fuel Reduction Project**

In May 2007, Lehigh Acres, an unincorporated community in Lee County of about 61,000 acres, finalized its CWPP which included an intensive vegetation management plan which called for the creation of strategic fire breaks throughout the community to slow the advance of a wildfire and allow for more effective suppression action should a wildfire approach the community. Since 2009, mitigation teams, funded by both local and Federal sources, have been implementing mechanical fuel reduction projects in the neighborhood. Lee County originally funded a team through the county's all-hazards Municipal Service Taxing Unit (MSTU) which provided about \$691,000 to finance the necessary equipment and operators to work on the project. The project was later included in Lee County's LMS in order to secure additional funding (Florida Department of Agriculture and Consumer Services, 2010). Fuel management work in Lehigh Acres slowed between March and October 2010 due to insufficient county funding. The Caloosahatchee Forestry Center, the local district of the Florida Forest Service responsible for wildfire mitigation projects in Lee County, continued efforts, though on a smaller scale. The Florida Forest Service later created a new Lehigh mitigation team in 2010, funded through 2012 with a Federal American Recovery and Reinvestment Act Grant.

In 2011, the local FFS wildfire mitigation specialist began conducting research to investigate the effectiveness of the mitigation work in Lehigh Acres. GIS mapping is being used to plot all wildfires in Lehigh Acres from 2001 to 2011 comparing efforts before the mitigation work started and the years since it began. The mitigation specialist will analyze the location, size, and intensity of wildfires in each of the years to assess the effects of the mechanical treatments and identify any reduction in the number, size, and intensity of wildfires.

Wildfire mitigation efforts funded by Lee County from 2009-2010 resulted in more than 2,200 acres of vegetation chopped, protecting more than \$110 million of property. Since October, 2010, federally funded efforts conducted by FFS have resulted in more than 1,700 additional chopped acres that have protected an estimated \$88 million of property. The work continues.

#### **4.6.5 Indian Lake Estates Fire Break**

In 2009, FFS used Federal grant money to mow and mulch 51 miles of fire breaks in the Indian Lake Estates community in Polk County. Community members have ensured the sustainability of the fire break by taking responsibility for its upkeep and maintenance. In 2010, the community self-financed a re-mowing project to cut back fuel growth within the fire break. The community intends to continue to maintain the fire breaks in the future. Since 2009, there have been numerous wildfires in the area due to lightning strikes; however, no structures have been lost. In spring 2011, a 300-acre fire started in the undeveloped areas near Indian Lake Estates but did not encroach upon the homes.

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## 5. Coordination of Local Mitigation Planning

In accordance with Requirement § 201.4(c)(4), **Section 5** describes the process by which the State of Florida provides funding and technical assistance for the development of local wildfire mitigation planning. This section also includes a description of the State's processes for incorporating wildfire mitigation into local planning processes and a description of the local mitigation projects.

### 5.1 Technical Assistance

#### 5.1.1 Florida Forest Service Field Units

The Florida Forest Service (FFS) provides technical assistance to local communities through its Field Units. The State of Florida is divided into 15 Field Units which are listed in **Appendix E**. The FFS's forestry programs are implemented by its Field Operations staff within these field units. The field units are grouped into four regions, each under a Deputy Chief of field operations. The multi-functional workforce of personnel and equipment provides a more responsive and comprehensive approach to land management and wildfire control statewide. FFS Field Units are responsible for engaging local governing bodies and Local Mitigation Strategy (LMS) working groups to alert them to measures that they can implement to improve resiliency such as developing Community Wildfire Protection Plans (CWPPs) or changing or instituting local comprehensive plans, ordinances, and codes that can effectively reduce wildfire risk. They assist with the development of the wildfire section of the LMS.

#### 5.1.2 Statewide Community Wildfire Protection Plan Initiative

In 2010, FFS received funding from the American Recovery and Reinvestment Act to assist communities with high wildfire risk in the development of CWPPs. Ten counties participated in this initiative including Brevard, Hillsborough, Lee, Marion, Martin, Pasco, Polk, Orange, Seminole, and Volusia. FFS worked with the participating Counties to organize technical working groups made up of local representatives from Fire Services, Planning/Growth Management, Emergency Management, and the Local Mitigation Strategy Working Group to ensure that local knowledge and expertise was incorporated into each CWPP. FFS Local Mitigation Specialists representing the FFS Field Units provided technical expertise to the working groups aiding them in developing comprehensive action plans tailored specifically for each of the counties to reduce their vulnerability to wildfire. This initiative lasted one year and the 10 plans were finalized and approved in Summer 2011.

### 5.1.3 Florida Wildland Fire Risk Assessment

The FFS is currently engaged in updating the Florida Wildland Fire Risk Assessment System (FL FRAS). The updated FL FRAS will allow communities to identify areas susceptible to wildfire risk and prioritize areas in which to implement mitigation projects. An assessment of community wildfire risk is an essential part of developing LMSs and CWPPs and also required when applying for Firewise Community/USA recognition. FL FRAS is described in further detail in **Section 4.2**.

### 5.1.4 Wildfire Risk Reduction in Florida

FFS is currently updating *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices (2010)* based on the Division of Community Planning's guidebook entitled *Wildfire Mitigation in Florida: Land Use Planning Strategies and Best Development Practices (2004)*. The newly updated guidebook is targeted at a diverse audience that includes homeowners, business and community leaders, elected officials, planners, developers and builders, landscapers, and architects. It addresses collaboration and outreach, local planning, community design, building construction, and landscaping; and also includes background on the wildfire problem and fire and fuel management in Florida. The manual includes clear guidelines to best protect homes, businesses, neighborhoods, communities, and new developments from the threat of wildfire while protecting forests and natural resources. Also included are Florida-specific recommendations for planning strategies to reduce wildfire risk, fuel management alternatives, fire-resistant landscaping and building construction, timber management practices, and social/economic cost-benefit analysis results. Case studies are included throughout the guide to give readers a sense of wildfire risk reduction projects that have been successfully completed.

### 5.1.5 Trainings and Workshops

As described in Section 5.1.2 of the State Hazard Mitigation Plan, the Florida Department of Emergency Management (DEM) carries out trainings and workshops to assist local governments in the creation of their LMSs. Also, DEM Mitigation Planning Staff corresponds with representatives from each of the individual counties during the development of their LMSs in an effort to provide guidance and information. DEM staff also organizes Hazard Mitigation Grant Program (HMGP) Application Workshops to provide eligible local applicants with detailed information about the application process and assist in the completion of a draft project application. The workshops are typically regionally based and the locations were determined by the areas with the highest impacts.

## 5.2 Local Funding Opportunities

As described in **Section 4.4**, the State of Florida offers funding opportunities and resources for wildfire mitigation projects in local communities. The FFS Annual Budget allocates resources to carry out mitigation activities and fund several of the positions associated with wildfire mitigation activities. Funding under this

state allocation is limited and is used to fund fuel management activities completed by FFS personnel in high risk wildfire areas across the state. The Emergency Management Preparedness and Assistance (EMPA) Competitive Grant Program provides funding to a variety of eligible projects which include: promoting public education on disaster preparedness and recovery issues; enhancing coordination of relief efforts of statewide private sector organizations, including public-private business partnership efforts; improving the training and operations capabilities of agencies assigned lead or support responsibilities in the emergency management plans; further State and local emergency management objectives which have been designated by the State of Florida as priorities in the applicable notice of fund availability.

## 5.3 Integration into Local Planning Initiatives

Local planning mechanisms such as the Local Comprehensive Plan, LMS, and CWPP to provide opportunities to manage wildfire risk through policy-driven, strategic, and collaborative approaches. A more detailed discussion of integrating wildfire mitigation into these local planning mechanisms can be found in the FFS's guidebook *Wildfire Risk Reduction in Florida: Home, Neighborhood, and Community Best Practices*.

### 5.3.1 Local Comprehensive Plan

Current legislation does not require Florida communities to address wildfire hazards in their Comprehensive Plan. The Comprehensive Plan, however, lends itself well to addressing wildfire hazard issues through its ability to guide land use and development patterns. Allowing development in wildfire prone areas without considering alternative development patterns or risk reduction increases wildfire risk to persons and property in a community. In addition, the inclusion of wildfire hazard issues in the Comprehensive Plan will strengthen support for future wildfire risk reduction actions (Florida Department of Agriculture and Consumer Services, 2010).

### 5.3.2 Local Mitigation Strategy

The LMS is at the heart of community hazard planning and is considered to be the minimum level of strategic hazard planning in most communities. Local planners and community members interested in wildfire risk reduction should work with the local LMS Committee to be sure that wildfire concerns are included in the document. The LMS is an effective means for prioritizing wildfire risk reduction projects to be eligible for Federal Emergency Management Agency (FEMA) hazard mitigation funds (HMGP and Pre-Disaster Mitigation Program) as well as other local funds contributed by the county (if available). Examples of wildfire risk reduction projects that could be included in a LMS to contribute to a strategic, incremental approach to wildfire risk reduction are: fuel management projects; home retrofits to meet recommended National Fire Protection Association (NFPA) standards; Firewise Community workshops or other public outreach and education initiatives, the development of more detailed plans to support wildfire risk reduction (e.g., a CWPP, as discussed in **Section 5.3.3**), and

hazard-reduction code enforcement, planning, and development practices (Florida Department of Agriculture and Consumer Services, 2010). The process by which the State reviews County LMSs is described in the State Hazard Mitigation Plan in Section 5.2.

### 5.3.3 Community Wildfire Protection Plan

A CWPP is a strategic planning process that addresses wildfire mitigation which can be done at a subdivision, city, town, village, or county level. Several communities in Florida have already completed or initiated a CWPP and a number of projects are underway in high risk counties (see **Section 5.1.2**). A CWPP typically has more collaborative involvement from the area surrounding the community and requires the agreement of the local governing body, the local fire service, and the FFS. A CWPP typically includes risk reduction activities in areas outside of but adjacent to the community. A CWPP will review the local ability to suppress wildfires, protect structures, identify suppression capacity needs, and identify potential sources of funding to address those needs.

Creating a CWPP can lead to economic and social benefits for the community. The collaborative nature of the CWPP process raises awareness of wildfire risk and strengthens networks in the community. The CWPP is an opportunity for the community to develop a locally coordinated approach to wildfire risk reduction. Proposed actions can also influence where and how State and Federal agencies implement fuel management projects on public and private lands and how additional Federal funds may be distributed for projects on nonfederal lands.

## 5.4 Local Mitigation Projects

A compilation of ongoing and proposed mitigation projects that the FFS intends to implement in local districts as budgets and resources allow is included in **Appendix E**. The individual projects included in this list were compiled from existing plans, such as the 2011 Wildfire Mitigation Action Plans and local CWPPs, and interviews with FFS Wildfire Mitigation Specialists. Information such as: lead agency, project title and description, geographic area, timeframe, possible or approved funding source, and project type is included as necessary.

## 5.5 Sources Cited

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## 6. Maintenance and Implementation Process

The State of Florida Division of Emergency Management (DEM) is the lead agency tasked with managing all aspects of the State of Florida Enhanced Hazard Mitigation Plan (SHMP). The State Hazard Mitigation Officer (SHMO), in coordination with the State Hazard Mitigation Plan Advisory Team (SHMPAT) is responsible for monitoring, evaluating, and updating the SHMP. Mitigation Planning Unit staff facilitates this task by monitoring and reporting on progress as understood through information offered by the SHMPAT members, local government, and other pertinent sources or partners.

This Wildfire Hazard Mitigation Plan Annex (the Annex) is a hazard-specific component of the SHMP. The Florida Forest Service (FFS) is the lead agency tasked with maintaining and implementing the Annex until such time as the content of the Annex is fully integrated into the main document of the SHMP. The Annex Interagency Working Group (IWG) assisted the FFS in overseeing the development of the Annex and will be requested to assist the FFS in monitoring, evaluating, and updating the Annex until it is integrated into the SHMP. When the Annex has been integrated into the SHMP, FFS will maintain a major role in updating and implementing wildfire hazard related portions of the SHMP, however, this task will be coordinated by DEM as the lead agency of the SHMP.

### 6.1 Monitoring, Evaluating, and Updating the Annex

In accordance with Requirement § 201.4(c)(5)(i), this section describes the established method and schedule for monitoring, evaluating, and updating the Annex. As feasible, Annex monitoring, evaluating, and updating will be included in the SHMP Strategy Implementation Tracking and Evaluation (SITE) monitoring process. The Annex should be updated on a 3-year planning cycle unless it is fully integrated into the main document of the SHMP during the 2013 SHMP update.

If the Annex remains as a separate component, the following will be evaluated and updated every 3 years:

- Section 2. Planning Process
- Section 3. Wildfire Risk Assessment
  - Due to the expense of modeling wildfire risk, the Florida Wildland Fire Risk Assessment (FL FRAS) model should be evaluated every 3 years by FFS District staff to determine if the risk results still reflect on the ground circumstances. An update of the model may only be necessary every 6 to 9 years depending on the rate of development and any major changes in wildland fuels. It is intended that FFS District staff will have access to the FL FRAS by 2012 in order to make modifications to the surface fuel layer as mitigation projects and development alter fuel loads.

Ongoing monitoring of the FL FRAS will enable the Annex risk assessment to provide more accurate information in its updates.

- Section 4. Mitigation Strategy
- Section 5. Coordination of Local Mitigation Planning

## 6.2 Implementation and Progress Achievements

Requirement § 201.4(c)(5)(ii) and (iii) mandates that plans include 1) a system for monitoring implementation of mitigation measures and project closeouts and 2) a system for reviewing progress on achieving goals as well as activities and projects in the Mitigation Strategy. The implementation of the specific State, regional, and local wildfire mitigation projects is described in **Appendix D**. Each of the Annex Mitigation Projects has been assigned a lead agency for implementation. The FFS will directly contact agencies responsible for implementing projects on an annual basis to monitor progress on these projects. Once integrated into the SHMP, the Annex projects should be integrated into the overall SHMP list of projects and be implemented in accordance with the processes described in Section 4.4 of the SHMP. At that point the SHMP SITE monitoring system will monitor project progress.

# Appendix A

## Planning Process Documentation

**Appendix A** includes documentation of the planning process conducted during the development of the Wildfire Hazard Mitigation Plan Annex. Meeting summaries are included from the following meetings of the Interagency Working Group (IWG) whose purpose and membership is described in **Section 2**:

- Kick-off Meeting – October 22, 2009
- Vulnerability Discussion – March 10, 2010
- Review of State Capability Section – January 6, 2011
- Discussion of draft plan – July 25, 2011

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## IWG Kick-off Meeting Summary | October 22, 2009

Thursday, October 22, 10:00 am – 12:00 pm EST

### Participants:

Jeff Bielling, Alachua County Fire and Rescue  
 Leslie Chapman-Henderson, Federal Alliance for Safe Homes (FLASH)  
 Julie Dennis, Florida Department of Community Affairs (DCA)  
 Christine Denny, Pandion Systems  
 Pat Durland, Stone Creek Fire, LLC.  
 Lauren Hagen, FLASH  
 Jim Harrell, Georgia Forestry Commission  
 Laura Hite-Herbert, Florida Division of Emergency Management (DEM)  
 Gerry LaCavera, Florida Forest Service (FFS, formerly known as the Division of Forestry [DOF])  
 Molly Mowery, CSA International, Inc. (CSA)  
 Cindy Palmer, Federal Emergency Management Agency (FEMA)  
 Link Walther, CSA

### Role of the IWG

- Purpose:
  - To provide input and expertise on above projects to ensure successful outcomes
- Expectations:
  - Be available for conference calls and meetings
  - Respond on specific issues related to the projects
  - Contribute expertise and relevant information
  - Note: Gerry requested that IWG members be timely in responding to information requests from the consultants because the projects are to be completed by June 30, 2010

### Introductions

- Gerry Lacavera, Wildfire Mitigation Coordinator – FFS
- Jeff Bielling, Wildfire Mitigation Officer – Alachua County Fire and Rescue
- Leslie Chapman-Henderson, President/CEO – FLASH
- Julie Dennis, Hazard Mitigation Planner – DCA
- Jim Harrell, Former FFS Wildfire Mitigation Coordinator, Georgia Forestry Commission
- Annie Hermansen-Baez, Center Manager/Technology Exchange Coordinator – U.S. Forest Service, Southern Research Station
- Laura Herbert, Hazard Mitigation Planner – DEM
- Cindy Palmer, Hazard Mitigation Planner – FEMA
- Members not available for call: Annie Hermansen-Baez
- Laura Hagen represented FLASH
- CSA International – Wildfire Annex for the State Hazard Mitigation Plan
  - Link Walther, Fellow of the American Institute of Planners (FAICP), Director
  - Molly Mowery, Community Planner
- Pandion Systems – Wildfire Mitigation in Florida Guidebook Update
  - Christine Denny, Vice President, Project Manager
  - Susan Marynowski, Lead Author for Guidebook

## Projects Overview

- The Florida Department of Agriculture and Consumer Services, FFS received funding through a FEMA grant to fund the development of the Wildfire Hazard Mitigation Plan Annex. CSA was selected through a competitive process to complete this plan, which will become an annex to the Enhanced State of Florida Mitigation Plan (ESHMP). The purpose of this project is to develop an expanded wildfire hazard mitigation plan annex that will enable the state and local governments to prioritize future projects to better prepare for and mitigate wildfire risk in their communities.
- The Draft SHMP as presently drafted contains a wildfire executive summary for pre- and post- disaster mitigation. The forthcoming Annex will flesh out that summary – where the risks are, strategies for changing those risks, and projects for accomplishing this on both the local and State level.
- Other team members (Pat Durland and Sanborn)
  - Pat Durland – Stone Creek Fire, LLC. Pat Durland brings a domestic and international perspective of wildfire mitigation programs, policies, and case studies to this project. He began his own consulting firm in 2003 after working for 30 years in different government agencies on wildland fire issues. Pat will be providing his expertise on various tasks throughout this project, particularly on helping us identify best practices for collaboration regarding implementation, potential successful mitigation case studies, and helping us identify funding sources.
  - Sanborn – A geospatial analysis firm which conducts wildfire risk vulnerability assessments. They will be performing the risk assessment component for the annex. Sanborn has developed and implemented numerous GIS systems around the country which focus on forestry and wildland fire management. They are in the process of developing new GIS based tools to analyze fire risk.
- Relationship to the State Hazard Mitigation Plan
  - The State Hazard Mitigation Plan Advisory Team (SHMPAT) is currently updating the SHMP. This will be completed and submitted to FEMA for approval by January 2010. The Annex will be completed by June 2010. At that point FFS will submit the annex to the State Hazard Mitigation Advisory Team for inclusion in the Enhanced State Hazard Mitigation Plan.
  - We will need to ensure that data sources used in the ESHMP are compatible with those sources used in the annex. All data sources will be cited in the Annex. CSA will follow up with Laura Herbert (DEM) to identify which data sources were used for the SHMP.
- Scope of Work and IWG's project participation
  - The scope of work has been designed to address each requirement contained in the Code of Federal Regulations for standard and enhanced state mitigation plans. (Code of Federal Regulations Title 44: Emergency Management and Assistance, § 201.4,201.5).
  - Each of the tasks and deliverables listed on the handout (Annex Work Plan) relates to a specific FEMA requirement. The work plan groups tasks according to how they will be organized as sections in the final annex. On your handout, we've included all of the tasks which require IWG involvement.
  - IWG major discussion points during call regarding scope of work:
    - Although the Annex will contain separate Goals and Objectives from the SHMP, these will tie in directly to the SHMP goals and objectives. The

- SHMP's goals are very general and require more detailed and specific goals and objectives in the wildfire annex. A crosswalk will be prepared that graphically depicts how the Wildfire Annex goals support the ESHMP goals.
- There may be additional people that we approach other than wildfire mitigation specialists for soliciting local and regional feedback. It will be important to keep in mind that these views may not always reflect the way that FFS approaches wildfire mitigation; however, these views will provide valuable insights that could assist in the preparation of the Annex.
  - Although the Local Mitigation Strategy (LMS) program will be addressed in the Local Mitigation Planning Coordination task, the need to integrate the Annex into LMSs will be stressed in the Annex section 'Plan Integration'.
- Project Timeline and Deliverables:
    - The risk assessment with Sanborn is getting underway. Although the final product won't be delivered until the beginning of next year, there will be preliminary data we can use to inform other tasks as applicable.
    - There are several deliverables which CSA will begin soliciting feedback on, including: goals and objectives, State capability assessment, State-level projects, and case studies.
    - CSA will coordinate with Pandion as much as possible to reduce duplication of research efforts. For example, the case study success stories should also be used in the guidebook if applicable.
    - The Annex's final deadline is June 2010 (based on FEMA funding restrictions). At this time we are not asking for an extension.

### Wildfire Mitigation in Florida Guidebook

- Overview of vision for new guide.
- Pandion is updating the guide to make it more user-friendly; to add more Florida-specific examples; and to update content and information.
- Update on where we are with guide progress.
- We sent out a survey a few months ago to collect feedback from target users; using this information, input from CSA, and from FFS and team members, we are finishing up the creation of a detailed outline and recommendations for changes to the guidebook.
- Discussion of anticipated roles for IWG members.  
IWG members will be asked to:
  - Provide input on the existing manual via the survey
  - Review specific chapters of the guidebook when the initial draft of text is complete in February 2010
  - Be available for calls or emails from the Pandion writing team
- Project Timeline and Deliverables: see work plan sent previously.

### Schedule and Communications

- How communications will be conducted.
  - Email contacts Pandion and CSA will use a consistent format for emails, with subject line reading: IWG: Guidebook – [subject] or IWG: Annex – [subject]
  - Document review Pandion will provide guidelines for doc review prior to February
- Future conference calls: this is likely to be scheduled in mid-January, and we will coordinate both teams to present material to be discussed on the call.

- In person meeting in April: We will provide a date for this all-day meeting as soon as possible so folks can secure funding as necessary. We will conduct this meeting in Tallahassee.
- Final note: Gerry requested to track time for matching in kind service for the FEMA grant fund. CSA and Pandion will log participants' time for their respective projects.

### Contact Information

- CSA International: mmowery@conshelf.com – 772-219-3058
- FTP site: <http://conshelf.com/intranet/>
- Username: IWG Password: wildfire
- Pandion Systems: cdenny@pandionsystems.com – 352-327-326

## IWG Meeting Summary | March 10, 2010

Wednesday, March 10, 10:00 am – 12:00 pm EST

### Participants:

David Buckley, data Transfer Solutions, ILC (DTS)  
Julie Dennis, DCA  
Christine Denny, Pandion Systems  
Pat Durland, Stone Creek Fire, LLC.  
Lauren Hagen, FLASH  
Jim Harrell, Georgia Forestry Commission  
Annie Hermansen-Baez, U.S. Forest Service, Southern Research Station  
Laura Hite-Herbert, DEM  
Gerry LaCavera, FFS  
Molly Mowery, CSA  
Cindy Palmer, FEMA  
Kate Sabourin, Sanborn  
Link Walther, CSA

### Intro/Purpose of Call

- The purpose of the call was to present the preliminary risk and vulnerability assessment results, the IWG discussed and finalized the Annex objectives, and shared feedback on research questions for the State Capabilities section.

### Presentation of Risk Assessment Results (David Buckley and Kate Sabourin)

- David Buckley provided a detailed presentation of the preliminary results of the risk and vulnerability assessment that will be included in the Annex. (Refer to the previously distributed presentation for more information.) The assessment provides more detail than past assessments by using county assessor data combined with the latest wildfire risk data to summarize population and structures at risk for each county. Results for five example counties were shown. The assessment allows decision makers to identify a) the most wildfire prone counties in Florida, and b) the most at-risk areas within each county, regardless of its overall risk.
- The final assessment results will be compiled in the Annex that summarize wildfire risk in both map format and as data tables that list a) population at risk to wildfire per



county, and b) structures at risk to wildfire per county. Individual detailed county statistics will be provided in an appendix. A statewide rollup of these values at risk will also be provided in the main body of the Annex. The detailed county statistics will be available as MS Excel spreadsheets as this is the output format of the analysis. However, it is not within the scope of the project to provide this in geographic information system (GIS) formats. The FFS already has all the county-based wildfire risk data in GIS format. A suggestion was raised to provide training, web based online tools, and access to GIS datasets. This could be pursued as a plan action or recommendation.

### Goals and Objectives

- Input was provided by the IWG on specific objectives. Refer to the Goals and Objectives email attachment to see revisions. The goals and objectives will be contained in the Annex's Mitigation Strategy.

### Next Steps/Research Questions

- CSA is finalizing a draft of the Mitigation Strategy and would like to ensure that all of the appropriate agencies and partners have been identified in this section. Including this information allows us to better understand capacity at the state level for performing and/or supporting wildfire mitigation. The IWG briefly reviewed this list and decided it was appropriate to also include federal agencies. Refer to the Agencies List email attachment.
- CSA will distribute the Mitigation Strategy section for IWG review; we will include funding opportunities in that section, and we will discuss this in greater detail at our next call.
- It is CSA's intent to use and reference the updated Guidebook to the extent possible as a resource for updated information, and for the implementation of project actions such as those related to education and information, and technical assistance.
- We have not yet set a date for our next conference call. This will likely be determined when we receive an update from FEMA on the grant extension request. We will keep the IWG informed of next steps as soon as possible.

## IWG Meeting Summary | January 6, 2011

Thursday, January 6, 10:00 am – 11:00 am EST

### Participants:

Ade Bajere, FFS  
 Allison Boyd, CSA  
 Julie Dennis, DCA  
 Pat Durlan, Stone Creek Fire, LLC.  
 Laura Herbert, DEM  
 Annie Hermansen-Baez, U.S. Forest Service, Southern Research Station  
 Gerry LaCavera, FFS  
 Trenise Lyons, FLASH  
 Tara McCaw, CSA  
 Lincoln Walther, CSA

### **Intro/Purpose of Call**

- The two main objectives of the call were 1) to give a status update of the project and 2) to discuss comments on the State Capabilities section.

### **Status Update/Project Timeline**

- State Capability Assessment: The most significant accomplishment since the group last met was finishing up the State Capability Assessment which was sent out to the group.
- Risk Assessment: The risk assessment should have been done by now but has been delayed. Sanborn will be giving a firm deliverable date in the next few days. They are hoping to have it done by early February. IWG will decide after reviewing the report if they would like to have a call with Sanborn to discuss the results.
- Statewide Mitigation Project List: The next big task that CSA is currently working on is the Statewide Action List. The first step is going to be to contact the state agencies to talk to them about what kind of projects they have planned. Planning to start calling and emailing state agencies this week. Requested that the group let CSA know if they have any contacts at the following agencies:
  - Department of Education Office of Educational Facilities
  - Department of Environmental Protection (DEP)
  - Department of Financial Services Division of State Fire Marshall
  - The Florida Fish and Wildlife Conservation Commission
  - Regional Planning Councils
  - Water Management Districts
  - Florida Fire Chiefs' Association (FFCA)
  - Florida Home Builders Association (FHBA) Disaster Contractors Network
  - The Nature Conservancy (TNC)
  - The Institute for Business and Home Safety (IBHS)
- Laura Herbert suggested that a presentation be made at the SHPAT meeting about the Wildfire Annex project many of the agencies will be in attendance. Pat Durlan suggested that CSA contact Remington Brown at IBHS. Once the Statewide Mitigation Project List is compiled it will be sent out to the IWG for review.
- Local Project List: A list of local wildfire mitigation projects will be compiled by interviewing local FFS specialists and surveying local LMS coordinators.
- The remainder of the plan including the planning process, implementation, and plan integration sections will be written up in March and April. The IWG will be asked to review the final draft of the plan in early May and then there will be a conference call in mid to late may to discuss any comments and edits.
- Pandion Guidebook: The Guidebook needs to be updated to reflect the changes in State leadership and new websites and email addresses for state staff. Drafts are available but not for circulation.

### **Discussion of State Capability Assessment**

- Comment that objectives were worded like goals and vague (i.e., Objective 2.7 should say how they would support FFS, Objective 2.6 needs how, and Objective 6.4 "LMS" needs defining. CSA will expand on objectives and submit draft back to group.

- Pat Durlan has suggestions on changes to the Federal Agency section that he will email to CSA.
- Gerry LaCavera suggested giving deadline for reviews so don't keep changing items that were previously edited due to different participation in meetings, etc.

### **Prioritization Methodology for Statewide Mitigation Project List**

- CSA suggested that the Statewide Project List follow the same prioritization methodology as the SHMP and prioritize the individual actions by each implementing agency based on that agency's funding availability and priorities.
- CSA also suggested categorizing the actions and then prioritizing the categories. Several group members disagreed with prioritizing the categories.
- Allison Boyd suggested adding "Research and Risk Assessment" as a category. Pat Durlan suggested keeping existing and future building separate. The current category list reflecting these changes includes:
  - Community Outreach and Education
  - Fuel Management
  - Staff Training
  - Policy/Planning/ New Construction Regulations
  - Building Retrofit and Landscaping
  - Fire Response Improvements
  - Research and Risk Assessment

### **Next Steps**

- Finalization of Risk Assessment: CSA will email that out when completed and the IWG will decide if they want a conference call to discuss.
- Edits to Capabilities Assessment: Will send out updated version with IWG's edits incorporated.
- Compilation and Prioritization of State Project List: Calls will be started next week.
- Discussions with local mitigation specialists: Will be started in February.

## **IWG Meeting Summary | July 25, 2011**

Monday, July 25, 2:00 pm – 3:00 pm EST

### **Participants:**

Jeff Bielling, Alachua County Fire and Rescue  
 Allison Boyd, CSA  
 Ralph Crawford, FFS  
 Julie Dennis, DCA  
 Laura Herbert, DEM  
 Trenise Lyons, FLASH  
 Tara McCaw, CSA

### Intro/Purpose of Call

- Primary purpose of today's call is to touch base with the Interagency Working Group as the Annex is being finalized and incorporate their feedback or comments into the final plan.
- Gerry Lacavera retired last month and Ralph Crawford is representing FFS during the finalization of the plan.

### Discussion of plan responsibility prior to FEMA approval

- The IWG discussed who would be responsible for maintaining and updating the plan prior to its integration into the State Hazard Mitigation Plan (SHMP).
- Next SHMP update is 2013. The Annex will be incorporated into the SHMP at that time.
- DEM is concerned that they will not have the technical expertise to update the plan for the 2013 update.
- FFS will designate a representative to coordinate with DEM on future updates and be involved in SHMPAT and SHMP updates.
- IWG will dissolve with the finalization of the Annex.

### Comments and Feedback on Draft

- Sections 1 through 6 of the plan were kept as concise as possible so it was easy to read and update. Detailed data was kept in the appendices.
- All references to the Division of Forestry in the Annex will be changed to Florida Forest Service.
- Website with local county data and maps will likely be available to the public by the end of the calendar year.
- Ralph Crawford will have FFS District representatives send out local maps and data to local planners in the individual counties.
- Jeff Bielling suggested adding a success story in **Section 4.5** about the development of the 2004 guidebook using FEMA Hazard Mitigation Grant Program Funds.
- Julie Dennis commented that climate change could be incorporated into the goals and objectives.
- Julie Dennis also suggested added large scale property owners to **Section 4** of the Annex. Ralph Crawford mentioned that FFS already has contacts with most of these.
- Julie Dennis offered to change the description of DCA programs in **Section 4** to reflect recent State agency changes. She will also take out references to 9J-5.
- The timeframe of the DCA project included in **Appendix E** should be changed to 2011 – 2013.
- CSA will be incorporating edits into the draft and sending out the finalized Annex to the group shortly after July 30, 2011.

### Additional Questions and Concerns

- CSA thanked the group for being involved in the planning process.

# Appendix B

## Risk Assessment Methodology

This document provides a summary description of the methods used to conduct the wildfire risk vulnerability assessment described in **Section 3**.

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# Summary of Methods for Wildfire Risk Vulnerability Assessment

## B.1 General Approach

The general methodology used in the assessment-combined wildfire risk outputs, developed as part of the Southern Wildfire Risk Assessment<sup>1</sup> (SWRA) project and subsequent Florida Forest Service (FFS, formerly known as the Division of Forestry [DOF]) updates, with parcel and assessment data obtained from the Florida Division of Revenue (DOR). Data was combined to generate summaries consistent with FEMA Hazard Mitigation Planning methodologies that defined:

- total population by wildfire risk zone in each county
- total number of structures by wildfire risk zone in each county
- total value (\$) of structures by wildfire risk zone in each county
- total acreage of wildfire risk and surface fuels in each county

A statistical risk assessment methodology was used to generate these summaries as the HAZUS-MH software does not provide these capabilities for wildfire hazard. The approach used was based on similar principles as HAZUS-MH, but required the development of manual processing methods and algorithms as no software exists to develop these summaries for wildfire. GIS data processing methods were the primary mechanisms used for the analysis.

The approach used has the advantage of integrating assessor data as the source for population and economic data. The assessor data provides greater detail and spatial resolution than the census data used as the default data source in the HAZUS-MH software.

### B.1.2 Wildfire Risk Assessment

The SWRA project and subsequent updates for Florida conducted by the FFS provide up to date wildfire occurrence, hazard, and risk data. This data is available as a 30-m resolution dataset in geographic information system (GIS) format. The availability of the datasets provided a great benefit to this project as it greatly reduced the effort and cost for compiling the risk assessment information. The methods were prototyped using the SWRA outputs as the FFS assessment update was not completed at the time. However, these methods can be applied to any wildfire risk data source.

The Level of Concern (LOC) dataset from the 2011 Florida Risk Assessment was used in this project. The LOC is a value between 0 and 100 and is a measure of wildfire risk. It reflects the possibility of suffering loss. It combines the Wildland

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<sup>1</sup> More info on the SWRA is available at [www.southernwildfirerisk.com](http://www.southernwildfirerisk.com). The Florida DOF conducted an update to the SWRA in 2011 using updated fuels and fire occurrence data.

Fire Susceptibility Index measure, which is related to the probability of an acre burning (threat), with the Fire Effects Index, which identifies those areas that have important values at risk to wildland fire and/or are costly to suppress.

### B.1.3 Vulnerability Assessment

The risk assessment data was combined with the DOR assessor and parcel data to conduct a vulnerability assessment at the county scale consistent with HAZUS-MH and FEMA DMP methods. A comprehensive loss estimation analysis could not be conducted as the data for this is not readily available. Accordingly, the vulnerability assessment focused on analyzing population and number of structures within each county that are prone to wildfire. County summaries can be rolled up to provide a statewide assessment.

A weakness in previous assessments, such as MEMPHIS, utilized a simple approach for assessing wildfire hazard and risk. Previous efforts leveraged surface fuels data to define hazard. The SWRA and FFS wildfire risk data used in this project provides a much more scientifically justifiable product that reflects a consistent and comparable measure of wildfire risk across the state. The use of this data provides an excellent basis for generating county vulnerability summaries for mitigation planning.

Accordingly, the results developed in this project provide a substantial enhancement to the information generated in both the 2004 and 2007 State Mitigation Plan updates.

## B.2 Methods

The Vulnerability Assessment involved compiling parcel and assessor data, estimating population for parcels and then integrating this with the LOC wildfire risk assessment output for generating summaries by county. The primary sources of data for this assessment were as follows<sup>2</sup>:

- Parcel Data – Florida Department of Revenue, 2010
- Assessor data – Florida Department of Revenue, 2010
- Census data – Census Bureau, Summary File 1 (SF1) table, 2000 (2010 was not available at the time analysis was conducted)

### B.2.1 Population Estimation

The population was determined on a parcel basis by generalized land use code. The assessor data was utilized to assign a generalized land use code to each parcel based on the detailed DOR code for the parcel (see **Attachment A** for a list of codes used). The population was calculated as follows:

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<sup>2</sup> See caveats for specific counties for exceptions to these sources.



Population of Parcel = PPH x Res\_Units

where:

PPH = persons per household in the census tract containing the parcel (derived from 2000 census figures)

Res\_Units = the number of residential units in the parcel as identified in the assessor data (derived from 2010 assessor data)

For example, in Single Family land use parcels, the Res\_Units is often 1. If the PPH for the parcel is 2.5 then the population for the parcel is 2.5 (2.5 \* 1). Another example is a MulitFamily land use parcel which might have a Res\_Units value of 4 and PPH of 2.5. The population for this parcel would be 10 (2.5 \* 4). All the other land use classes are calculated the same way. If there are 0 Res\_Units in a parcel, then that parcel will have 0 population.

Certain **caveats and assumptions** exist with respect to the estimation of population. These include:

- *Parcels* – Each county provides their parcel data to the DOR - each county's property appraiser is different and has different work flows and different base data. The information provided by one county may be different than the information provided by another. We can only work with the data that was provided and if the property appraiser did not populate the number of units for a property we cannot determine the population of that parcel.
- *PPH Factors* – The people per household factors were calculated based on 2000 Census Tract data. The 2000 Census data was all that was available at the time of this project. In addition, due to the volume of data for the entire state the Census Tracts were used instead of Block Groups. The differences between using the Block Group level data and Tract level data would probably not be that great, but this was not tested. The PPH values are calculated based on data from the 2000 Census so some tracts resulted in zero PPH values since they didn't have information in the 2000 Census to determine the PPH values. In this case these tracts were given the average PPH of the state.
- *Population Control Totals* – The population is being compared to Florida Bureau of Economic and Business Research (BEBR) quality control totals that those control totals are estimates based off of 2000 Census data and that not every county accepts the BEBR control totals.
- Population values are created as Integer so there are no partial people calculated – of course this means there is rounding in the population.
- The Commercial/Industrial generalized land use class includes the “Mixed Use” DOR Code which by definition includes “store and office or store and residential or residential combination.” It is therefore reasonable for this class to have a population count.

## B.2.2 Population Summary Methods

Population summaries are developed by adding the population values for each parcel and subtotalling by the different land use codes within each LOC risk class within each county. Subtotaling by general land use code is optional. The methods provided in this document describe the subtotaling by land use code. Subtotaling was also done for LOC groupings of Low, Medium, and High. An example assessment is shown below for Okeechobee County, which is used as an example throughout this document.

**Okeechobee County - Population**  
By Wildfire Risk & Land Use Zone

	Risk	Total Pop	%	Single Family Residential	Multi-Family Residential	Mobile Homes	Agricultural	Other
Low	LOC 0	12,304	29.5%	4,529	841	5,227	693	1,014
	LOC 1	862	2.1%	423	24	281	124	10
	LOC 2	3,608	8.6%	1,859	167	876	616	90
	LOC 3	9,814	23.5%	4,311	757	3,789	747	210
	Subtotal	26,588	63.6%	11,122	1,789	10,173	2,180	1,324
Medium	LOC 4	1,215	2.9%	576	212	302	62	63
	LOC 5	1,167	2.8%	580	123	315	77	72
	LOC 6	2,059	4.9%	1,069	309	381	160	140
	Subtotal	4,441	10.6%	2,225	644	998	299	275
High	LOC 7	3,079	7.4%	1,424	402	794	267	192
	LOC 8	2,912	7.0%	1,701	193	741	108	169
	LOC 9	4,755	11.4%	2,881	353	1,170	162	189
	Subtotal	10,746	25.7%	6,006	948	2,705	537	550
TOTAL		41,775	100.0%	19,353	3,381	13,876	3,016	2,149

For quality assurance purposes, the total population calculated for each county was compared to the BEBR forecasted population for 2010. This comparison provided some measure that the processing methods used yielded reasonable results. This comparison, and at times common sense, clearly indicated that a population total was incorrect. Often a reasonable solution, such as using the 2009 Assessor data rather than the 2010 data, was found and implemented. The following is a summary of the counties in which the methods were adjusted to avoid a noted error along with a description of the adjustment:

### Baker

The Assessor table for Baker had clearly erroneous data in it. For example, there is a parcel with a single-family home with a population of over 2000. These result in a total calculated population for Baker County being millions off of the BEBR numbers.

A review of the 2009 Assessor data indicated that it did not contain these same issues. The 2009 Assessor data was therefore used in place of the 2010 Assessor data.

### **Broward**

The parcel polygons only cover the east side of Broward County. The 2009 parcel data is the same. There was no means to correct for this issue.

### **Miami-Dade**

The parcel polygons only cover the east side of Miami-Dade County. The 2009 parcel data is the same. There was no means to correct for this issue.

### **Pinellas**

The Assessor table for Pinellas County had many instances of spatially identical parcel polygons stacked on top of each other. This occurred primarily in the multi-family or condominium land use classes. The standard methods did not capture all of these polygons in the population total and resulted in population totals that were about 220,000 less than the BEBR totals.

Sanborn identified the issue and adjusted the calculation to include these duplicate polygons. This brought the population to within 82,000 of the BEBR totals.

### **Sumter**

The Assessor table for the county of Sumter had a very low number of residential units resulting in a total population count of 106 using the project methods. This compared to a BEBR total population count of 97,685. Unfortunately the 2009 Assessor data was similar.

The Assessor data (2010) did have information in the number of structures field. With the assumption that, for residential land use classes, the number of structures in a parcel would be similar to the number of residential units in the parcel, Sanborn adjusted the methods to use the number of structures as a surrogate for residential units for the Single Family Residential, Multi-Family Residential, and Mobile Home land use classes. Therefore, the population equation for Sumter became PPH multiplied by the number of structure for these three land use classes. No population was calculated for other land use classes. This resulted in a population of 94,741 which is within 4% of the BEBR population.

### **Taylor**

The 2010 Assessor data had 0 values for all residential units.

The 2009 Assessor data contained values for residential units and therefore this data was used for Taylor County.

### B.2.3 Structure Summary Methods

A summary of the number of structures and the dollar value of structures in millions for each parcel was also calculated using methods similar to the population summary described above. The assessed dollar value for each parcel and the number of structures on each parcel were available in the Assessor data<sup>3</sup>. Accordingly, two output tables are generated.

**Okeechobee County - No. Structures**  
By Wildfire Risk & Land Use Zone

Risk	No. Structures	%	Single Family	Multi-Family	Mobile Homes	Vacant	Agricultural	Commercial	Institutional/ Government	Industrial	Vacant	Misc/ Undefined	
			Residential	Residential		Residential					Commercial/Industrial/Institutional		
Low	LOC 0	5,939	29.7%	1,935	325	2,193	0	489	737	164	77	0	19
	LOC 1	447	2.2%	210	10	128	0	88	1	9	0	0	1
	LOC 2	1,912	9.5%	918	72	406	0	449	14	45	4	0	4
	LOC 3	4,767	23.8%	2,079	268	1,706	0	522	124	46	18	0	4
	Subtotal	13,065	65.2%	5,142	675	4,433	0	1,548	876	264	99	0	28
Medium	LOC 4	612	3.1%	286	50	139	0	36	79	15	7	0	0
	LOC 5	624	3.1%	284	51	144	0	48	57	24	16	0	0
	LOC 6	1,047	5.2%	479	115	190	2	98	98	50	15	0	0
	Subtotal	2,283	11.4%	1,049	216	473	2	182	234	89	38	0	0
High	LOC 7	1,428	7.1%	604	123	355	0	162	100	63	21	0	0
	LOC 8	1,248	6.2%	631	73	328	0	64	58	76	12	0	6
	LOC 9	2,002	10.0%	1,134	129	502	0	87	73	44	26	0	7
	Subtotal	4,678	23.4%	2,369	325	1,185	0	313	231	183	59	0	13
	TOTAL	20,026	100.0%	8,560	1,216	6,091	2	2,043	1,341	536	196	0	41

**Okeechobee County - Value of Structures**  
By Wildfire Risk & Land Use Zone

Risk	Millions	%	Single Family	Multi-Family	Mobile Homes	Vacant	Agricultural	Commercial	Institutional/ Government	Industrial	Vacant	Misc/ Undefined	
			Residential	Residential		Residential					Commercial/Industrial/Institutional		
Low	LOC 0	\$618.84	23.7%	\$143.98	\$13.04	\$92.72	\$24.33	\$149.37	\$111.72	\$56.75	\$10.86	\$5.66	\$10.41
	LOC 1	\$77.90	3.0%	\$20.33	\$0.57	\$6.62	\$1.66	\$37.37	\$0.05	\$7.31	\$0.09	\$0.32	\$3.58
	LOC 2	\$520.23	20.0%	\$87.83	\$3.77	\$17.64	\$13.27	\$312.31	\$0.76	\$67.88	\$1.00	\$2.50	\$13.27
	LOC 3	\$604.47	23.2%	\$187.93	\$11.44	\$69.44	\$36.18	\$217.15	\$17.90	\$35.61	\$7.53	\$4.80	\$16.49
	Subtotal	\$1,821.44	69.9%	\$440.07	\$28.82	\$186.42	\$75.44	\$716.20	\$130.43	\$167.55	\$19.48	\$13.28	\$43.75
Medium	LOC 4	\$82.75	3.2%	\$25.76	\$3.90	\$6.67	\$4.29	\$12.61	\$18.81	\$5.98	\$1.88	\$1.59	\$1.26
	LOC 5	\$94.81	3.6%	\$23.53	\$2.73	\$7.04	\$8.81	\$17.20	\$18.87	\$11.66	\$2.07	\$1.27	\$1.63
	LOC 6	\$147.76	5.7%	\$35.26	\$6.39	\$7.83	\$5.30	\$43.57	\$19.72	\$22.47	\$2.11	\$1.85	\$3.26
	Subtotal	\$325.32	12.5%	\$84.55	\$13.02	\$21.54	\$18.40	\$73.38	\$57.40	\$40.11	\$6.06	\$4.71	\$6.15
High	LOC 7	\$157.63	6.0%	\$46.75	\$5.66	\$14.68	\$8.28	\$40.53	\$11.96	\$18.87	\$3.58	\$2.18	\$5.14
	LOC 8	\$121.27	4.7%	\$43.56	\$2.89	\$11.46	\$4.57	\$18.80	\$5.53	\$27.04	\$1.53	\$1.32	\$4.57
	LOC 9	\$181.71	7.0%	\$80.23	\$5.61	\$19.08	\$8.05	\$28.30	\$6.87	\$18.58	\$6.56	\$2.22	\$6.21
	Subtotal	\$460.61	17.7%	\$170.54	\$14.16	\$45.22	\$20.90	\$87.63	\$24.36	\$64.49	\$11.67	\$5.72	\$15.92
	TOTAL	\$2,607.37	100.0%	\$695.16	\$56.00	\$253.18	\$114.74	\$877.21	\$212.19	\$272.15	\$37.21	\$23.71	\$65.82

### B.2.4 Wildfire Risk Acreage Summary Methods

In addition to the population and structure summaries generated for each county as part of the Vulnerability Assessment, a summary of acreage by wildfire risk class was also generated. This summary can be derived by simply summing the total area for each risk class and dividing to calculate the acreage.

<sup>3</sup> As with population, the quality of the assessor data varies from county to county.

### Okeechobee County - Total Acres

By Wildfire Risk

	Risk	Acres	%
Low	LOC 0	138,067	24.2%
	LOC 1	30,204	5.3%
	LOC 2	207,840	36.4%
	LOC 3	129,644	22.7%
	Subtotal	505,756	88.7%
Medium	LOC 4	6,660	1.2%
	LOC 5	8,369	1.5%
	LOC 6	12,565	2.2%
	Subtotal	27,594	4.8%
High	LOC 7	16,715	2.9%
	LOC 8	8,647	1.5%
	LOC 9	11,642	2.0%
	Subtotal	37,004	6.5%
	<b>TOTAL</b>	<b>570,354</b>	<b>100.0%</b>

## B.2.5 Statewide Assessments

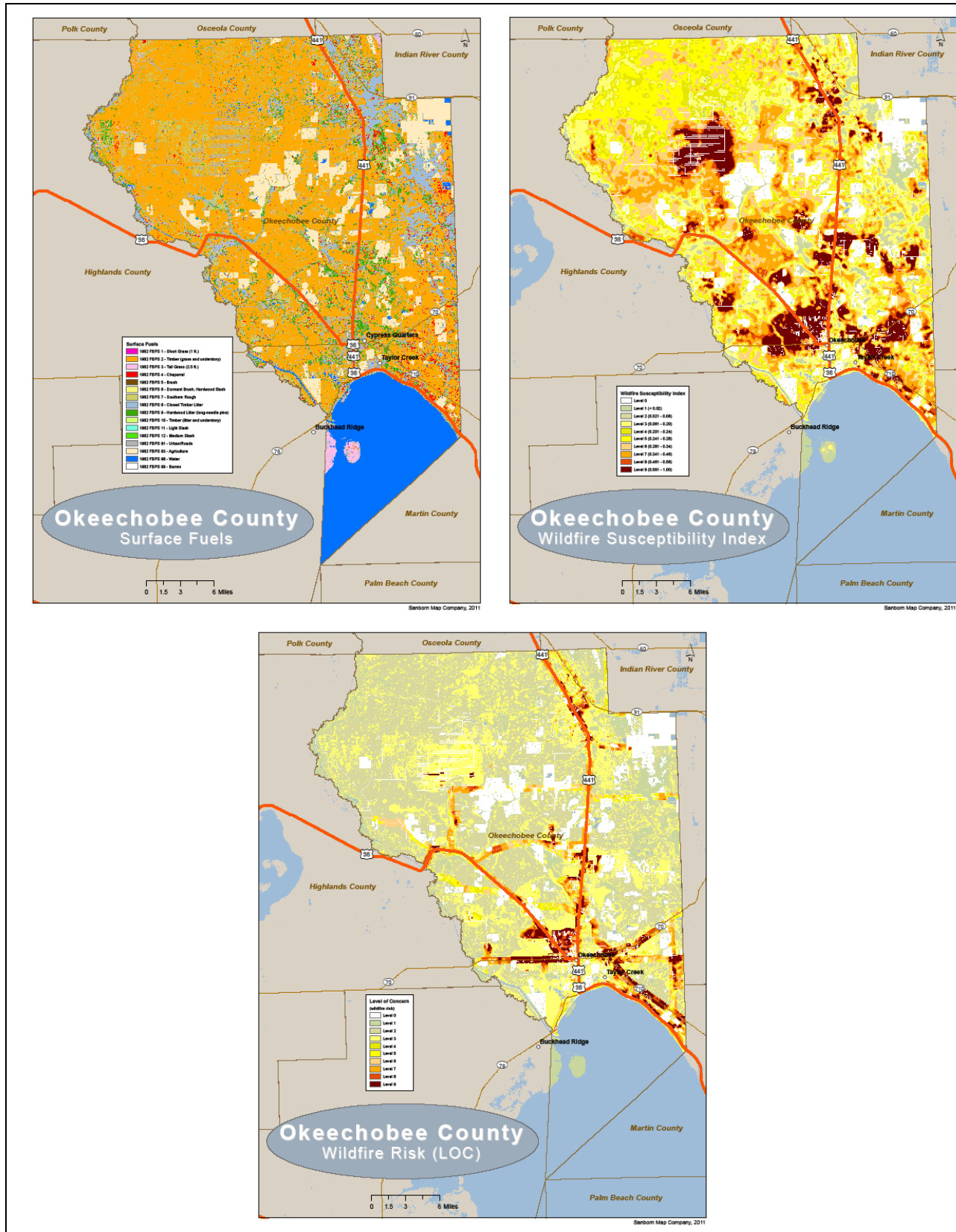
Once each County's summary statistics were developed, statewide county comparisons were completed for each of the analyses. An example is shown for a subset of the counties.

### Florida Statewide County Comparison - Population by Wildfire Risk

	Risk	MARION	MARTIN	MIAMI-DADE	MONROE	NASSAU	OKALOOSA	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH
Low	LOC 0	114,944	98,557	1,885,201	71,681	27,978	136,247	12,304	564,891	117,753	1,034,905
	LOC 1	16,134	628	4,629	9,779	1,701	7,186	862	17,761	1,448	6,755
	LOC 2	31,736	1,299	10,554	6,527	2,966	8,483	3,608	38,045	7,888	9,765
	LOC 3	66,302	5,596	28,182	1,943	24,753	29,965	9,814	122,648	18,634	43,266
	Subtotal	229,116	106,080	1,928,566	89,930	57,398	181,881	26,588	743,345	145,723	1,094,691
Medium	LOC 4	21,151	2,413	10,454	90	6,294	4,987	1,215	92,614	12,514	29,892
	LOC 5	19,763	3,350	12,961	20	4,761	3,211	1,167	93,202	14,120	26,287
	LOC 6	22,329	4,832	19,201	8	4,604	2,701	2,059	110,172	22,244	25,624
	Subtotal	63,243	10,595	42,616	118	15,659	10,899	4,441	295,988	48,878	81,803
High	LOC 7	26,331	6,298	28,652	0	4,379	1,362	3,079	116,560	42,186	26,085
	LOC 8	9,893	3,113	9,857	0	1,424	202	2,912	43,225	20,308	9,048
	LOC 9	12,417	3,904	10,589	0	1,958	22	4,755	47,772	24,486	11,439
	Subtotal	48,641	13,315	49,098	0	7,761	1,586	10,746	207,557	86,980	46,572
	<b>TOTAL</b>	<b>341,000</b>	<b>129,990</b>	<b>2,020,280</b>	<b>90,048</b>	<b>80,818</b>	<b>194,366</b>	<b>41,775</b>	<b>1,246,890</b>	<b>281,581</b>	<b>1,223,066</b>

## B.3 Maps

Maps of surface fuels, Wildland Fire Susceptibility Index (WFSI), and LOC were generated for each county. An example of each for Okeechobee County are shown on the following page. These were delivered as .pdf files along with the final county statistics. In addition a statewide map of each of these was also produced.



## B.4 MORE INFORMATION

The methods described in the report were developed by Data Transfer Solutions LLC (Orlando, FL) under a subcontract to The Sanborn Map Company (Colorado Springs, CO) and further refined by Sanborn on a county-by-county basis. The methods were prototyped and finalized using five counties<sup>4</sup> selected by the FFS project team in March 2010. Example outputs and level of detail for the summary tables and charts were reviewed and finalized with the Florida State Hazard Mitigation Plan Wildfire Annex Steering Committee under the guidance of Gerry LaCavera, Wildfire Mitigation Coordinator, FFS and Molly Mowery, CSA International, Inc. (CSA) (prime contractor for the plan development).

The Sanborn Map Company implemented the methods for all counties in Florida under a subcontract to CSA (Stuart, FL) in March and April 2011. Revisions to the tables and charts were made during implementation based on additional requests from Gerry Lacavera, FFS, and Tara McCaw, CSA. Revisions primarily included adjustments to land use categories and LOC summation categories. Individual adjustments to the methods for specific counties are included in the discussion above.

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<sup>4</sup> Flagler, Collier, Escambia, Manatee and Okeechobee

# Attachment A: Generalized Land Use Crosswalk List

The following table lists the generalized land use codes that were used for assigning the population values to the parcel assessor data. Generalized codes were used to accommodate this attribution as too many DOR Codes exists to effectively link and summarize the data.

<b>DOR Code</b>	<b>Detailed DOR Code Description</b>	<b>Revised Generalized Land Use Description</b>
<b>000</b>	Vacant residential	Vacant Residential
<b>001</b>	Single family	Single Family
<b>002</b>	Mobile homes	Mobile Homes
<b>003</b>	Multi-family – 10 units or more	Multi-Family Residential
<b>004</b>	Condominia	Multi-Family Residential
<b>005</b>	Cooperatives	Multi-Family Residential
<b>006</b>	Retirement homes not eligible for exemption. Others shall be given an Institutional classification	Multi-Family Residential
<b>007</b>	Miscellaneous residential (migrant camps, boarding homes, etc.)	Multi-Family Residential
<b>008</b>	Multi-family – less than 10 units	Multi-Family Residential
<b>009</b>	Undefined – reserved for Use by Department of Revenue	Miscellaneous/Undefined
<b>010</b>	Vacant commercial	Vacant Commercial/Industrial/Institutional
<b>011</b>	Stores, one story	Commercial
<b>012</b>	Mixed use – store and office or store and residential or residential combination	Commercial
<b>013</b>	Department stores	Commercial
<b>014</b>	Supermarkets	Commercial
<b>015</b>	Regional shopping centers	Commercial
<b>016</b>	Community shopping centers	Commercial
<b>017</b>	Office buildings, non-professional service buildings, one story	Commercial
<b>018</b>	Office buildings, non-professional service buildings, multi-story	Commercial
<b>019</b>	Professional service buildings	Commercial
<b>020</b>	Airports (private or commercial), bus terminals, marine terminals, piers, marinas.	Commercial
<b>021</b>	Restaurants, cafeterias	Commercial
<b>022</b>	Drive-in restaurants	Commercial
<b>023</b>	Financial institutions (banks, saving and loan companies, mortgage companies, credit services)	Commercial
<b>024</b>	Insurance company offices	Commercial



<b>DOR Code</b>	<b>Detailed DOR Code Description</b>	<b>Revised Generalized Land Use Description</b>
<b>025</b>	Repair service shops (excluding automotive), radio and T.V. repair, refrigeration service, electric repair, laundries, laundromats	Commercial
<b>026</b>	Service stations	Commercial
<b>027</b>	Auto sales, auto repair and storage, auto service shops, body and fender shops, commercial garages, farm and machinery sales and services, auto rental, marine equipment, trailers and related equipment, mobile home sales, motorcycles, construction vehicle sales	Commercial
<b>028</b>	Parking lots (commercial or patron) mobile home parks	Commercial
<b>029</b>	Wholesale outlets, produce houses, manufacturing outlets	Commercial
<b>030</b>	Florist, greenhouses	Commercial
<b>031</b>	Drive-in theaters, open stadiums	Commercial
<b>032</b>	Enclosed theaters, enclosed auditoriums	Commercial
<b>033</b>	Nightclubs, cocktail lounges, bars	Commercial
<b>034</b>	Bowling alleys, skating rinks, pool halls, enclosed arenas	Commercial
<b>035</b>	Tourist attractions, permanent exhibits, other entertainment facilities, fairgrounds (privately owned).	Commercial
<b>036</b>	Camps	Commercial
<b>037</b>	Race tracks; horse, auto or dog	Commercial
<b>038</b>	Golf courses, driving ranges	Commercial
<b>039</b>	Hotels, motels	Commercial
<b>040</b>	Vacant industrial	Vacant Commercial/ Industrial/Institutional
<b>041</b>	Light manufacturing, small equipment manufacturing plants, small machine shops, instrument manufacturing printing plants	Industrial
<b>042</b>	Heavy industrial, heavy equipment manufacturing, large machine shops, foundries, steel fabricating plants, auto or aircraft plants	Industrial
<b>043</b>	Lumber yards, sawmills, planing mills	Industrial
<b>044</b>	Packing plants, fruit and vegetable packing plants, meat packing plants	Industrial
<b>045</b>	Canneries, fruit and vegetable, bottlers and brewers distilleries, wineries	Industrial
<b>046</b>	Other food processing, candy factories, bakeries, potato chip factories	Industrial
<b>047</b>	Mineral processing, phosphate processing, cement plants, refineries, clay plants, rock and gravel plants.	Industrial
<b>048</b>	Warehousing, distribution terminals, trucking terminals, van and storage warehousing	Industrial
<b>049</b>	Open storage, new and used building supplies, junk yards, auto wrecking, fuel storage, equipment and material storage	Industrial
<b>050</b>	Improved agricultural	Agricultural

<b>DOR Code</b>	<b>Detailed DOR Code Description</b>	<b>Revised Generalized Land Use Description</b>
051	Cropland soil capability Class I	Agricultural
052	Cropland soil capability Class II	Agricultural
053	Cropland soil capability Class III	Agricultural
054	Timberland – site index 90 and above	Agricultural
055	Timberland – site index 80 to 89	Agricultural
056	Timberland – site index 70 to 79	Agricultural
057	Timberland – site index 60 to 69	Agricultural
058	Timberland – site index 50 to 59	Agricultural
059	Timberland not classified by site index to Pines	Agricultural
060	Grazing land soil capability Class I	Agricultural
061	Grazing land soil capability Class II	Agricultural
062	Grazing land soil capability Class III	Agricultural
063	Grazing land soil capability Class IV	Agricultural
064	Grazing land soil capability Class V	Agricultural
065	Grazing land soil capability Class VI	Agricultural
066	Orchard Groves, Citrus, etc.	Agricultural
067	Poultry, bees, tropical fish, rabbits, etc.	Agricultural
068	Dairies, feed lots	Agricultural
069	Ornamentals, miscellaneous agricultural	Agricultural
070	Vacant	Vacant Commercial/ Industrial/Institutional
071	Churches	Institutional/Government
072	Private schools and colleges	Institutional/Government
073	Privately owned hospitals	Institutional/Government
074	Homes for the aged	Institutional/Government
075	Orphanages, other non-profit or charitable services	Institutional/Government
076	Mortuaries, cemeteries, crematoriums	Institutional/Government
077	Clubs, lodges, union halls	Institutional/Government
078	Sanitariums, convalescent and rest homes	Institutional/Government
079	Cultural organizations, facilities	Institutional/Government
080	Undefined – reserved for future use	Miscellaneous/Undefined
081	Military	Institutional/Government
082	Forest, parks, recreational areas	Institutional/Government
083	Public county schools – include all property of Board of Public Instruction	Institutional/Government
084	Colleges	Institutional/Government
085	Hospitals	Institutional/Government

<b>DOR Code</b>	<b>Detailed DOR Code Description</b>	<b>Revised Generalized Land Use Description</b>
<b>086</b>	Counties (other than public schools, colleges, hospitals) including non-municipal government.	Institutional/Government
<b>087</b>	State, other than military, forests, parks, recreational areas, colleges, hospitals	Institutional/Government
<b>088</b>	Federal, other than military, forests, parks, recreational areas, hospitals, colleges	Institutional/Government
<b>089</b>	Municipal, other than parks, recreational areas, colleges, hospitals	Institutional/Government
<b>090</b>	Leasehold interests (government owned property leased by a non-governmental lessee)	Miscellaneous/Undefined
<b>091</b>	Utility, gas and electricity, telephone and telegraph, locally assessed railroads, water and sewer service, pipelines, canals, radio/television communication	Institutional/Government
<b>092</b>	Mining lands, petroleum lands, or gas lands	Miscellaneous/Undefined
<b>093</b>	Subsurface rights	Miscellaneous/Undefined
<b>094</b>	Right-of-way, streets, roads, irrigation channel, ditch, etc.	Miscellaneous/Undefined
<b>095</b>	Rivers and lakes, submerged lands	Miscellaneous/Undefined
<b>096</b>	Sewage disposal, solid waste, borrow pits, drainage reservoirs, waste land, marsh, sand dunes, swamps	Miscellaneous/Undefined
<b>097</b>	Outdoor recreational or parkland, or high-water recharge subject to classified use assessment.	Miscellaneous/Undefined
<b>098</b>	Centrally assessed	Miscellaneous/Undefined
<b>099</b>	Acreage not zoned agricultural	Miscellaneous/Undefined

## Attachment B: Generalized Land Use Numerical Code List

The following table lists the generalized land use numerical codes that were used for processing.

<b>General Land Use Code</b>	<b>General Land Use Description</b>
1	Agricultural
2	Commercial
3	Institutional/Government
4	Industrial
5	Miscellaneous/Undefined
6	Mobile Homes
7	Multi-Family Residential
8	Single Family Residential
9	Vacant Commercial/Industrial/Institutional
10	Vacant Residential

# Appendix C

## Risk Assessment Data Maps

The following maps and tabulations are included in **Appendix C**:

### Statewide Maps

Florida Surface Fuels  
Florida Wildfire Susceptibility Index (WFSI)  
Florida Wildfire Risk by Level of Concern (LOC)

### Statewide Tabulations

Florida Statewide County Comparison – Population by Wildfire Risk (LOC)  
Florida Statewide County Comparison – Number of Structures by Wildfire Risk (LOC)  
Florida Statewide County Comparison – Value of Structures by (Millions) Wildfire Risk (LOC)  
Florida Statewide County Comparison – Total Acres by Wildfire Risk (LOC)

The remainder of **Appendix C** which includes wildfire risk assessment summary reports for every county in Florida can be downloaded digitally (site to be determined). Each report includes the following countywide maps and tabulations:

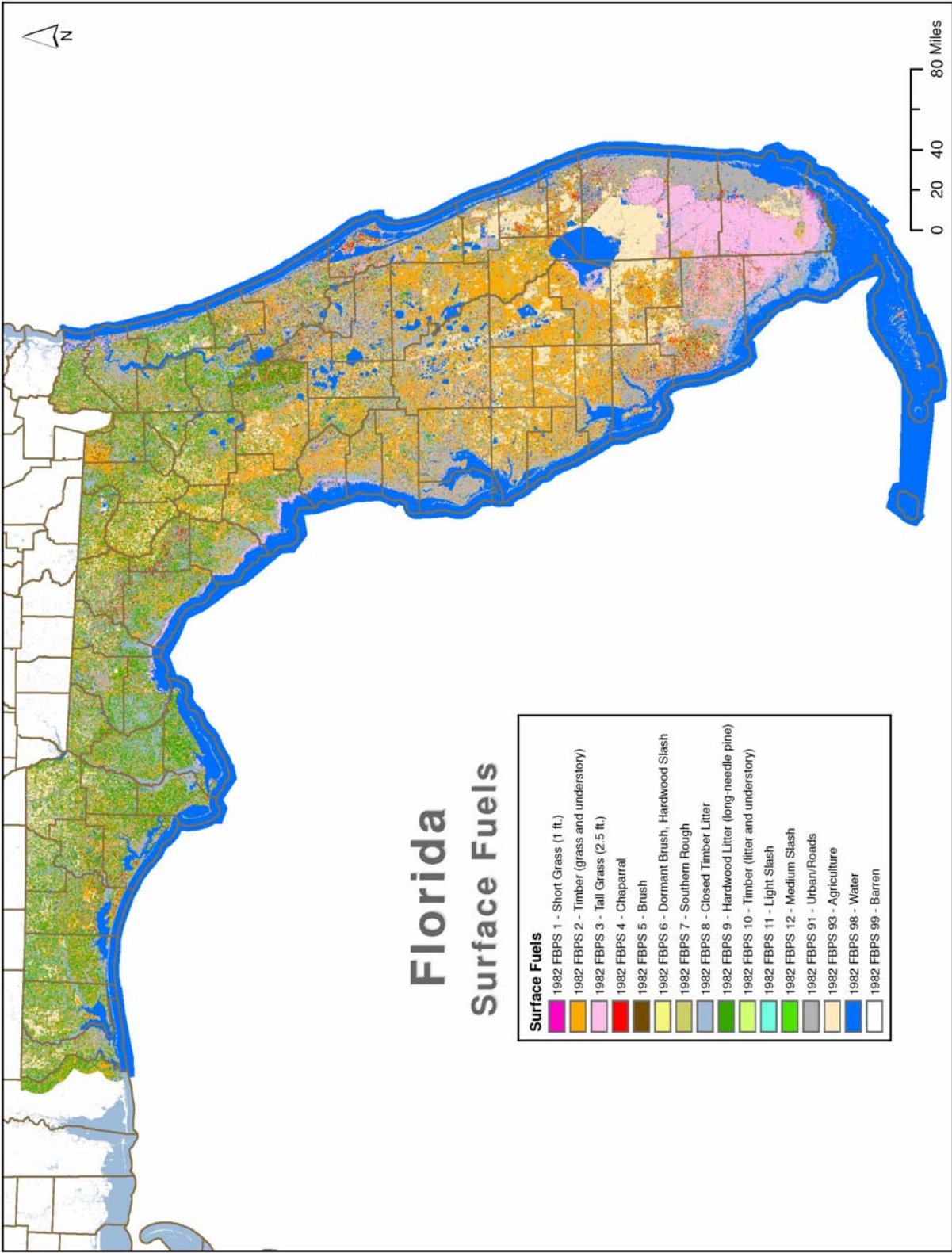
### County Maps

Surface Fuels  
Wildfire Susceptibility Index (WFSI)  
Wildfire Risk (LOC)

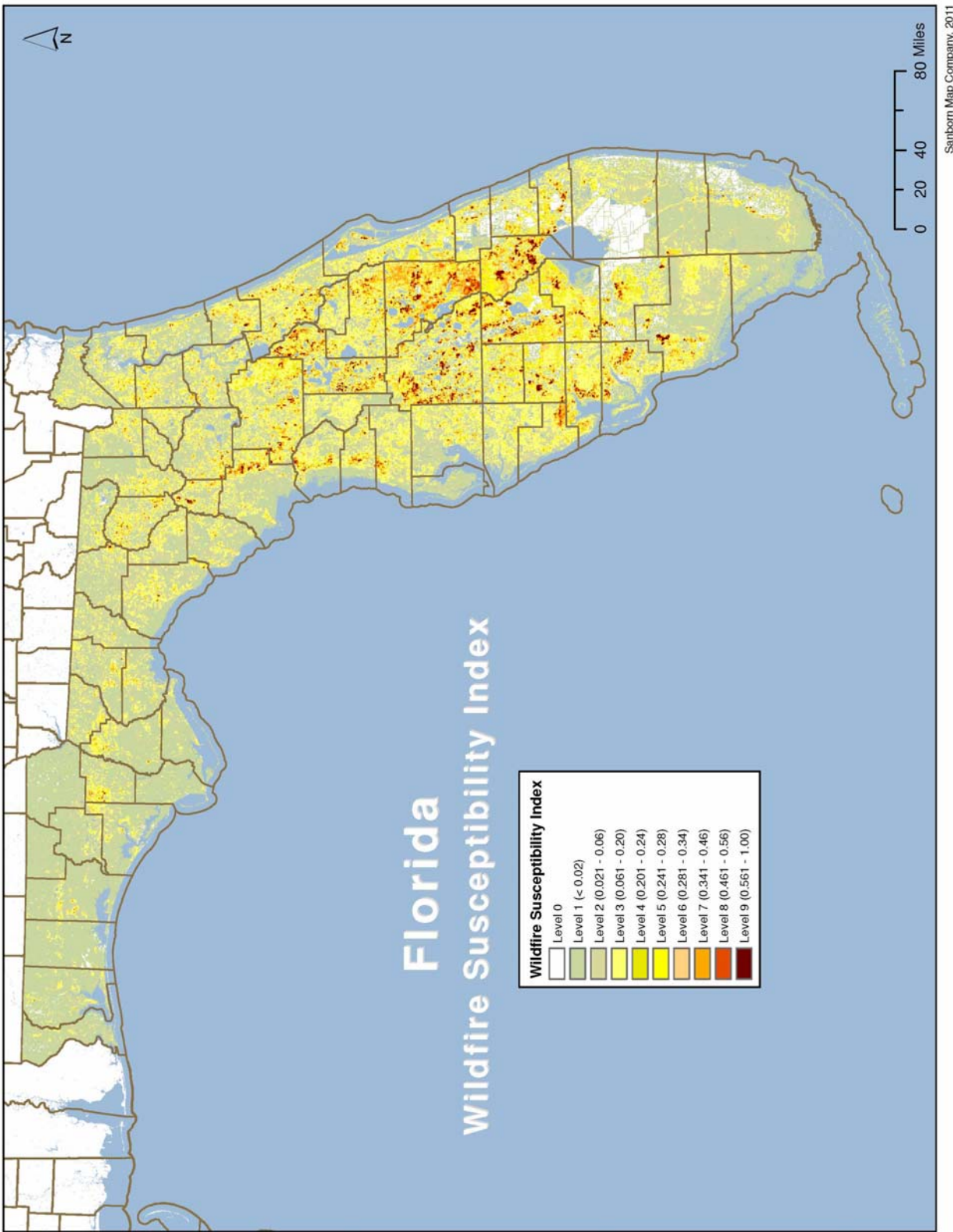
### County Tabulations

Total Acres by Wildfire Risk (LOC)  
Population by Wildfire Risk (LOC) and Land Use  
Number of Structures by Wildfire Risk (LOC) and Land Use  
Value of structures by Wildfire Risk (LOC) and Land Use

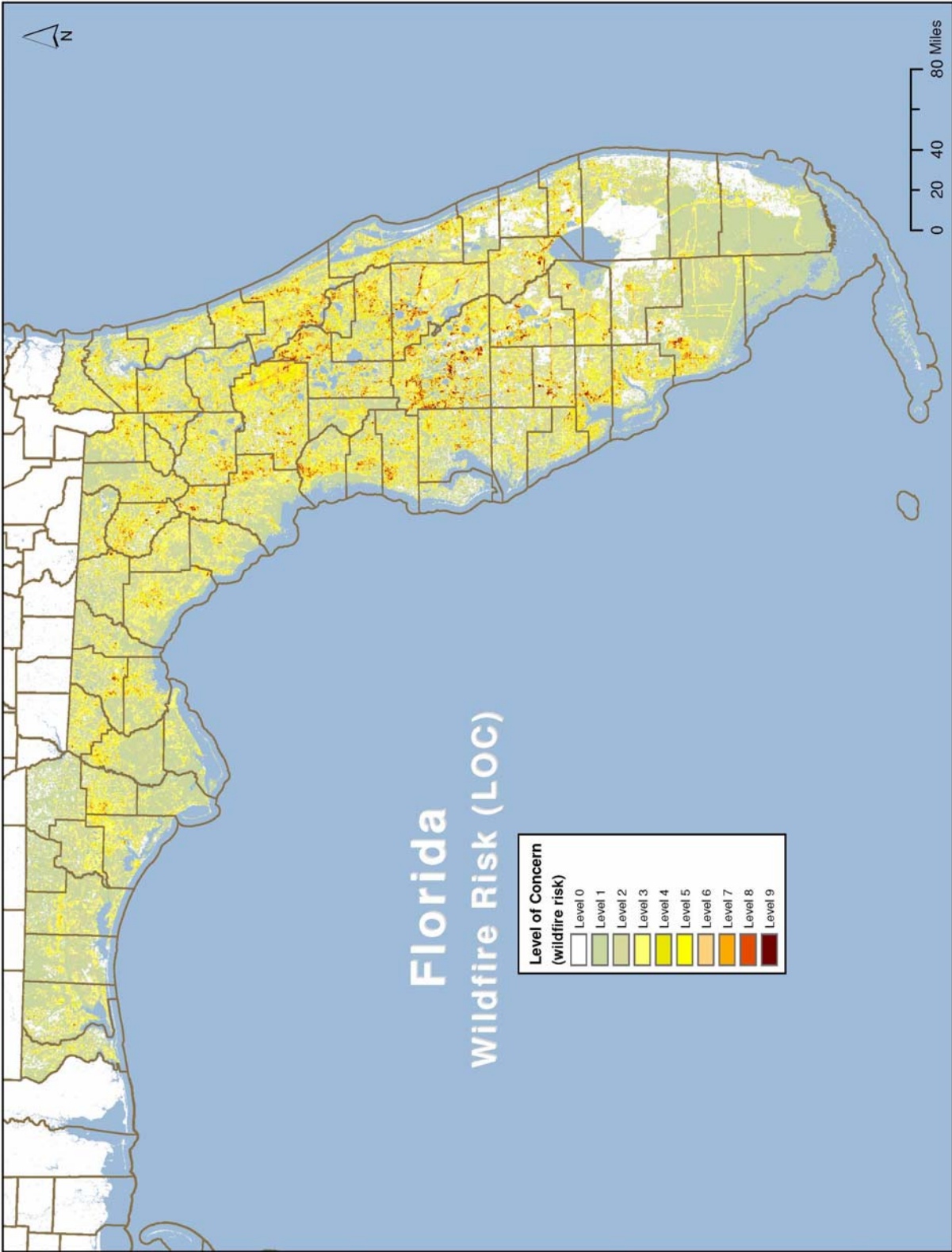
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Sanborn Map Company, 2011







## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	ALACHUA	BAKER	BAY	BRADFORD	BREVARD	BROWARD	CALHOUN	CHARLOTTE	CITRUS	CLAY
LOC 0	117,493	8,584	169,930	8,354	355,212	1,471,922	5,070	93,231	69,384	74,718
LOC 1	4,886	631	2,063	240	3,620	4,422	602	4,951	6,253	1,579
LOC 2	7,374	608	2,363	302	6,795	6,476	672	5,419	8,178	5,787
LOC 3	50,742	2,614	15,890	3,144	44,360	41,481	3,196	8,438	42,668	22,352
<b>Subtotal</b>	<b>180,495</b>	<b>12,437</b>	<b>190,246</b>	<b>12,040</b>	<b>409,987</b>	<b>1,524,301</b>	<b>9,540</b>	<b>112,039</b>	<b>126,483</b>	<b>104,436</b>
LOC 4	15,994	1,338	4,671	1,678	24,565	20,449	945	3,697	15,864	10,699
LOC 5	12,691	1,530	4,746	2,028	24,368	20,582	771	4,015	12,246	11,061
LOC 6	13,481	1,814	5,831	2,702	26,350	19,812	743	8,700	13,499	14,001
<b>Subtotal</b>	<b>42,166</b>	<b>4,682</b>	<b>15,248</b>	<b>6,408</b>	<b>75,283</b>	<b>60,843</b>	<b>2,459</b>	<b>16,412</b>	<b>41,609</b>	<b>35,761</b>
LOC 7	19,272	2,948	7,884	4,115	32,533	19,985	742	23,299	13,804	20,621
LOC 8	8,637	1,569	3,166	1,810	12,233	7,384	193	14,337	6,261	11,954
LOC 9	10,054	2,586	6,255	1,504	14,829	1,848	102	21,463	6,165	16,487
<b>Subtotal</b>	<b>37,963</b>	<b>7,103</b>	<b>17,305</b>	<b>7,429</b>	<b>59,595</b>	<b>29,217</b>	<b>1,037</b>	<b>59,099</b>	<b>26,230</b>	<b>49,062</b>
<b>TOTAL</b>	<b>260,624</b>	<b>24,222</b>	<b>222,799</b>	<b>25,877</b>	<b>544,865</b>	<b>1,614,361</b>	<b>13,036</b>	<b>187,550</b>	<b>194,322</b>	<b>189,259</b>

## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	COLLIER	COLUMBIA	DESOTO	DIXIE	DUVAL	ESCAMBIA	FLAGLER	FRANKLIN	GADSDEN	GILCHRIST
LOC 0	159,203	22,829	11,511	3,987	607,841	219,499	37,812	8,907	22,114	4,705
LOC 1	3,091	1,757	261	853	8,829	7,123	612	338	1,810	784
LOC 2	5,181	2,772	1,135	1,225	19,035	20,608	1,206	333	2,245	1,457
LOC 3	16,396	11,890	1,969	4,160	111,315	79,751	4,665	2,742	10,833	3,109
<b>Subtotal</b>	<b>183,871</b>	<b>39,248</b>	<b>14,876</b>	<b>10,225</b>	<b>747,020</b>	<b>326,981</b>	<b>44,295</b>	<b>12,320</b>	<b>37,002</b>	<b>10,055</b>
LOC 4	7,638	4,439	716	927	39,167	8,729	4,192	465	2,590	1,036
LOC 5	10,341	4,391	1,121	824	31,546	3,980	4,411	321	1,910	970
LOC 6	15,167	5,493	2,214	883	40,216	2,611	6,687	308	2,045	1,214
<b>Subtotal</b>	<b>33,146</b>	<b>14,323</b>	<b>4,051</b>	<b>2,634</b>	<b>110,929</b>	<b>15,320</b>	<b>15,290</b>	<b>1,094</b>	<b>6,545</b>	<b>3,220</b>
LOC 7	29,209	6,176	5,041	1,197	54,781	864	13,505	381	2,356	2,025
LOC 8	16,353	2,845	3,213	538	26,052	103	9,692	143	860	1,186
LOC 9	30,139	2,934	4,667	354	42,105	37	15,997	25	1,159	1,410
<b>Subtotal</b>	<b>75,701</b>	<b>11,955</b>	<b>12,921</b>	<b>2,089</b>	<b>122,938</b>	<b>1,004</b>	<b>39,194</b>	<b>549</b>	<b>4,375</b>	<b>4,621</b>
<b>TOTAL</b>	<b>292,718</b>	<b>65,526</b>	<b>31,848</b>	<b>14,948</b>	<b>980,887</b>	<b>343,305</b>	<b>98,779</b>	<b>13,963</b>	<b>47,922</b>	<b>17,896</b>

## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	GLADES	GULF	HAMILTON	HARDEE	HENDRY	HERNANDO	HIGHLANDS	HILLSBOROUGH	HOLMES	INDIAN RIVER
LOC 0	6,008	13,552	4,162	12,300	94,768	50,592	644,294	7,081	94,938	
LOC 1	493	712	842	663	4,260	1,587	44,745	2,278	905	
LOC 2	1,150	1,008	664	1,311	7,687	4,121	42,229	1,752	1,288	
LOC 3	1,902	4,611	2,904	5,840	30,168	8,972	357,986	3,283	8,511	
<b>Subtotal</b>	<b>9,553</b>	<b>19,883</b>	<b>8,572</b>	<b>20,114</b>	<b>136,883</b>	<b>65,272</b>	<b>1,089,254</b>	<b>14,394</b>	<b>105,642</b>	
LOC 4	714	795	897	2,015	8,429	2,736	68,377	73	3,020	
LOC 5	663	491	931	1,239	7,027	3,264	46,886	37	2,908	
LOC 6	1,012	232	882	2,130	785	5,716	41,347	41	4,757	
<b>Subtotal</b>	<b>2,389</b>	<b>1,518</b>	<b>2,710</b>	<b>3,618</b>	<b>23,460</b>	<b>11,716</b>	<b>156,610</b>	<b>151</b>	<b>10,685</b>	
LOC 7	1,096	88	788	1,238	10,880	9,120	34,994	38	10,042	
LOC 8	290	29	195	585	5,108	6,141	11,424	4	5,079	
LOC 9	531	0	172	918	5,309	14,039	11,598	0	9,263	
<b>Subtotal</b>	<b>1,917</b>	<b>117</b>	<b>1,155</b>	<b>2,741</b>	<b>21,297</b>	<b>29,300</b>	<b>58,016</b>	<b>42</b>	<b>24,384</b>	
<b>TOTAL</b>	<b>13,859</b>	<b>21,518</b>	<b>12,437</b>	<b>26,584</b>	<b>181,640</b>	<b>106,288</b>	<b>1,303,880</b>	<b>14,587</b>	<b>140,711</b>	

## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	JACKSON	JEFFERSON	LAFAYETTE	LAKE	LEE	LEON	LEVY	LIBERTY	MADISON	MANATEE
LOC 0	24,309	4,990	2,401	150,309	483,965	124,412	14,008	2,183	6,731	202,562
LOC 1	6,156	1,350	876	6,406	6,937	17,515	2,595	330	1,629	21,138
LOC 2	5,811	1,196	524	29,128	12,083	13,921	2,946	328	1,419	22,500
LOC 3	9,304	5,263	1,839	44,444	41,531	64,768	11,886	1,485	5,316	86,677
<b>Subtotal</b>	<b>45,580</b>	<b>12,799</b>	<b>5,640</b>	<b>230,287</b>	<b>544,516</b>	<b>220,616</b>	<b>31,435</b>	<b>4,326</b>	<b>15,095</b>	<b>332,877</b>
LOC 4	366	1,094	472	20,759	13,208	13,949	3,787	523	1,185	24,644
LOC 5	140	728	390	23,408	15,366	9,523	2,947	465	756	10,392
LOC 6	40	620	397	27,890	21,980	8,410	3,167	464	600	5,654
<b>Subtotal</b>	<b>546</b>	<b>2,442</b>	<b>1,259</b>	<b>72,057</b>	<b>50,554</b>	<b>31,882</b>	<b>9,901</b>	<b>1,452</b>	<b>2,541</b>	<b>40,690</b>
LOC 7	29	443	479	34,190	31,469	9,128	5,293	355	549	2,817
LOC 8	0	68	208	14,220	18,129	2,793	3,447	103	104	470
LOC 9	0	25	353	18,258	28,202	1,877	4,325	42	84	163
<b>Subtotal</b>	<b>29</b>	<b>536</b>	<b>1,040</b>	<b>66,668</b>	<b>77,800</b>	<b>13,798</b>	<b>13,065</b>	<b>500</b>	<b>737</b>	<b>3,450</b>
<b>TOTAL</b>	<b>46,155</b>	<b>15,777</b>	<b>7,939</b>	<b>369,012</b>	<b>672,870</b>	<b>266,296</b>	<b>54,401</b>	<b>6,278</b>	<b>18,373</b>	<b>377,017</b>

## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	MARION	MARTIN	MIAMI-DADE	MONROE	NASSAU	OKALOOSA	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH
LOC 0	114,944	98,557	1,885,201	71,681	27,978	136,247	12,304	564,891	117,753	1,034,905
LOC 1	16,134	628	4,629	9,779	1,701	7,186	862	17,761	1,448	6,755
LOC 2	31,736	1,299	10,554	6,527	2,966	8,483	3,608	38,045	7,888	9,765
LOC 3	66,302	5,596	28,182	1,943	24,753	29,965	9,814	122,648	18,634	43,266
Subtotal	<b>229,116</b>	<b>106,080</b>	<b>1,928,566</b>	<b>89,930</b>	<b>57,398</b>	<b>181,881</b>	<b>26,588</b>	<b>743,345</b>	<b>145,723</b>	<b>1,094,691</b>
LOC 4	21,151	2,413	10,454	90	6,294	4,987	1,215	92,614	12,514	29,892
LOC 5	19,763	3,350	12,961	20	4,761	3,211	1,167	93,202	14,120	26,287
LOC 6	22,329	4,832	19,201	8	4,604	2,701	2,059	110,172	22,244	25,624
Subtotal	<b>63,243</b>	<b>10,595</b>	<b>42,616</b>	<b>118</b>	<b>15,659</b>	<b>10,899</b>	<b>4,441</b>	<b>295,988</b>	<b>48,878</b>	<b>81,803</b>
LOC 7	26,331	6,298	28,652	0	4,379	1,362	3,079	116,560	42,186	26,085
LOC 8	9,893	3,113	9,857	0	1,424	202	2,912	43,225	20,308	9,048
LOC 9	12,417	3,904	10,589	0	1,958	22	4,755	47,772	24,486	11,439
Subtotal	<b>48,641</b>	<b>13,315</b>	<b>49,098</b>	<b>0</b>	<b>7,761</b>	<b>1,586</b>	<b>10,746</b>	<b>207,557</b>	<b>86,980</b>	<b>46,572</b>
TOTAL	<b>341,000</b>	<b>129,990</b>	<b>2,020,280</b>	<b>90,048</b>	<b>80,818</b>	<b>194,366</b>	<b>41,775</b>	<b>1,246,890</b>	<b>281,581</b>	<b>1,223,066</b>

## Florida Statewide County Comparison - Population by Wildfire Risk

Risk	PASCO	PINELLAS	POLK	PUTNAM	SANTA ROSA	SARASOTA	SEMINOLE	ST. JOHNS	ST. LUCIE	SUMTER
LOC 0	265,691	648,633	286,837	44,084	74,848	192,170	190,754	54,726	207,069	31,819
LOC 1	17,820	21,408	11,184	1,956	3,248	14,772	9,819	3,345	1,167	14,011
LOC 2	12,835	9,671	21,917	2,454	5,684	21,942	13,288	5,108	5,585	11,599
LOC 3	87,994	130,103	76,638	14,059	48,017	76,604	75,561	28,502	16,469	16,623
Subtotal	<b>384,340</b>	<b>809,815</b>	<b>396,576</b>	<b>62,553</b>	<b>131,797</b>	<b>305,488</b>	<b>289,422</b>	<b>91,681</b>	<b>230,290</b>	<b>74,052</b>
LOC 4	27,130	20,346	35,063	5,437	12,177	15,405	45,868	9,312	5,997	13,221
LOC 5	17,897	8,235	32,824	5,399	8,168	9,260	36,030	8,319	9,645	2,895
LOC 6	17,739	3,591	37,620	6,776	6,724	6,676	34,509	9,118	17,011	3,326
Subtotal	<b>62,766</b>	<b>32,172</b>	<b>105,507</b>	<b>17,612</b>	<b>27,069</b>	<b>31,341</b>	<b>116,407</b>	<b>26,749</b>	<b>32,653</b>	<b>19,442</b>
LOC 7	18,329	2,366	63,737	10,028	3,392	7,896	31,185	11,193	20,712	1,014
LOC 8	7,089	753	38,010	5,228	748	10,027	10,665	4,258	8,347	174
LOC 9	5,907	353	58,067	7,006	168	9,413	6,633	7,398	7,817	59
Subtotal	<b>31,326</b>	<b>3,472</b>	<b>159,815</b>	<b>22,262</b>	<b>4,308</b>	<b>27,336</b>	<b>48,483</b>	<b>22,849</b>	<b>36,876</b>	<b>1,247</b>
TOTAL	<b>478,432</b>	<b>845,459</b>	<b>661,898</b>	<b>102,427</b>	<b>163,174</b>	<b>364,165</b>	<b>454,312</b>	<b>141,279</b>	<b>299,819</b>	<b>94,741</b>

# Florida Statewide County Comparison - Population by Wildfire Risk

Risk	SUWANNEE	TAYLOR	UNION	VOLUSIA	WAKULLA	WALTON	WASHINGTON
LOC 0	12,596	6,260	2,536	218,438	8,420	28,559	10,662
LOC 1	1,669	715	195	5,970	784	5,152	3,277
LOC 2	2,073	661	216	12,093	1,015	6,296	2,638
LOC 3	7,378	3,027	1,762	70,962	7,862	21,165	7,633
<b>Subtotal</b>	<b>23,716</b>	<b>10,663</b>	<b>4,709</b>	<b>307,463</b>	<b>18,081</b>	<b>61,172</b>	<b>24,210</b>
LOC 4	2,786	1,117	618	35,398	2,493	2,725	691
LOC 5	2,407	1,151	561	30,173	2,212	1,964	270
LOC 6	2,872	1,560	738	34,176	2,619	1,708	178
<b>Subtotal</b>	<b>8,065</b>	<b>3,828</b>	<b>1,917</b>	<b>99,747</b>	<b>7,324</b>	<b>6,397</b>	<b>1,139</b>
LOC 7	4,113	1,876	843	46,681	3,034	1,049	62
LOC 8	1,786	617	176	24,201	1,197	371	8
LOC 9	2,126	847	99	32,738	1,823	580	1
<b>Subtotal</b>	<b>8,025</b>	<b>3,340</b>	<b>1,118</b>	<b>103,620</b>	<b>6,054</b>	<b>2,000</b>	<b>71</b>
<b>TOTAL</b>	<b>39,806</b>	<b>17,831</b>	<b>7,744</b>	<b>510,830</b>	<b>31,459</b>	<b>69,569</b>	<b>25,420</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	ALACHUA	BAKER	BAY	BRADFORD	BREVARD	BROWARD	CALHOUN	CHARLOTTE	CITRUS	CLAY
LOC 0	36,628	3,352	74,777	3,776	142,926	419,258	2,377	47,972	26,499	28,538
LOC 1	1,911	217	804	98	1,545	1,415	242	2,508	2,861	612
LOC 2	3,081	210	848	121	2,743	2,093	270	2,926	3,659	2,056
LOC 3	19,901	923	6,143	1,255	17,506	10,973	1,326	4,415	16,837	8,473
Subtotal	<b>61,521</b>	<b>4,702</b>	<b>82,572</b>	<b>5,250</b>	<b>164,720</b>	<b>433,739</b>	<b>4,215</b>	<b>57,821</b>	<b>49,856</b>	<b>39,679</b>
LOC 4	5,271	475	1,825	685	9,397	5,348	398	1,934	6,054	3,899
LOC 5	4,123	544	1,677	813	9,113	5,528	324	2,140	4,515	3,969
LOC 6	4,180	655	1,990	1,083	10,073	5,480	318	4,104	5,124	4,971
Subtotal	<b>13,574</b>	<b>1,674</b>	<b>5,492</b>	<b>2,581</b>	<b>28,583</b>	<b>16,356</b>	<b>1,040</b>	<b>8,178</b>	<b>15,693</b>	<b>12,839</b>
LOC 7	5,395	1,064	2,696	1,629	12,300	4,869	324	10,414	5,187	7,230
LOC 8	2,446	589	1,229	719	4,794	1,426	85	6,749	2,030	3,949
LOC 9	2,536	982	2,494	627	5,680	510	44	10,629	2,224	5,727
Subtotal	<b>10,377</b>	<b>2,635</b>	<b>6,419</b>	<b>2,975</b>	<b>22,774</b>	<b>6,805</b>	<b>453</b>	<b>27,792</b>	<b>9,441</b>	<b>16,906</b>
TOTAL	<b>85,472</b>	<b>9,011</b>	<b>94,483</b>	<b>10,806</b>	<b>216,077</b>	<b>456,900</b>	<b>5,708</b>	<b>93,791</b>	<b>74,990</b>	<b>69,424</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	COLLIER	COLUMBIA	DESO TO	DIXIE	DUVAL	ESCAMBIA	FLAGLER	FRANKLIN	GA DSDEN	GILCHRIST
LOC 0	52,026	9,229	4,529	2,171	204,250	74,411	16,951	4,384	8,769	1,986
LOC 1	1,221	684	134	461	3,212	2,985	303	161	671	322
LOC 2	1,921	1,067	535	677	6,932	7,671	591	151	819	535
LOC 3	5,956	4,665	815	2,302	39,672	27,951	2,282	1,245	4,172	1,228
Subtotal	<b>61,124</b>	<b>15,645</b>	<b>6,013</b>	<b>5,611</b>	<b>254,066</b>	<b>113,018</b>	<b>20,127</b>	<b>5,941</b>	<b>14,431</b>	<b>4,071</b>
LOC 4	2,664	1,768	309	493	13,480	3,132	1,968	220	936	422
LOC 5	3,483	1,726	461	449	10,948	1,410	2,038	145	696	399
LOC 6	5,472	2,141	818	482	13,617	943	3,003	136	748	488
Subtotal	<b>11,619</b>	<b>5,635</b>	<b>1,588</b>	<b>1,424</b>	<b>38,045</b>	<b>5,485</b>	<b>7,009</b>	<b>501</b>	<b>2,380</b>	<b>1,309</b>
LOC 7	10,002	2,359	1,822	648	18,021	340	5,773	171	919	811
LOC 8	5,261	1,140	1,196	285	8,914	37	4,009	59	338	482
LOC 9	7,791	1,169	1,849	209	13,469	17	6,584	11	434	590
Subtotal	<b>23,054</b>	<b>4,668</b>	<b>4,867</b>	<b>1,142</b>	<b>40,404</b>	<b>394</b>	<b>16,366</b>	<b>241</b>	<b>1,691</b>	<b>1,883</b>
TOTAL	<b>95,797</b>	<b>25,948</b>	<b>12,468</b>	<b>8,177</b>	<b>332,515</b>	<b>118,897</b>	<b>43,502</b>	<b>6,683</b>	<b>18,502</b>	<b>7,263</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	GLADES	GULF	HAMILTON	HARDEE	HENDRY	HERNANDO	HIGHLANDS	HILLSBOROUGH	HOLMES	INDIAN RIVER
LOC 0	2,744	2,044	6,063	2,044	3,609	6,311	42,619	24,097	216,714	3,289
LOC 1	241	332	295	332	158	586	1,961	733	15,921	974
LOC 2	493	264	419	264	588	1,115	3,468	1,965	14,581	766
LOC 3	811	1,159	1,945	1,159	577	3,206	14,474	4,120	118,549	1,403
<b>Subtotal</b>	<b>4,289</b>	<b>3,799</b>	<b>8,722</b>	<b>3,799</b>	<b>4,932</b>	<b>11,218</b>	<b>62,522</b>	<b>30,915</b>	<b>365,765</b>	<b>6,432</b>
LOC 4	329	368	340	368	317	1,119	4,002	1,275	22,776	37
LOC 5	307	389	211	389	430	632	3,199	1,515	15,725	16
LOC 6	467	369	102	369	701	657	3,650	2,688	14,054	18
<b>Subtotal</b>	<b>1,103</b>	<b>1,126</b>	<b>653</b>	<b>1,126</b>	<b>1,448</b>	<b>2,408</b>	<b>10,851</b>	<b>5,478</b>	<b>52,555</b>	<b>71</b>
LOC 7	464	318	49	318	1,285	989	4,815	4,493	11,886	15
LOC 8	116	83	13	83	658	430	2,235	2,926	4,142	2
LOC 9	216	71	0	71	682	594	2,388	6,614	4,570	0
<b>Subtotal</b>	<b>796</b>	<b>472</b>	<b>62</b>	<b>472</b>	<b>2,625</b>	<b>2,013</b>	<b>9,438</b>	<b>14,033</b>	<b>20,598</b>	<b>17</b>
<b>TOTAL</b>	<b>6,188</b>	<b>9,437</b>	<b>5,397</b>	<b>5,397</b>	<b>9,005</b>	<b>15,639</b>	<b>82,811</b>	<b>50,426</b>	<b>438,918</b>	<b>6,520</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	JACKSON	JEFFERSON	LAFAYETTE	LAKE	LEE	LEON	LEVY	LIBERTY	MADISON	MANATEE
LOC 0	11,290	2,376	1,015	1,015	50,654	180,815	43,156	5,455	996	2,977
LOC 1	2,636	594	329	329	2,155	2,477	6,927	1,037	145	660
LOC 2	2,459	512	199	199	10,748	4,377	5,478	1,138	142	585
LOC 3	4,080	2,243	725	725	15,351	14,628	23,694	4,599	625	2,180
<b>Subtotal</b>	<b>20,465</b>	<b>5,725</b>	<b>2,268</b>	<b>2,268</b>	<b>78,908</b>	<b>202,296</b>	<b>79,255</b>	<b>12,229</b>	<b>1,908</b>	<b>6,402</b>
LOC 4	175	467	188	188	6,350	4,723	4,270	1,407	228	453
LOC 5	65	324	151	151	7,212	5,254	2,924	1,151	197	297
LOC 6	21	276	155	155	9,406	7,787	2,540	1,253	203	247
<b>Subtotal</b>	<b>261</b>	<b>1,067</b>	<b>494</b>	<b>494</b>	<b>22,968</b>	<b>17,765</b>	<b>9,734</b>	<b>3,811</b>	<b>628</b>	<b>997</b>
LOC 7	15	195	194	194	11,592	11,318	2,730	1,952	158	225
LOC 8	0	34	73	73	5,033	6,319	866	1,327	46	47
LOC 9	0	12	121	121	6,175	9,566	650	1,649	22	35
<b>Subtotal</b>	<b>15</b>	<b>241</b>	<b>388</b>	<b>388</b>	<b>22,800</b>	<b>27,202</b>	<b>4,246</b>	<b>4,928</b>	<b>226</b>	<b>307</b>
<b>TOTAL</b>	<b>20,741</b>	<b>7,033</b>	<b>3,150</b>	<b>3,150</b>	<b>124,676</b>	<b>247,263</b>	<b>93,235</b>	<b>20,968</b>	<b>2,762</b>	<b>7,706</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	MARION	MARTIN	MIAMI-DADE	MONROE	NASSAU	OKALOOSA	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH
LOC 0	51,473	44,868	747,211	31,470	12,042	55,057	5,939	149,488	40,454	351,718
LOC 1	6,743	272	1,792	4,512	713	2,807	447	6,043	526	2,647
LOC 2	13,690	564	3,515	3,055	1,221	3,271	1,912	12,691	2,445	3,758
LOC 3	28,826	2,444	9,297	886	10,112	11,034	4,767	42,409	6,578	15,880
<b>Subtotal</b>	<b>100,732</b>	<b>48,148</b>	<b>761,815</b>	<b>39,923</b>	<b>24,088</b>	<b>72,169</b>	<b>13,065</b>	<b>210,631</b>	<b>50,003</b>	<b>374,003</b>
LOC 4	9,378	1,030	3,367	58	2,417	1,706	612	28,801	4,439	10,343
LOC 5	8,897	1,410	3,917	15	1,768	1,123	624	25,840	5,104	8,691
LOC 6	9,979	2,067	5,898	4	1,570	1,012	1,047	27,408	7,704	8,548
<b>Subtotal</b>	<b>28,254</b>	<b>4,507</b>	<b>13,182</b>	<b>77</b>	<b>5,755</b>	<b>3,841</b>	<b>2,283</b>	<b>82,049</b>	<b>17,247</b>	<b>27,582</b>
LOC 7	11,510	2,702	8,345	1	1,605	520	1,428	27,703	14,143	8,667
LOC 8	4,342	1,364	2,630	0	542	76	1,248	10,958	7,223	3,511
LOC 9	5,393	1,740	2,731	0	752	10	2,002	10,346	8,811	4,127
<b>Subtotal</b>	<b>21,245</b>	<b>5,806</b>	<b>13,706</b>	<b>1</b>	<b>2,899</b>	<b>606</b>	<b>4,678</b>	<b>49,007</b>	<b>30,177</b>	<b>16,305</b>
<b>TOTAL</b>	<b>150,231</b>	<b>58,461</b>	<b>788,703</b>	<b>40,001</b>	<b>32,742</b>	<b>76,616</b>	<b>20,026</b>	<b>341,687</b>	<b>97,427</b>	<b>417,890</b>

## Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	PASCO	PINELLAS	POLK	PUTNAM	SANTA ROSA	SARASOTA	SEMINOLE	ST. JOHNS	ST. LUCIE	SUMTER
LOC 0	114,854	306,020	103,336	16,710	28,755	86,751	56,239	25,189	75,673	15,817
LOC 1	7,023	9,969	4,133	832	1,272	6,726	3,424	1,429	491	6,519
LOC 2	5,106	4,615	8,117	1,024	2,266	9,587	4,613	2,055	2,137	5,290
LOC 3	34,500	56,766	26,941	5,908	18,095	33,000	22,469	11,770	6,237	8,363
<b>Subtotal</b>	<b>161,482</b>	<b>377,370</b>	<b>142,528</b>	<b>24,474</b>	<b>50,388</b>	<b>136,064</b>	<b>86,745</b>	<b>40,443</b>	<b>84,538</b>	<b>35,989</b>
LOC 4	10,851	8,736	12,314	2,240	4,504	6,860	13,789	3,861	2,293	5,990
LOC 5	7,213	3,729	11,794	2,202	3,108	3,904	10,982	3,397	3,586	1,495
LOC 6	7,225	1,678	13,479	2,721	2,591	2,882	11,065	3,747	6,361	1,659
<b>Subtotal</b>	<b>25,289</b>	<b>14,143</b>	<b>37,587</b>	<b>7,163</b>	<b>10,203</b>	<b>13,646</b>	<b>35,836</b>	<b>11,005</b>	<b>12,240</b>	<b>9,144</b>
LOC 7	7,099	2,714	22,584	3,992	1,343	2,991	10,478	4,499	7,854	616
LOC 8	2,413	285	13,558	2,056	298	3,713	3,701	1,762	2,930	97
LOC 9	2,413	159	20,809	2,744	69	3,676	2,409	2,991	2,865	28
<b>Subtotal</b>	<b>12,226</b>	<b>1,211</b>	<b>56,951</b>	<b>8,792</b>	<b>1,710</b>	<b>10,380</b>	<b>16,588</b>	<b>9,252</b>	<b>13,649</b>	<b>741</b>
<b>TOTAL</b>	<b>198,998</b>	<b>392,724</b>	<b>237,066</b>	<b>40,429</b>	<b>62,301</b>	<b>160,090</b>	<b>139,169</b>	<b>60,700</b>	<b>110,427</b>	<b>45,874</b>



# Florida Statewide County Comparison - No. Structures by Wildfire Risk

Risk	SUWANNEE	TAYLOR	UNION	VOLUSIA	WAKULLA	WALTON	WASHINGTON
LOC 0	5,450	3,083	1,292	85,314	3,672	13,450	4,964
LOC 1	683	298	93	2,314	317	2,226	1,356
LOC 2	855	281	105	4,730	410	2,735	1,107
LOC 3	2,968	1,366	905	28,636	3,165	9,740	3,257
<b>Subtotal</b>	<b>9,956</b>	<b>5,028</b>	<b>2,395</b>	<b>120,994</b>	<b>7,564</b>	<b>28,151</b>	<b>10,684</b>
LOC 4	1,116	459	318	13,392	1,013	1,297	300
LOC 5	971	488	298	11,175	894	934	117
LOC 6	1,181	661	343	12,529	1,052	802	76
<b>Subtotal</b>	<b>3,268</b>	<b>1,608</b>	<b>959</b>	<b>37,096</b>	<b>2,959</b>	<b>3,033</b>	<b>493</b>
LOC 7	1,687	782	403	17,344	1,221	504	26
LOC 8	731	292	89	8,922	485	168	3
LOC 9	844	390	52	11,771	722	242	0
<b>Subtotal</b>	<b>3,262</b>	<b>1,464</b>	<b>544</b>	<b>38,037</b>	<b>2,428</b>	<b>914</b>	<b>29</b>
<b>TOTAL</b>	<b>16,486</b>	<b>8,100</b>	<b>3,898</b>	<b>196,127</b>	<b>12,951</b>	<b>32,098</b>	<b>11,206</b>

## Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	ALACHUA	BAKER	BAY	BRADFORD	BREVARD	BROWARD	CALHOUN	CHARLOTTE	CITRUS	CLAY
LOC 0	9,666	\$489.13	\$14,454.22	\$513.16	\$21,635.47	\$126,727.36	\$281.84	\$7,262.27	\$3,723.63	\$4,752.59
LOC 1	531	\$110.19	\$800.06	\$119.80	\$452.54	\$1,006.98	\$126.81	\$968.86	\$770.73	\$258.51
LOC 2	715	\$89.97	\$525.29	\$93.48	\$696.89	\$1,224.14	\$91.84	\$647.78	\$731.87	\$500.93
LOC 3	3,717	\$238.51	\$2,096.36	\$333.69	\$3,962.64	\$5,715.54	\$229.90	\$1,170.38	\$2,813.49	\$1,827.11
Subtotal	<b>\$14,629.53</b>	<b>\$927.80</b>	<b>\$17,875.93</b>	<b>\$1,060.13</b>	<b>\$26,747.54</b>	<b>\$134,674.02</b>	<b>\$730.39</b>	<b>\$10,049.29</b>	<b>\$8,039.72</b>	<b>\$7,339.14</b>
LOC 4	972	\$80.59	\$457.86	\$105.78	\$1,825.77	\$2,543.07	\$47.46	\$351.26	\$958.59	\$659.52
LOC 5	757	\$83.67	\$401.69	\$113.91	\$1,756.60	\$2,831.47	\$38.01	\$361.21	\$760.34	\$653.97
LOC 6	851	\$100.74	\$444.51	\$127.33	\$1,732.35	\$2,877.19	\$38.29	\$602.61	\$804.68	\$821.59
Subtotal	<b>\$2,579.88</b>	<b>\$265.00</b>	<b>\$1,304.06</b>	<b>\$347.02</b>	<b>\$5,314.72</b>	<b>\$8,251.73</b>	<b>\$123.76</b>	<b>\$1,315.08</b>	<b>\$2,523.61</b>	<b>\$2,135.08</b>
LOC 7	1,077	\$163.33	\$633.27	\$179.92	\$2,178.02	\$2,724.14	\$35.54	\$1,420.65	\$736.34	\$1,223.75
LOC 8	500	\$87.63	\$305.62	\$84.65	\$854.85	\$711.85	\$9.49	\$1,000.23	\$252.90	\$693.42
LOC 9	627	\$153.45	\$556.85	\$91.60	\$1,058.26	\$320.70	\$7.59	\$1,480.47	\$263.93	\$996.52
Subtotal	<b>\$2,203.45</b>	<b>\$404.41</b>	<b>\$1,495.74</b>	<b>\$356.17</b>	<b>\$4,091.13</b>	<b>\$3,756.69</b>	<b>\$52.62</b>	<b>\$3,901.35</b>	<b>\$1,253.17</b>	<b>\$2,913.69</b>
TOTAL	<b>\$19,412.86</b>	<b>\$1,597.21</b>	<b>\$20,675.73</b>	<b>\$1,763.32</b>	<b>\$36,153.39</b>	<b>\$146,682.44</b>	<b>\$906.77</b>	<b>\$15,265.72</b>	<b>\$11,816.50</b>	<b>\$12,387.91</b>

## Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	COLLIER	COLUMBIA	DESOTO	DIXIE	DUVAL	ESCAMBIA	FLAGLER	FRANKLIN	GADSDEN	GILCHRIST
LOC 0	\$24,840.71	\$1,427.70	\$972.35	\$972.35	\$43,379.21	\$12,205.91	\$3,242.63	\$1,162.74	\$909.71	\$353.43
LOC 1	\$1,736.52	\$299.23	\$128.86	\$128.86	\$1,502.42	\$912.78	\$191.60	\$256.53	\$237.58	\$160.55
LOC 2	\$1,512.52	\$229.24	\$488.67	\$488.67	\$2,130.29	\$1,181.94	\$301.62	\$130.35	\$233.76	\$158.43
LOC 3	\$3,389.90	\$702.56	\$310.49	\$310.49	\$9,783.41	\$4,018.66	\$920.87	\$579.00	\$700.59	\$283.20
Subtotal	<b>\$31,479.65</b>	<b>\$2,658.73</b>	<b>\$1,900.37</b>	<b>\$1,900.37</b>	<b>\$56,795.33</b>	<b>\$18,319.29</b>	<b>\$4,656.72</b>	<b>\$2,128.62</b>	<b>\$2,081.64</b>	<b>\$955.61</b>
LOC 4	\$1,537.48	\$250.38	\$89.50	\$89.50	\$3,174.20	\$429.56	\$510.15	\$47.84	\$127.77	\$81.70
LOC 5	\$1,949.47	\$233.67	\$110.84	\$110.84	\$2,536.18	\$193.35	\$543.16	\$29.87	\$99.43	\$70.93
LOC 6	\$2,819.82	\$283.00	\$148.74	\$148.74	\$3,329.58	\$178.01	\$705.86	\$31.02	\$109.34	\$79.90
Subtotal	<b>\$6,306.77</b>	<b>\$767.05</b>	<b>\$349.08</b>	<b>\$349.08</b>	<b>\$9,039.96</b>	<b>\$800.92</b>	<b>\$1,759.17</b>	<b>\$108.73</b>	<b>\$336.54</b>	<b>\$232.53</b>
LOC 7	\$4,166.87	\$336.46	\$249.80	\$249.80	\$4,417.56	\$72.42	\$1,067.94	\$31.69	\$126.15	\$111.79
LOC 8	\$1,944.12	\$157.10	\$153.54	\$153.54	\$1,949.38	\$5.54	\$614.93	\$6.26	\$45.37	\$60.72
LOC 9	\$2,458.76	\$191.51	\$258.36	\$258.36	\$2,856.10	\$2.27	\$1,141.36	\$0.99	\$59.22	\$82.72
Subtotal	<b>\$8,569.75</b>	<b>\$685.07</b>	<b>\$661.70</b>	<b>\$661.70</b>	<b>\$9,223.04</b>	<b>\$80.23</b>	<b>\$2,824.23</b>	<b>\$38.94</b>	<b>\$230.74</b>	<b>\$255.23</b>
TOTAL	<b>\$46,356.17</b>	<b>\$4,110.85</b>	<b>\$2,911.15</b>	<b>\$2,911.15</b>	<b>\$75,058.33</b>	<b>\$19,200.44</b>	<b>\$9,240.12</b>	<b>\$2,276.29</b>	<b>\$2,648.92</b>	<b>\$1,443.37</b>

Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	GLADES	GULF	HAMILTON	HARDEE	HENDRY	HERNANDO	HIGHLANDS	HILLSBOROUGH	HOLMES	INDIAN RIVER
LOC 0	\$914.73	\$1,227.72	\$294.60	\$829.51	\$2,116.38	\$5,095.52	\$3,176.06	\$43,207.14	\$431.12	\$10,337.76
LOC 1	\$235.77	\$330.25	\$238.58	\$177.16	\$572.06	\$493.44	\$145.16	\$3,564.14	\$322.21	\$426.29
LOC 2	\$950.14	\$161.32	\$136.90	\$453.01	\$825.88	\$604.79	\$348.13	\$3,063.15	\$142.68	\$494.48
LOC 3	\$716.27	\$558.13	\$273.96	\$293.97	\$692.81	\$2,123.72	\$669.42	\$21,768.21	\$193.87	\$1,834.25
Subtotal	<b>\$2,816.91</b>	<b>\$2,277.42</b>	<b>\$944.04</b>	<b>\$1,753.65</b>	<b>\$4,207.13</b>	<b>\$8,317.47</b>	<b>\$4,338.77</b>	<b>\$71,602.64</b>	<b>\$1,089.88</b>	<b>\$13,092.78</b>
LOC 4	\$148.00	\$92.65	\$55.81	\$105.05	\$198.26	\$595.63	\$185.75	\$4,194.74	\$7.19	\$559.61
LOC 5	\$141.09	\$36.40	\$48.45	\$116.85	\$119.12	\$497.53	\$205.28	\$2,784.97	\$3.81	\$455.86
LOC 6	\$150.09	\$18.98	\$49.75	\$126.03	\$95.86	\$582.60	\$333.16	\$2,560.10	\$2.79	\$622.40
Subtotal	<b>\$439.18</b>	<b>\$148.03</b>	<b>\$154.01</b>	<b>\$347.93</b>	<b>\$413.24</b>	<b>\$1,675.76</b>	<b>\$724.19</b>	<b>\$9,539.81</b>	<b>\$13.79</b>	<b>\$1,637.87</b>
LOC 7	\$111.58	\$11.21	\$44.55	\$186.12	\$129.88	\$755.37	\$621.19	\$2,174.56	\$2.14	\$784.99
LOC 8	\$32.52	\$1.33	\$12.18	\$102.30	\$58.07	\$327.12	\$378.87	\$728.88	\$0.28	\$384.24
LOC 9	\$41.59	\$0.03	\$12.85	\$72.73	\$50.33	\$370.91	\$746.29	\$714.81	\$0.13	\$522.76
Subtotal	<b>\$185.69</b>	<b>\$12.57</b>	<b>\$69.58</b>	<b>\$361.15</b>	<b>\$238.28</b>	<b>\$1,453.40</b>	<b>\$1,746.35</b>	<b>\$3,618.25</b>	<b>\$2.55</b>	<b>\$1,691.99</b>
TOTAL	<b>\$3,441.78</b>	<b>\$2,438.02</b>	<b>\$1,167.63</b>	<b>\$2,462.73</b>	<b>\$4,858.65</b>	<b>\$11,446.63</b>	<b>\$6,809.31</b>	<b>\$84,760.70</b>	<b>\$1,106.22</b>	<b>\$16,422.64</b>

Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	JACKSON	JEFFERSON	LAFAYETTE	LAKE	LEE	LEON	LEVY	LIBERTY	MADISON	MANATEE
LOC 0	\$1,291.62	\$379.20	\$164.13	\$32,978.86	\$8,029.14	\$11,745.70	\$901.85	\$112.22	\$368.49	\$11,957.23
LOC 1	\$553.96	\$304.47	\$137.27	\$1,224.51	\$537.11	\$1,565.22	\$504.90	\$240.87	\$216.47	\$2,092.19
LOC 2	\$312.77	\$185.33	\$98.38	\$1,414.93	\$2,120.90	\$1,264.25	\$370.16	\$81.72	\$172.19	\$2,101.17
LOC 3	\$487.17	\$431.23	\$201.40	\$4,521.45	\$2,998.43	\$4,732.98	\$973.51	\$133.66	\$352.15	\$6,148.50
Subtotal	<b>\$2,645.52</b>	<b>\$1,300.23</b>	<b>\$601.18</b>	<b>\$40,139.75</b>	<b>\$13,685.58</b>	<b>\$19,308.15</b>	<b>\$2,750.42</b>	<b>\$568.47</b>	<b>\$1,109.30</b>	<b>\$22,299.09</b>
LOC 4	\$20.11	\$62.07	\$34.34	\$1,718.47	\$1,153.47	\$1,016.00	\$249.79	\$29.57	\$55.09	\$1,552.98
LOC 5	\$8.24	\$41.46	\$25.70	\$1,887.64	\$1,307.20	\$732.12	\$193.45	\$25.97	\$38.16	\$712.54
LOC 6	\$2.73	\$33.45	\$23.01	\$2,626.94	\$1,728.64	\$698.93	\$190.36	\$22.72	\$27.41	\$426.92
Subtotal	<b>\$31.08</b>	<b>\$136.98</b>	<b>\$83.05</b>	<b>\$6,233.05</b>	<b>\$4,189.31</b>	<b>\$2,447.05</b>	<b>\$633.60</b>	<b>\$78.26</b>	<b>\$120.66</b>	<b>\$2,692.44</b>
LOC 7	\$0.89	\$24.97	\$21.93	\$3,077.40	\$2,061.38	\$791.65	\$244.89	\$19.90	\$23.01	\$248.98
LOC 8	\$0.03	\$8.24	\$8.45	\$1,372.58	\$938.92	\$175.89	\$142.88	\$5.04	\$5.63	\$44.87
LOC 9	\$0.00	\$4.11	\$15.02	\$1,486.50	\$1,023.13	\$126.35	\$185.74	\$2.33	\$3.23	\$16.02
Subtotal	<b>\$0.92</b>	<b>\$37.32</b>	<b>\$45.40</b>	<b>\$5,936.48</b>	<b>\$4,023.43</b>	<b>\$1,093.89</b>	<b>\$573.51</b>	<b>\$27.27</b>	<b>\$31.87</b>	<b>\$309.87</b>
TOTAL	<b>\$2,677.52</b>	<b>\$1,474.53</b>	<b>\$729.63</b>	<b>\$52,309.28</b>	<b>\$21,898.32</b>	<b>\$22,849.09</b>	<b>\$3,957.53</b>	<b>\$674.00</b>	<b>\$1,261.83</b>	<b>\$25,301.40</b>

## Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	MARION	MARTIN	MIAMI-DADE	MONROE	NASSAU	OKALOOSA	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH
LOC 0	\$8,185.77	\$13,934.02	\$171,024.37	\$17,503.96	\$2,623.89	\$10,660.84	\$618.84	\$39,248.83	\$7,670.93	\$104,049.22
LOC 1	\$1,542.43	\$580.47	\$1,545.07	\$3,685.18	\$231.11	\$1,261.39	\$77.90	\$1,987.23	\$456.54	\$1,759.75
LOC 2	\$2,699.01	\$856.16	\$1,584.56	\$1,834.16	\$391.62	\$1,107.41	\$520.23	\$4,057.15	\$2,113.28	\$2,048.36
LOC 3	\$5,310.89	\$2,061.23	\$4,863.74	\$320.99	\$2,826.65	\$2,708.52	\$604.47	\$11,896.77	\$3,188.99	\$7,402.18
Subtotal	<b>\$17,738.10</b>	<b>\$17,431.88</b>	<b>\$179,017.74</b>	<b>\$23,344.29</b>	<b>\$6,073.27</b>	<b>\$15,738.16</b>	<b>\$1,821.44</b>	<b>\$57,189.98</b>	<b>\$13,429.74</b>	<b>\$115,259.51</b>
LOC 4	\$1,851.56	\$505.69	\$1,349.38	\$19.47	\$482.26	\$308.49	\$82.75	\$7,165.19	\$1,122.88	\$3,737.54
LOC 5	\$1,805.79	\$565.13	\$1,425.12	\$7.34	\$308.00	\$168.27	\$94.81	\$6,763.66	\$1,309.55	\$3,119.86
LOC 6	\$1,822.24	\$681.95	\$2,054.93	\$1.93	\$265.50	\$138.35	\$147.76	\$7,769.08	\$2,032.72	\$2,967.49
Subtotal	<b>\$5,479.59</b>	<b>\$1,752.77</b>	<b>\$4,829.43</b>	<b>\$28.74</b>	<b>\$1,055.76</b>	<b>\$615.11</b>	<b>\$325.32</b>	<b>\$21,697.93</b>	<b>\$4,465.15</b>	<b>\$9,824.89</b>
LOC 7	\$1,875.46	\$941.27	\$2,904.15	\$0.45	\$261.93	\$71.66	\$157.63	\$7,880.73	\$3,384.62	\$2,928.99
LOC 8	\$661.26	\$498.42	\$895.07	\$0.00	\$88.60	\$12.94	\$121.27	\$2,774.00	\$1,532.36	\$1,086.19
LOC 9	\$786.35	\$646.90	\$933.60	\$0.00	\$120.38	\$1.19	\$181.71	\$3,006.70	\$2,055.77	\$967.41
Subtotal	<b>\$3,323.07</b>	<b>\$2,086.59</b>	<b>\$4,732.82</b>	<b>\$0.45</b>	<b>\$470.91</b>	<b>\$85.79</b>	<b>\$460.61</b>	<b>\$13,661.43</b>	<b>\$6,972.75</b>	<b>\$4,982.59</b>
TOTAL	<b>\$26,540.76</b>	<b>\$21,271.24</b>	<b>\$188,579.99</b>	<b>\$23,373.48</b>	<b>\$7,599.94</b>	<b>\$16,439.06</b>	<b>\$2,607.37</b>	<b>\$92,549.34</b>	<b>\$24,867.64</b>	<b>\$130,066.99</b>

## Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	PASCO	PINELLAS	POLK	PUTNAM	SANTA ROSA	SARASOTA	SEMINOLE	ST. JOHNS	ST. LUCIE	SUMTER
LOC 0	\$13,004.65	\$57,326.66	\$13,422.15	\$2,109.04	\$4,770.95	\$20,723.62	\$12,535.44	\$7,638.39	\$11,004.49	\$2,399.53
LOC 1	\$1,669.18	\$2,665.01	\$674.97	\$385.15	\$686.25	\$2,837.13	\$686.18	\$800.13	\$318.15	\$1,347.40
LOC 2	\$1,216.94	\$1,177.64	\$1,333.44	\$324.22	\$769.80	\$2,786.25	\$933.49	\$807.56	\$717.85	\$1,023.96
LOC 3	\$5,985.88	\$10,289.55	\$3,850.35	\$1,165.62	\$3,032.10	\$9,676.72	\$5,384.46	\$4,368.05	\$1,488.04	\$1,438.87
Subtotal	<b>\$21,876.65</b>	<b>\$71,458.86</b>	<b>\$19,280.91</b>	<b>\$3,984.03</b>	<b>\$9,259.10</b>	<b>\$36,023.72</b>	<b>\$19,539.57</b>	<b>\$13,614.13</b>	<b>\$13,528.53</b>	<b>\$6,209.76</b>
LOC 4	\$2,026.10	\$1,641.59	\$1,667.51	\$314.69	\$684.23	\$1,742.20	\$3,131.47	\$1,386.16	\$541.98	\$1,104.83
LOC 5	\$1,407.23	\$662.17	\$1,622.05	\$272.61	\$456.87	\$1,015.13	\$2,636.95	\$1,099.89	\$679.18	\$237.54
LOC 6	\$1,401.23	\$351.94	\$1,846.59	\$308.58	\$374.50	\$749.17	\$2,711.80	\$1,224.63	\$1,077.03	\$248.19
Subtotal	<b>\$4,834.56</b>	<b>\$2,655.70</b>	<b>\$5,136.15</b>	<b>\$895.88</b>	<b>\$1,515.60</b>	<b>\$3,506.50</b>	<b>\$8,480.22</b>	<b>\$3,710.68</b>	<b>\$2,298.19</b>	<b>\$1,590.56</b>
LOC 7	\$1,236.74	\$227.84	\$2,905.63	\$413.88	\$220.04	\$699.71	\$2,703.35	\$1,262.30	\$1,170.23	\$102.91
LOC 8	\$439.85	\$71.71	\$1,735.04	\$205.93	\$52.11	\$562.09	\$916.48	\$412.25	\$479.61	\$15.46
LOC 9	\$370.16	\$29.82	\$2,652.65	\$280.35	\$10.48	\$630.00	\$608.62	\$593.23	\$444.31	\$5.57
Subtotal	<b>\$2,046.74</b>	<b>\$329.37</b>	<b>\$7,293.32</b>	<b>\$900.16</b>	<b>\$282.63</b>	<b>\$1,891.80</b>	<b>\$4,228.45</b>	<b>\$2,267.78</b>	<b>\$2,094.15</b>	<b>\$123.94</b>
TOTAL	<b>\$28,757.95</b>	<b>\$74,443.93</b>	<b>\$31,710.38</b>	<b>\$5,780.07</b>	<b>\$11,057.33</b>	<b>\$41,422.02</b>	<b>\$32,248.24</b>	<b>\$19,592.59</b>	<b>\$17,920.87</b>	<b>\$7,924.26</b>

Florida Statewide County Comparison – Value of Structures (Millions) by Wildfire Risk

Risk	SUWANNEE	TAYLOR	UNION	VOLUSIA	WAKULLA	WALTON	WASHINGTON
LOC 0	\$733.84	\$423.00	\$225.77	\$12,910.80	\$524.49	\$5,361.63	\$538.61
LOC 1	\$154.64	\$169.59	\$91.58	\$612.99	\$197.75	\$893.43	\$319.58
LOC 2	\$168.09	\$115.37	\$80.65	\$1,011.08	\$148.07	\$622.17	\$182.18
LOC 3	\$459.56	\$284.35	\$267.61	\$5,117.89	\$509.07	\$3,914.58	\$472.66
<b>Subtotal</b>	<b>\$1,516.13</b>	<b>\$992.31</b>	<b>\$665.61</b>	<b>\$19,652.76</b>	<b>\$1,379.38</b>	<b>\$10,791.81</b>	<b>\$1,513.03</b>
LOC 4	\$135.28	\$64.39	\$59.14	\$1,975.69	\$132.61	\$401.82	\$41.62
LOC 5	\$112.07	\$63.84	\$46.82	\$1,709.15	\$112.93	\$241.08	\$15.64
LOC 6	\$134.57	\$80.52	\$48.51	\$1,928.95	\$130.47	\$240.16	\$8.66
<b>Subtotal</b>	<b>\$381.92</b>	<b>\$208.75</b>	<b>\$154.47</b>	<b>\$5,613.79</b>	<b>\$376.01</b>	<b>\$883.06</b>	<b>\$65.92</b>
LOC 7	\$187.64	\$90.54	\$47.60	\$2,656.05	\$167.28	\$174.52	\$2.85
LOC 8	\$84.17	\$37.84	\$10.22	\$1,405.79	\$66.58	\$21.85	\$0.36
LOC 9	\$116.36	\$64.35	\$7.26	\$2,023.76	\$131.01	\$14.80	\$0.04
<b>Subtotal</b>	<b>\$388.17</b>	<b>\$192.73</b>	<b>\$65.08</b>	<b>\$6,085.60</b>	<b>\$364.87</b>	<b>\$211.17</b>	<b>\$3.25</b>
<b>TOTAL</b>	<b>\$2,286.22</b>	<b>\$1,393.79</b>	<b>\$885.16</b>	<b>\$31,352.15</b>	<b>\$2,120.26</b>	<b>\$11,886.04</b>	<b>\$1,582.20</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	ALACHUA	BAKER	BAY	BRADFORD	BREVARD	BROWARD	CALHOUN	CHARLOTTE	CITRUS	CLAY
LOC 0	164,456	32,015	92,344	37,538	180,342	222,756	55,818	110,883	69,200	94,908
LOC 1	90,942	112,377	155,057	28,913	84,523	336,488	102,241	76,284	99,891	60,309
LOC 2	74,865	61,882	78,131	20,961	118,807	116,127	57,417	87,036	46,911	46,733
LOC 3	170,795	108,640	125,651	50,863	166,410	68,615	100,992	80,183	86,863	112,444
Subtotal	<b>501,058</b>	<b>314,914</b>	<b>451,183</b>	<b>138,275</b>	<b>550,082</b>	<b>743,986</b>	<b>316,469</b>	<b>354,386</b>	<b>302,865</b>	<b>314,394</b>
LOC 4	29,624	17,964	12,335	10,753	27,129	8,979	13,954	24,222	21,205	21,016
LOC 5	22,285	12,860	8,460	9,284	23,568	7,794	11,281	15,189	17,251	16,642
LOC 6	22,253	11,383	8,278	10,501	24,112	9,052	11,689	15,341	18,904	17,338
Subtotal	<b>74,162</b>	<b>42,207</b>	<b>29,073</b>	<b>30,538</b>	<b>74,809</b>	<b>25,825</b>	<b>36,925</b>	<b>54,752</b>	<b>57,360</b>	<b>54,996</b>
LOC 7	23,658	10,541	9,064	12,671	28,852	7,259	9,226	23,090	21,383	21,066
LOC 8	9,408	4,089	3,081	5,092	10,896	1,895	2,619	13,949	8,899	9,573
LOC 9	11,951	5,142	3,179	5,461	10,675	1,050	2,334	19,447	10,334	11,929
Subtotal	<b>45,017</b>	<b>19,772</b>	<b>15,324</b>	<b>23,224</b>	<b>50,423</b>	<b>10,204</b>	<b>14,178</b>	<b>56,486</b>	<b>40,616</b>	<b>42,568</b>
TOTAL	<b>620,237</b>	<b>376,892</b>	<b>495,580</b>	<b>192,037</b>	<b>675,315</b>	<b>780,015</b>	<b>367,572</b>	<b>465,625</b>	<b>400,841</b>	<b>411,958</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	COLLIER	COLUMBIA	DESO TO	DIXIE	DUVAL	ESCAMBIA	FLAGLER	FRANKLIN	GA DS DEN	GILCHRIST
LOC 0	210,971	82,352	110,585	40,158	206,592	140,171	49,536	23,768	62,721	49,227
LOC 1	664,318	178,791	33,007	171,739	60,583	111,107	53,893	195,758	67,261	38,352
LOC 2	181,445	68,748	131,934	76,727	46,520	62,360	55,311	52,587	50,200	33,311
LOC 3	187,791	103,265	68,150	130,186	122,245	99,427	90,513	72,337	108,312	52,957
Subtotal	<b>1,244,525</b>	<b>433,156</b>	<b>343,677</b>	<b>418,810</b>	<b>435,940</b>	<b>413,065</b>	<b>249,252</b>	<b>344,450</b>	<b>288,494</b>	<b>173,847</b>
LOC 4	18,824	20,249	12,636	13,407	24,134	7,596	16,093	4,796	14,994	11,274
LOC 5	16,111	15,744	12,131	8,017	18,630	3,849	13,297	1,651	10,952	9,430
LOC 6	19,321	16,145	11,002	6,787	20,371	2,567	14,435	1,281	10,863	9,935
Subtotal	<b>54,256</b>	<b>52,138</b>	<b>35,769</b>	<b>28,211</b>	<b>63,135</b>	<b>14,012</b>	<b>43,824</b>	<b>7,728</b>	<b>36,808</b>	<b>30,639</b>
LOC 7	26,842	16,099	13,484	6,598	23,403	1,454	16,614	942	8,396	11,062
LOC 8	13,087	5,537	6,172	2,107	9,574	244	7,047	257	2,477	5,296
LOC 9	17,883	5,741	10,179	1,945	12,343	147	8,088	215	2,054	6,665
Subtotal	<b>57,812</b>	<b>27,377</b>	<b>29,836</b>	<b>10,650</b>	<b>45,320</b>	<b>1,845</b>	<b>31,749</b>	<b>1,413</b>	<b>12,927</b>	<b>23,023</b>
TOTAL	<b>1,356,593</b>	<b>512,670</b>	<b>409,281</b>	<b>457,671</b>	<b>544,395</b>	<b>428,922</b>	<b>324,825</b>	<b>353,591</b>	<b>338,228</b>	<b>227,509</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	GLADES	GULF	HAMILTON	HARDEE	HENDRY	HERNANDO	HIGHLANDS	HILLSBOROUGH	HOLMES	INDIAN RIVER
LOC 0	151,487	26,820	67,127	101,696	318,825	68,508	204,654	221,109	81,221	154,167
LOC 1	100,346	228,172	93,960	47,045	139,638	78,076	44,038	88,958	140,711	53,904
LOC 2	179,558	52,579	51,983	117,549	170,327	37,441	194,533	64,289	43,859	42,091
LOC 3	123,456	49,792	81,477	63,419	87,901	69,969	140,698	161,075	43,382	41,909
Subtotal	<b>554,847</b>	<b>357,363</b>	<b>294,547</b>	<b>329,709</b>	<b>716,691</b>	<b>253,994</b>	<b>583,923</b>	<b>535,432</b>	<b>309,173</b>	<b>292,071</b>
LOC 4	17,933	3,849	12,685	17,289	10,859	16,454	13,697	47,973	1,744	7,668
LOC 5	19,367	1,657	8,684	20,584	10,228	12,663	18,589	32,794	827	6,650
LOC 6	19,354	918	7,276	17,052	8,666	12,781	20,317	29,630	553	6,743
Subtotal	<b>56,654</b>	<b>6,424</b>	<b>28,645</b>	<b>54,925</b>	<b>29,753</b>	<b>41,898</b>	<b>52,603</b>	<b>110,397</b>	<b>3,124</b>	<b>21,061</b>
LOC 7	11,946	291	6,102	15,298	8,499	14,207	31,015	26,161	338	7,857
LOC 8	3,531	35	1,775	4,537	3,059	6,206	15,290	7,582	76	3,724
LOC 9	4,350	26	1,302	4,079	3,474	7,355	24,939	5,767	58	4,929
Subtotal	<b>19,827</b>	<b>352</b>	<b>9,179</b>	<b>23,914</b>	<b>15,032</b>	<b>27,768</b>	<b>71,244</b>	<b>39,511</b>	<b>472</b>	<b>16,510</b>
TOTAL	<b>631,328</b>	<b>364,139</b>	<b>332,371</b>	<b>408,548</b>	<b>761,476</b>	<b>323,660</b>	<b>707,770</b>	<b>685,339</b>	<b>312,769</b>	<b>329,642</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	JACKSON	JEFFERSON	LAFAYETTE	LAKE	LEE	LEON	LEVY	LIBERTY	MADISON	MANATEE
LOC 0	224,639	57,483	44,454	207,969	231,231	92,692	90,454	29,583	87,947	151,142
LOC 1	228,291	145,983	92,275	69,383	67,978	108,867	244,685	290,097	136,523	88,833
LOC 2	76,931	67,494	72,724	103,956	43,746	63,711	108,833	77,840	80,913	86,722
LOC 3	77,191	97,079	109,682	149,122	72,620	129,112	175,328	91,030	121,165	103,387
Subtotal	<b>607,052</b>	<b>368,039</b>	<b>319,135</b>	<b>530,430</b>	<b>415,575</b>	<b>394,382</b>	<b>619,300</b>	<b>488,550</b>	<b>426,548</b>	<b>430,083</b>
LOC 4	2,382	9,350	11,210	27,525	17,918	16,151	25,243	15,593	11,441	30,701
LOC 5	897	5,586	7,411	29,823	17,267	11,068	19,314	12,885	7,214	14,614
LOC 6	465	4,131	5,650	40,916	22,223	9,954	18,356	11,115	6,144	7,930
Subtotal	<b>3,744</b>	<b>19,067</b>	<b>24,271</b>	<b>98,264</b>	<b>57,407</b>	<b>37,173</b>	<b>62,913</b>	<b>39,593</b>	<b>24,799</b>	<b>53,245</b>
LOC 7	125	2,930	4,488	55,711	30,409	9,708	22,030	8,506	4,416	3,998
LOC 8	18	827	1,404	25,130	14,971	3,729	10,901	1,996	1,244	709
LOC 9	0	645	1,378	30,582	19,718	4,166	13,129	990	1,106	190
Subtotal	<b>143</b>	<b>4,402</b>	<b>7,270</b>	<b>111,423</b>	<b>65,099</b>	<b>17,603</b>	<b>46,060</b>	<b>11,492</b>	<b>6,766</b>	<b>4,897</b>
TOTAL	<b>610,939</b>	<b>391,508</b>	<b>350,676</b>	<b>740,117</b>	<b>538,080</b>	<b>449,158</b>	<b>728,273</b>	<b>539,635</b>	<b>458,113</b>	<b>488,226</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	MARION	MARTIN	MIAMI-DADE	MONROE	NASSAU	OKALOOSA	OKEECHOBEE	ORANGE	OSCEOLA	PALM BEACH
LOC 0	217,858	264,684	364,843	134,641	62,501	128,945	138,067	192,531	177,960	913,728
LOC 1	102,294	19,515	688,936	523,476	97,747	252,431	30,204	43,039	50,763	155,189
LOC 2	120,699	48,499	105,975	40,072	72,456	109,769	207,840	78,221	280,485	149,015
LOC 3	219,421	67,282	76,811	21,697	141,852	99,958	129,644	130,645	262,110	127,247
<b>Subtotal</b>	<b>660,271</b>	<b>399,980</b>	<b>1,236,565</b>	<b>719,886</b>	<b>374,556</b>	<b>591,103</b>	<b>505,756</b>	<b>444,437</b>	<b>771,318</b>	<b>1,345,179</b>
LOC 4	95,977	14,750	6,972	847	17,522	5,351	6,660	36,396	20,053	20,219
LOC 5	105,696	15,309	5,504	366	11,055	2,932	8,369	36,106	24,698	15,941
LOC 6	82,319	14,449	6,607	188	9,048	2,415	12,565	42,863	41,262	14,810
<b>Subtotal</b>	<b>283,991</b>	<b>44,508</b>	<b>19,083</b>	<b>1,401</b>	<b>37,625</b>	<b>10,698</b>	<b>27,594</b>	<b>115,364</b>	<b>86,013</b>	<b>50,970</b>
LOC 7	76,191	16,670	9,046	99	7,618	1,310	16,715	47,011	57,770	13,611
LOC 8	22,941	7,064	2,764	0	2,677	199	8,647	17,579	23,324	4,670
LOC 9	20,951	8,498	2,354	0	2,718	45	11,642	17,563	25,659	5,005
<b>Subtotal</b>	<b>120,083</b>	<b>32,232</b>	<b>14,164</b>	<b>99</b>	<b>13,013</b>	<b>1,554</b>	<b>37,004</b>	<b>82,153</b>	<b>106,753</b>	<b>23,286</b>
<b>TOTAL</b>	<b>1,064,345</b>	<b>476,720</b>	<b>1,269,812</b>	<b>721,386</b>	<b>425,194</b>	<b>603,355</b>	<b>570,354</b>	<b>641,955</b>	<b>964,084</b>	<b>1,419,435</b>

## Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	PASCO	PINELLAS	POLK	PUTNAM	SANTA ROSA	SARASOTA	SEMINOLE	ST. JOHNS	ST. LUCIE	SUMTER
LOC 0	106,844	115,880	352,774	133,020	136,968	79,088	72,040	113,625	210,761	43,124
LOC 1	99,136	12,350	107,313	98,989	226,839	63,532	17,698	98,877	23,093	137,099
LOC 2	61,339	5,867	175,781	64,382	108,771	64,964	17,094	51,185	41,557	52,305
LOC 3	116,134	37,587	241,015	126,387	152,258	95,531	41,648	105,198	42,469	74,878
<b>Subtotal</b>	<b>383,454</b>	<b>171,684</b>	<b>876,883</b>	<b>422,778</b>	<b>624,836</b>	<b>303,115</b>	<b>148,480</b>	<b>368,885</b>	<b>317,880</b>	<b>307,406</b>
LOC 4	32,109	6,910	61,105	23,839	12,977	20,445	14,361	15,898	9,876	28,358
LOC 5	21,443	2,962	60,469	20,340	7,321	13,378	12,795	11,493	10,246	13,620
LOC 6	21,113	1,716	69,587	21,341	5,247	9,996	14,480	10,849	11,632	12,352
<b>Subtotal</b>	<b>74,666</b>	<b>11,588</b>	<b>191,161</b>	<b>65,520</b>	<b>25,545</b>	<b>43,819</b>	<b>41,637</b>	<b>38,240</b>	<b>31,754</b>	<b>54,330</b>
LOC 7	20,215	1,201	92,558	23,050	3,658	10,204	16,964	10,337	12,244	7,810
LOC 8	7,154	387	48,430	8,339	1,007	6,739	6,717	3,297	4,059	1,305
LOC 9	7,440	185	77,024	9,722	413	6,389	6,931	3,664	4,122	579
<b>Subtotal</b>	<b>34,810</b>	<b>1,773</b>	<b>218,012</b>	<b>41,111</b>	<b>5,078</b>	<b>23,332</b>	<b>30,612</b>	<b>17,298</b>	<b>20,425</b>	<b>9,694</b>
<b>TOTAL</b>	<b>492,930</b>	<b>185,045</b>	<b>1,286,056</b>	<b>529,409</b>	<b>655,459</b>	<b>370,266</b>	<b>220,729</b>	<b>424,423</b>	<b>370,059</b>	<b>371,430</b>



# Florida Statewide County Comparison - Total Acres by Wildfire Risk

Risk	SUWANNEE	TAYLOR	UNION	VOLUSIA	WAKULLA	WALTON	WASHINGTON
LOC 0	127,728	52,920	25,520	169,855	25,339	148,828	75,002
LOC 1	46,303	210,821	25,363	110,130	151,873	275,644	126,680
LOC 2	44,557	125,870	21,541	98,319	75,120	135,112	53,852
LOC 3	106,686	209,451	56,986	193,088	102,935	147,313	124,812
<b>Subtotal</b>	<b>325,274</b>	<b>599,062</b>	<b>129,410</b>	<b>571,392</b>	<b>355,267</b>	<b>706,897</b>	<b>380,346</b>
LOC 4	24,131	25,576	9,830	38,582	11,671	8,211	7,827
LOC 5	20,388	15,477	7,029	32,948	7,979	4,751	3,353
LOC 6	22,027	12,645	6,161	36,927	7,503	3,664	1,748
<b>Subtotal</b>	<b>66,546</b>	<b>53,698</b>	<b>23,020</b>	<b>108,457</b>	<b>27,153</b>	<b>16,626</b>	<b>12,928</b>
LOC 7	27,152	10,824	5,278	45,516	7,395	3,145	721
LOC 8	10,805	3,993	1,288	22,270	2,774	1,088	114
LOC 9	13,053	4,602	826	34,828	2,635	829	20
<b>Subtotal</b>	<b>51,010</b>	<b>19,419</b>	<b>7,392</b>	<b>102,614</b>	<b>12,804</b>	<b>5,062</b>	<b>855</b>
<b>TOTAL</b>	<b>442,830</b>	<b>672,179</b>	<b>159,822</b>	<b>782,463</b>	<b>395,224</b>	<b>728,585</b>	<b>394,129</b>

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# Appendix D

## State and Regional Mitigation Projects

**Appendix D** includes a comprehensive list of ongoing and proposed wildfire mitigation projects to be implemented by State and regional agencies and non-governmental organizations throughout Florida.

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# State and Regional Mitigation Projects

A number of State and regional agencies and non-governmental organizations are currently engaged in implementing wildfire mitigation projects throughout Florida. **Section D.2** includes a comprehensive list of the ongoing and proposed mitigation projects planned through 2016. The list was compiled through interviews and information request surveys administered to representatives from a variety of agencies/organizations working throughout the State including: Department of Economic Opportunity (DEO); Division of Community Development (DCD); Department of Environmental Protection (DEP) Division of Recreation and Parks; DEP Office of Coastal and Aquatic Managed Areas (CAMA); DEP Office of Greenways and Trails (OGT); Division of Forestry (DOF); Florida Fish and Wildlife Conservation Commission (FWC); Northwest Florida Water Management District (NFWMD); South Florida Water Management District (SFWMD); Southwest Florida Water Management District (SWFWMD); St. Johns River Water Management District (SJRWMD); and Suwannee River Water Management District (SRWMD). Each project is identified by the following information as appropriate:

- **Lead Agency** refers to the agency that is responsible for overseeing the implementation of the project.
- **Project Title and Description** indicates the title of the project as determined by the lead agency. The description of the project is a brief overview of the action to be taken by the lead agency and any partners. In some cases, the description includes a general discussion of the location of the project. A more detailed description of each of the projects can be obtained by contacting the lead agencies.
- **Geographic Area** refers to the region or county where the project is planned to be implemented. If the project is statewide it would be indicated in this field.
- **Timeframe** is the year(s) that the project will ideally be implemented however timeframes are often contingent on availability of funding and other resources. If the lead agency intends to implement the project on an ongoing basis that is indicated in this field.
- **Possible or Approved Funding Source** specifies potential financial resources that could be used to implement a project. Examples of possible or approved funding sources include: agency budget allocations, revenue funds, Federal, State or local grants, and/or in-kind donations.
- **Partners** are any other agencies or organizations providing financial or in-kind support during the implementation of the project.
- **Project Type** is one of seven categories that describe the project. Categories include: Building Retrofit and Landscaping; Community Outreach and Education; Fire Response Improvements; Fuel Management; Policy/Planning/New Construction Regulations; Research and Risk Assessment; and Staff Training.

## D.1 Prioritization Methodology

The State and Regional Mitigation projects were prioritized by each of the lead agencies. During the compilation of the project list, the agency/organizations were asked to list the wildfire mitigation projects that they are planning to implement in order of priority (highest to lowest) based on funding availability and their specific agency/organization's goals and objectives. The list in **Section D.2** reflects this prioritization.

## D.2 Mitigation Projects

The following wildfire mitigation projects are listed alphabetically by lead implementing agency and each agency's projects have been prioritized according to the prioritization methodology described in **Section D.1**.

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
<b>Department of Economic Opportunity (DEO); Division of Community Development (DCD)</b>	<b>Integrating Wildfire Mitigation into Large Scale Planning Initiatives</b> – Department of Community Affairs is exploring ways to expand past programs that provided technical assistance to counties and regions that may be interested in undertaking large-scale planning projects. This new effort may incorporate the principles of past initiatives such as sector planning and the Rural Lands Stewardship Program. The Department may explore ways that wildfire mitigation planning and principles of the Firewise Program can be incorporated into these large-scale developments where appropriate. This may be in the form of targeted technical assistance, voluntary information sharing, and guidance or tools geared towards this specific program.	Statewide	Possibly 2011 – 2013	Internal DCA staff time or the FEMA Hazard Mitigation Assistance Programs as needed.	Florida Division of Forestry (DOF); Florida Division of Emergency Management (DEM)	Community Outreach and Education; Policy/Planning/ New Construction Regulations
<b>Florida Department of Environmental Protection (DEP) Division of Recreation and Parks</b>	<b>Prescribed Burning/Mulching Gyro-Track</b> – The Division of Recreation and Parks is aiming to perform prescribed burning and/or mulching on approximately 1,170 acres in the following state parks: Bald Point State Park; Camp Helen State Park Fuel Reduction; Deer Lake State Park; Dr. Julian G. Bruce St. George Island State Park; Eden Gardens; Tarkiln Bayou Preserve State Park; Crystal River Preserve State Park; Fort Cooper State Park; Paynes Prairie Preserve State Park; Lower Wekiva River Preserve State Park; Rock Springs Run State Reserve; Silver River State Park; Wekiwa Springs State Park; Oscar Scherer State Park; and Werner-Boyce Salt Springs State Park.	Statewide	Possibly 2011 – 2013			Fuel Management
<b>DEP Division of Recreation and Parks</b>	<b>Prescribed Burning/Roller-Chop</b> – The Division of Recreation and Parks is aiming to perform mechanical treatments on approximately 2,045 acres in the following state parks: Amelia Island State Park; Big Talbot Island State Park; Crystal River Preserve State Park; Paynes Prairie Preserve State Park; Lower Wekiva River Preserve State Park; Rock Springs Run State Reserve; Wekiwa Springs State Park; Beker; Don Pedro Island State Park; Highlands Hammock State Park; Little Manatee River State Park; and Myakka River State Park.	Statewide	Possibly 2011 – 2013			Fuel Management

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
DEP Office of Coastal and Aquatic Managed Areas (CAMA)	<b>Coastal Strand Habitat Restoration, Guana Tolomato Matanzas National Estuarine Research Reserve – CAMA</b> plans to apply prescription burning to 690 acres of coastal strand habitat along State Road (SR) A1A. This acreage requires mechanical pre-treatment to reduce radiant heat exposure to residences immediately across SR A1A.	St. John's County	Began in 2008, ongoing through 2016 on a 5-8 year cycle	State of Florida Conservation and Recreation Lands (CARL) funds; National Oceanic and Atmospheric Administration (NOAA) operations grant; other external grant sources	DOF; Florida Fish and Wildlife Commission (FWC); DEP Division of Recreation and Parks; University of North Florida	Fuel Management/ Ecological Restoration
DEP CAMA	<b>Fresh Water Marsh Restoration, GTM Research Reserve</b> – CAMA plans to apply prescribed burning to a 58-acre fresh water marsh on Guana Peninsula on a 2-3 year cycle to remove slash pines and other encroaching species from the marsh. There are also plans to construct a low water crossing to restore sheet flow to marsh. These projects were recommended as strategies to restore historical hydrology to marsh.	St. John's County	Began in 2006, ongoing on a 2-3 year cycle	State of Florida CARL funds; NOAA operations grant; other external grant sources	DOF; FWC; DEP Division of Recreation and Parks; University of North Florida	Fuel Management/ Ecological Restoration
DEP CAMA	<b>Restoration of oak scrub habitat GTM Research Reserve</b> – CAMA plans to apply prescribed burning to 25 acre oak scrub habitat on Guana Peninsula.	St. John's County	Began in 2002, ongoing on an 8-10 year cycle	State of Florida CARL funds; NOAA operations grant; other external grant sources	DOF; FWC; DEP Division of Recreation and Parks; University of North Florida	Fuel Management/ Ecological Restoration
DEP CAMA	<b>Mechanical Fuel Reduction and Prescribed Burning in Rookery Bay National Estuarine Research Reserve (NERR)</b> – CAMA plans to apply mechanical pre-treatment to reduce radiant heat exposure to Florida Power and Light (FPL) and LCEC power lines, cables, and residences/structures immediately adjacent to Reserve boundary.	Collier County	Began in 2010, ongoing through 2013 and beyond to maintain 2-4 year cycle for burning		DOF; FWC; FPL; LCEC; East Naples Fire District; IOC Fire District; DEP Division of Recreation and Parks; Collier County Sheriff's Office; LCEC; United States Fish and Wildlife Service (USFWS); Prescribed Fire Training Center (PFTC)	Fuel Management/ Ecological Restoration

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
DEP CAMA	<p><b>Rookery Bay NERR/Outer Islands</b> – CAMA plans to apply prescribed burning to 500 acres on the outer islands to reduce the risk of wildfires caused by residences and campers.</p>	Collier County	Plans to begin in 2011, ongoing on a 2-5 year cycle	State of Florida; NOAA Operations Grant; other grant sources and partnerships	DOF; Naples Fire District, East Naples Fire District; IOC Fire District; Marco Island Fire District; DEP Division of Recreation and Parks; Collier County Sheriff's Office Marine and Aviation; FWC Marine Division; USFWS; Keewaydin Island Homeowner's Association; Continental Construction; PFTC	Fuel Management/ Ecological Restoration



Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
DEP CAMA	<b>All other Prescribed Burning Activities</b> – Reintroduce fire into natural areas.	Collier County	Began in 2010, ongoing to maintain 2-3 year cycle until fuel loads are at manageable levels to increase burn intervals depending on habitat	State of Florida; NOAA Operations Grant; other grant sources and partnerships	DOF; Naples Fire District, East Naples Fire District; IOC Fire District; Marco Island Fire District; DEP Division of Recreation and Parks; Collier County Sheriff's Office Marine and Aviation; FWC Marine Division; USFWS; The Nature Conservancy (TNC); United States National Park Service (NPS); PFTC	Fuel Management/ Ecological Restoration
DEP Office of Greenways and Trails (OGT)	<b>Annual Prescribed Fire Program</b> – OGT averages approximately 3,000 acres of prescribed fire per year. While fuel management is not the only reason for burning, it is one of the most important results of the prescribed fire program. Most of the prescribed fire projects are done in wildland-urban interface (WUI) areas adjacent to our boundaries.	Central Florida	Ongoing	OGT budget	DOF; FWC; County agencies	Fuel Management
DEP OGT	<b>Mulching project</b> – OGT is in the process of hiring a contractor to remove oak trees by mulching them and removing them from the site. This is part of an overall scrub restoration project to encourage a resident population of Florida scrub jays to expand their habitat. This also qualifies as a fuel management project.	Central Florida	2011	OGT budget	FWC provided guidance with this project	Fuel Management

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
DEP OGT	<b>Timber sales</b> – This is an ongoing project of assessing those timber stands that are approaching full canopy closure with high basal areas and preparing them for thinning operations. By opening up these overcrowded timber stands, we not only provide more diversity for wildlife and produce healthier trees, but we are also reducing the fuels within the stands thereby making it safer to prescribe burn in the future.	Central Florida	Ongoing	Revenue source	DOF administers timber sales	Fuel Management
DEP OGT	<b>Chopping projects</b> – OGT has a bulldozer and roller chopper that are frequently utilized to manage fuels on certain parcels prior to attempting a prescribed fire. Many of these areas are in WUI sections of the Cross Florida Greenway or in areas of extremely heavy fuels.	Central Florida	Ongoing	OGT budget	Wildfire fuel mitigation grants	Fuel Management
Florida Fish and Wildlife Conservation Commission (FWC)	<b>Prescribed Fire</b> – FWC will continue using prescribed fire on all lead managed Wildlife Management Areas for the purpose of fuel management and natural plant community restoration.	Statewide	Ongoing	Pittman-Robinson Act; Conservation and Recreation Lands Trust Fund; State Game Trust Fund; Land Acquisition Trust Fund	Various Federal, State and local government agencies; private landowners; and non-governmental organizations	Fuel Management
FWC	<b>Mechanical/Chemical Control Treatments</b> – FWC will continue using various mechanical and/or chemical control methods when needed for the purpose of fuel management and natural plant community restoration.	Statewide	Ongoing	Pittman-Robinson Act; CARL funds; State Game Trust Fund; Land Acquisition Trust Fund	Various Federal, State and local government agencies; private landowners; and non-governmental organizations	Fuel Management
FWC	<b>Landowner's Assistance Program</b> – FWC plans to continue to provide cost share money to private landowners for fuel reduction and management, including prescribed fire, mechanical vegetation control, and chemical treatments.	Statewide	Ongoing	State Wildlife Grants; Future Farm Bill Conservation Programs	Natural Resources Conservation Service; USFWS	Fuel Management
Florida Forest Service (FFS)	<b>Community Wildfire Protection Planning Initiative</b> – FFS will provide capacity to local mitigation planning teams to assist them with the development of community wildfire protection plans.	Statewide	2011 - 2013	FEMA Fire Prevention and Safety Grant	Local government agencies	Policy/Planning/ New Construction Regulations

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
<b>Northwest Florida Water Management District (NFWMD)</b>	<b>Prescribed Burning Program</b> – NFWMD implements a prescribed burning program for all fire-dependent natural communities on the lands owned by the District. The project is used to manage fuels and for ecological purposes. Goal is to apply prescribed fire to 10,000-15,000 acres annually.	NFWMD	Ongoing	Water Management Lands Trust Fund; Wetland Mitigation funds.	Gulf Coastal plain Ecosystem partnership (GCPEP); Aeronautical Repair Station Association (ARSA); PFTC	Fuel Management
<b>South Florida Water Management District (SFWMD)</b>	<b>Prescribed burning</b> – Mitigation of wildfires is implemented by the SFWMD through recurring, District-wide prescribed burning of District lands. Keeping lands burned within an appropriate fire return interval is the best method of mitigating wildfire by keeping fire fuels and related fire intensity low. Regular renewal of boundary firelines associated with prescribed burn planning helps to prevent movement of those wildfires that do occur, to offsite areas.	SFWMD	Ongoing	Water Management Lands Trust Fund; Florida Forever Program; Ad Valorem taxes; other as budgeted through Governing Board	FWC; DEP; DOF, TNC; NPS; individual Counties	Fuel Management
<b>Southwest Florida Water Management District (SWFWMD)</b>	<b>Fire Management Outreach and Education</b> – The SWFWMD land managers/burn bosses routinely conduct public outreach to inform the public of the need for prescribed burning to control hazardous fuel accumulation and to maintain ecological integrity of Florida's ecosystems. Generally, these events are targeted at neighboring residential communities that occur at the WUI or may otherwise experience effects of prescribed burning (smoke). SWFWMD anticipates approximately 2-5 per year aimed at audiences living adjacent to District owned and managed lands, primarily within the most heavily populated counties within the District's jurisdiction (Hillsborough, Pasco, Hernando and Sarasota counties).	SWFWMD	Ongoing	SWFWMD General Fund		Community Outreach & Education

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
SWFWMD	<b>Fire Management Personnel Training</b> – The SWFWMD currently has 11 Certified Prescribed Burners that function as Burns Bosses, and 20 trained fire fighters/heavy equipment operators that provide crews for burns. Over 460 years of experience are represented on the District’s fire management team. Fire management personnel will maintain training as necessary to stay current on State and District training requirements. Additional training which supports development of knowledge and skills will be taken as available and per budget constraints. Two additional personnel are scheduled to attend the Interagency Prescribed Burn course in 2011. No additional staffing is anticipated within the 5-year interval addressed herein.	SWFWMD	Training will occur as needed, and based on course availability and budget constraints	SWFWMD General Fund	DOF Training Centers; National Interagency Prescribed Fire Training Center; Others	
SWFWMD	<b>Fire Management and Fuels Reduction programs</b> – The SWFWMD is the lead manager on 30 properties totaling approximately 350,000 acres, of which 164,000 are fire-maintained systems. From 2011-2016, the District plans to burn approximately 30,000 acres per year, mechanically reduce approximately 800-1,000 acres via hydroax and approximately 1,500 via roller chopping. Many of these mechanical reductions activities will focus on the WUI.	SWFWMD	Ongoing	SWFWMD General Fund	Various Counties (Cooperative funding); DOF (special projects that might be identified and wildfire suppression); Informal partnerships with other County Structural Fire Control	Fuel Management
St. John’s River Water Management District (SJRWMD)	<b>SJRWMD Prescribed Fire Program</b> – Prescribed burning of District owned and managed properties. SJRWMD plans to burn between 30,000 and 50,000 acres per year for the next five years. This is, of course, weather conditions permitting. While the primary purpose of a given prescribed burn may vary, all burns conducted on District lands can be considered to have fuel reduction as either the primary or secondary purpose.	SJRWMD	Ongoing	District Ad Valorem Funds	DOF; DEP Division of Recreation and Parks; TNC	Fuel Management
SJRWMD	<b>Moses Creek Conservation Area (CA) WUI Buffer Maintenance</b> – This project is fuel reduction by maintaining 54 acres of fuels, with heavy-duty mowers along the boundary of Moses Creek CA. This boundary borders 4 subdivisions.	St. Johns County	Ongoing (once annually)	District Ad Valorem Funds		Fuel Management

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Partners	Project Type
SJRWMD	<b>Julington-Durbin Preserve WUI Buffer Maintenance</b> – This project is fuel reduction by maintaining 38 acres of fuels, with heavy-duty mowers along the boundary of Julington-Durbin Preserve. This boundary borders 4 subdivisions.	Duval County	Ongoing (once annually)	District Ad Valorem Funds		Fuel Management
SJRWMD	<b>Lake Norris CA WUI Buffer Maintenance</b> – This project is fuel reduction by mowing 2 acres of heavy fuels along the western boundary of Lake Norris CA. This boundary borders 2 subdivisions. Once the heavy mowing is accomplished through contractor (DOF mitigation monies), SJRWMD will maintain with a heavy duty bush hog.	Lake County	Initial treatment 2011, maintenance will be once annually	Initial treatment is with DOF Fuels Mitigation program; annual treatments will be funded through District Ad Valorem	DOF is contracting the initial treatment	Fuel Management
SJRWMD	<b>Bayard CA WUI Buffer Maintenance</b> – This project is fuel reduction by maintaining 9 acres of fuels, with heavy-duty mowers along the boundary of Bayard CA. This boundary borders several single-family dwellings, and County Road 209 as well as the CSX Railway.	Clay County	Ongoing, once annually	District Ad Valorem		Fuels Management
SJRWMD	<b>Black Creek Ravines CA WUI Buffer Maintenance</b> – This project is fuel reduction by maintaining 5 acres of fuels, with heavy-duty mowers along the boundary of Black Creek Ravines CA. This boundary is urban interface with 3 subdivisions.	Clay County	Ongoing, once annually	District Ad Valorem		Fuels Management
SJRWMD	<b>Buck Lake CA Fireline/Fuels Management</b> – Using heavy-duty mower/mulcher to mow 40-foot wide buffer along boundaries of heavily fueled management units. Total area in this project will be 12.7 acres.	Brevard and Volusia Counties	Initial mowing 2011, then maintenance once annually	District Ad Valorem		Fuels Management
Suwannee River Water Management District (SRWMD)	<b>SRWMD Prescribed Burn Program</b> – The SRWMD implements their Prescribed Burn Program for the purpose of helping to restore and maintain natural plant community structure and function, to enhance habitat for game and non-game wildlife species, and to reduce overall fuel levels to help lower the intensity of possible wildfires.	SRWMD	Ongoing; funded on a fiscal year basis	Funded on a fiscal year basis with Governing Board approval	DOF	Fuel Management

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# Appendix E

## Local Mitigation Projects

**Appendix E** includes a list of ongoing and proposed mitigation projects that the Florida Forest Service (FFS) intends to implement in local districts as budgets and resources allow.

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# Local Mitigation Projects

The list of projects in **Section E.2** is a compilation of ongoing and proposed mitigation projects that the Florida Forest Service (FFS) intends to implement in local districts as budgets and resources allow. The individual projects included in this list were compiled from existing plans, such as the 2011 Wildfire Mitigation Action Plans and local Community Wildfire Protection Plans (CWPPs), and interviews with FFS Wildfire Mitigation Specialists. Each project is identified by the following information as appropriate:

- **Lead Agency** refers to the agency that is responsible for overseeing implementation of the project. While there are a number of agencies working to mitigate wildfire risk at the local level in each county, this list only includes projects that have been planned by FFS as indicated in the lead agency field for each project. Some of these projects however are being implemented in partnership with other local agencies that are also listed in this field.
- **Project Title and Description** indicates the action entailed and the location of the project. A more detailed description of each of the projects can be obtained by contacting the individual FFS Field Units.
- **Geographic Area** refers to the county or counties where the project is planned to be implemented.
- **Timeframe** is the year(s) that the project will ideally be implemented however timeframes are often contingent on availability of funding and other resources. In some cases, the projects are intended to be ongoing which is indicated in this field.
- **Possible or Approved Funding Source** specifies potential financial resources that could be used to implement a project. Examples of possible or approved funding sources include: agency budget allocations, revenue funds, federal, state or local grants, and/or in-kind donations.
- **Project Type** is one of seven categories that describe the project. Categories include: Building Retrofit and Landscaping; Community Outreach and Education; Fire Response Improvements; Fuel Management; Policy/Planning/New Construction Regulations; Research and Risk Assessment; and Staff Training.
- **CWPP Project** means that the project is included in a local Community Wildfire Protection Plan. Some funding sources give preferences to projects that are included in CWPPs.

## E.1 Prioritization Methodology

The FFS Wildfire Mitigation Specialist at each of the individual FFS Field Units prioritized each county's local mitigation project included in **Section E.2**. Projects that were anticipated to reduce the vulnerability of populations living in high-risk areas were given a high priority for implementation. Risk levels were determined according to the on-the-ground knowledge of local wildfire experts. High priority projects were then ranked based on funding and resource availability. Although the project list was prioritized for 2011, priorities often change locally as the year progresses and the fire season becomes more active. FFS Field Units include: the Blackwater Forestry Center; Bunnell District; Caloosahatchee Forestry Center; Chipola Forestry Center; Everglades District; Jacksonville District; Lakeland District; Myakka River District; Okeechobee District; Orlando District; Perry District; Suwannee Forestry Center; Tallahassee Forestry Center; Waccasassa Forestry Center; and the Withlacoochee Forestry Center.

## E.2 Local Mitigation Projects

The following wildfire mitigation projects are organized by FFS Field Units and listed by county. The projects for each county are listed according to priority as determined according to the prioritization methodology detailed in **Section E.1**.

### Blackwater Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and Mechanical Treatment University of West Florida	Escambia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Hwy 98/Myrtle Grove	Escambia County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Ethridge Road/Pleasant Grove	Escambia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Silver Oaks	Okaloosa County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Clear Creek	Okaloosa County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Garcon Point	Santa Rosa County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Woodbine Hills	Santa Rosa County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Malone/Parker roads	Santa Rosa County	2011	Budget allocations	Fuel Management	

## Bunnell District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; Volusia County Fire Services (VCFS)	Conduct community awareness of Wildfire and Firewise programs via Fire Station Open House in targeted areas of significant risk.	Volusia County	Ongoing and quarterly	Seek mitigation funding and Firewise program with FFS	Community Outreach and Education	X
FFS; VCFS	Conduct recurrent training related to wildfire suppression and structural triage and protection in the urban interface.	Volusia County	Continual	Seek funding, Fire Assistance Grant, CWPP, Hazard Mitigation Grant and/or operations budget to include sponsorship	Fire Response Improvements	X
FFS; VCFS	Reactivate the Volusia County Wildfire Coordinating Group.	Volusia County	January 2012	Not needed	Fire Response Improvements	X

## Caloosahatchee Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Mechanical Treatment and possible prescribed burning Golden Gate Estates (70-ft-wide corridors).	Collier County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment and possible prescribed burning East Naples (70-ft-wide corridors).	Collier County	2011	Budget allocations	Fuel Management	
FFS	Develop a CWPP for Golden Gate Estates	Collier County	2011	Budget allocations	Community Outreach and Education	
FFS	Hold a Firewise Community workshop in Golden Gate Estates and develop a plan to have the community designated as a Firewise Community/USA.	Collier County	2011	Budget allocations	Community Outreach and Education	
FFS	Renew Firewise Community/USA Designations for: Vanderbilt Country Club; Key Marco; Fiddlers Creek; and Veronawalk.	Collier County	Ongoing	Budget allocations	Community Outreach and Education	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Develop plans to have the following communities designated as Firewise Communities/USA: Sherwood (Golden Gate); Jerome (East Naples); Maplewood (East Naples); Autumn Woods (North Naples); Immokalee Non-Profit Housing; Forest Glen (Golden Gate); Naples Lakes (Golden Gate); Sapphire Lakes (Golden Gate); Stonebridge (North Naples); Pebblebrooke (Golden Gate); and Wilshire Lakes (North Naples).	Collier County	2011	Budget allocations	Community Outreach and Education	
FFS	Establish a Firewise Designation Site in Max Hasse Community Park.	Collier County	2011	Budget allocations	Community Outreach and Education	
FFS	Mechanical treatments and prescribed burning in Montura Ranch (30-ft-buffer).	Hendry County	2011	Budget allocations	Fuel Management	
FFS	Prescribed burning Port Labelle.	Hendry County	2011	Budget allocations	Fuel Management	
FFS; Hendry County Emergency Management	Initiate the development of a Community Wildfire Protection Plan for a neighborhood in Hendry County.	Hendry County	2011	Budget allocations	Community Outreach and Education	
FFS	Pursue Firewise Communities/USA designations for Clewiston and Labelle.	Hendry County	2011	Budget allocations	Community Outreach and Education	
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Continue mechanical fuel reduction and prescribed burns in Lehigh Acres.	Lee County	Ongoing	Federal and state grants, local funds	Fuel Management	X
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Continue mechanical fuel reduction, as appropriate in North Fort Myers.	Lee County	Ongoing	Federal and state grants, local funds	Fuel Management	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Continue mechanical fuel reduction and prescribed burns in Greenbriar Estates.	Lee County	Ongoing	Federal and state grants, local funds	Fuel Management	X
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Continue prescribed burns and use roller chopping in Gator Slough in Cape Coral.	Lee County	Ongoing	Federal and state grants, local funds	Fuel Management	X
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Continue mechanical fuel reduction and prescribed burns in Briar Cliff.	Lee County	Ongoing	Federal and state	Fuel Management	X
FFS, in concert with Lee County Public Safety and the independent fire district/city fire department of Lee County	Identify strategic fuel reduction areas and annually prioritize areas for prescribed burns/mechanical fuel management.	Lee County	Annually	Lee County All Hazards MSTU funds, federal and state grant funds, State general revenue	Fuel Management	X
FFS	Increase the number of independent fire district/city fire department fire fighters certified to fight wildfires with S130/190 training classes.	Lee County	Annually	State general revenue funds, federal and state grant funds	Fire Response Improvements	X

## Chipola Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and Mechanical Treatment Frank Brown Park	Bay County	2011-2012	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Woodville	Bay County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Long Branch	Bay County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Pier Park (3 acres)	Bay County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Sam Adkins Park Project	Calhoun County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Calhoun County	Calhoun County	2011-2012	Budget allocations	Fuel Management	
FFS	Mechanical Treatment North Port St. Joe Project (2,500 ft)	Gulf County	2011-2012	Budget allocations	Fuel Management	
FFS	Mechanical Treatment South Port St. Joe Project (4,000 ft)	Gulf County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Register	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Ben Williams	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn N.E. Allen	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Adams	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Houston Stafford	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn John Gould	Washington County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Lowell Kelly	Holmes and Washington Counties	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn Mitsy Harless	Holmes County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Riverside School (20 acres)	Jackson County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Rhoulac Middle School (40 acres)	Washington County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Rockman (40 acres)	Walton County	2011-2012	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Wood (500 ft)	Walton County	2011-2012	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Long Branch	Washington County	2011-2012	Budget allocations	Fuel Management	

## Everglades District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and Fire Lines Tivoli Sand Pine Preserve	Broward County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines Dolphin Center	Broward County	2011	Budget allocations	Fuel Management	
FFS	Prescribed burn South Florida Water Management District Miami (430 acre)	Broward County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Miami-Dade Communication Tower	Broward County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn A.D. Barnes Park	Miami-Dade County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Larry and Penny Thompson Park	Miami-Dade County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Martinez Pineland	Miami-Dade County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Zoo Miami	Miami-Dade County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Navy Wells	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Fire Lines Pine Jog Environmental and Educational Center	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines Boca Community Hospital	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines Pasio, Palm Beach Gardens	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines Caloosa, Palm Beach Gardens	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines North Lake/710	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines E Road – Loxahatchee	Palm Beach County	2011	Budget allocations	Fuel Management	
FFS	Fire Lines Deer Run – Acreage	Palm Beach County	2011	Budget allocations	Fuel Management	

## Jacksonville District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn Lake Geneva, Keystone Heights (80 acres); Invite media to prescribed burn, write newspaper article and prepare information packets to be delivered door-to-door.	Clay County	2011	Budget allocations	Fuel Management; Community Outreach and Education	X
FFS	Mechanical Treatment Camp Blanding's south boundary, Keystone Heights (100-ft buffer).	Clay County	2011	Budget allocations	Fuel Management	X
FFS	Prescribed Burn and Mechanical Treatment Pier Station, Penney Farms (50 X 100 ft buffer); Write prescribed burn article in Pier Station Church bulletin.	Clay County	2011	Budget allocations	Fuel Management; Community Outreach and Education	X
FFS	Mechanical Treatment Plantation Farms Community Association (200 acres); Prepare and distribute community newsletter detailing mitigation projects.	Clay County	2011	Budget allocations	Fuel Management; Community Outreach and Education	
FFS	Mechanical Treatment Big Tree Lake Estates (may require some investigation of absentee landowners).	Clay County	2011	Budget allocations	Fuel Management	
FFS	Community education campaign in Penney Farms including door-to-door campaign for the Thunder Road area, newsletter for the Pier Station community church, and community meeting for the Town of Penney Farms.	Clay County	2011	Budget allocations	Community Outreach and Education	X
FFS	Implement the "Firewise actions" contained in the Lake Region CWPP (Keystone Heights). This includes hazardous fuel reduction projects, distributing literature and area events, making presentations to community groups, and coordinating with Clay County Emergency management and the Keystone and McRae Volunteer Fire Departments.	Clay County	2011	Budget allocations	Fuel Management; Community Outreach and Education	



Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Mechanical fuel treatments on 50 acres of heavy forest underbrush adjacent to the homes in Oakleaf Plantation. This project should be re-treated every 2-4 years.	Clay County	2011	Budget Allocations	Fuel Management	
FFS	Mechanical Treatment City of Jacksonville Locso Park (15 acres); Prepare mitigation door hangers and deliver to residents in the area prior to mowing.	Duval County	2011	Budget allocations	Fuel Management; Community Outreach and Education	
FFS	Prescribed Burn and Mechanical Treatment North Side Pumpkin Hill Creek Preserve (burn 15 acres; 100-ft buffer strips); Prepare newspaper article detailing the project	Duval County	2011	Budget allocations	Fuel Management; Community Outreach and Education	
FFS	Prescribed Burn and Mechanical Treatment Sal Taylor Preserve on Nathan Hale Road (burn 25 acres; 100-ft buffer strips)	Duval County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment City of Jacksonville Beach and Peach Park (30 acres).	Duval County	2011	Budget allocations	Fuel Management	
FFS	Mechanical fuel treatments on 11 acres of forest underbrush at McGirts Creek park Expansion to create a wildfire bufferstrip between the park and the homes on the north boundary.	Duval	2011	Budget Allocations	Fuel Management	
FFS	Mechanical Treatment Argyle Area on Old Middleburg Road (50-ft buffer strips); Provide mitigation door hangers throughout the area prior to mowing.	Duval County	2011	Budget allocations	Fuel Management; Community Outreach and Education	
FFS	Mechanically treat 8 acres of forest underbrush on Dutton Island Preserve to create a 150-ft wildfire buffer zone between the preserve and the homes along the southeast boundary.	Duval County	2011	Budget Allocations	Fuel Management	
FFS	Mechanically treat 18 acres of forest underbrush on Hanna Park to create a 100-200-ft wildfire buffer between the park and the homes along the southern boundary.	Duval County	2011	Budget Allocations	Fuel Management	
FFS	Mechanical Treatment Flagler Business Park on Race Track Road (50 acres); Invite the media to cover this project because it is in highly traveled corridor.	Duval County	2011	Budget allocations	Fuel Management; Community Outreach and Education	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Mechanical Treatment Nassau County School Board Property, Hilliard and Callahan (50–100-ft buffer).	Nassau County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Rayonier Forest Resources property in Callahan and Hilliard (50–100-ft buffer).	Nassau County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Nassau County Judicial Complex, Yulee (100-ft buffer strip).	Nassau County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Old Nassauville (50-ft buffers strips).	Nassau County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Eastwood Apartments, Hilliard (30-50 acres; 100-ft buffer zone).	Nassau County	2011	Budget allocations	Fuel Management	

## Lakeland District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
CWPP Working Group; FFS	Review areas mapped as LOC 9 to determine if the area is targeted for upcoming fuel management or has been treated since the map was created.	Hillsborough County	Annually	None needed	Fuel Management	X
FFS	Identify large private landowners with wildland fuels near developments at-risk to coordinate fuel management or provide technical assistance.	Hillsborough County	2011-2015	None needed for identification and outreach	Fuel Management	X
FFS; Hillsborough County Conservation Services Section	Continue education campaign to reach out to WUI residents on the benefits of prescribed fires.	Hillsborough County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS	Approach communities within the identified target areas for Firewise Communities education.	Hillsborough County	Ongoing	None needed	Community Outreach and Education	X
FFS	Meet with the Hillsborough County School Board to see if a wildfire school program can be introduced.	Hillsborough County	2011-2013	None needed for meeting	Community Outreach and Education	X
FFS	Research developing a program for training landscaping companies on Firewise landscaping methods. Seek organizations that may be able to assist, such as the Florida Nurseries Association.	Hillsborough County	2011-2013	None needed for research; seek grant for developing the training program	Community Outreach and Education	X
FFS	Determine if any volunteer organizations could assist with Firewise landscaping improvements for homeowners in need of help.	Hillsborough County	2013- 2015	Not needed	Building Retrofit and Landscaping	X
County Fire Rescue; FFS	Improve interoperability communications between agencies.	Hillsborough County	2011-2013	Costs to be determined	Fire Response Improvements	X
FFS	Continue programs to reduce fuel loads in at-risk neighborhoods (e.g. Indian Lakes) by applying for funds and requesting permission from neighboring homeowners.	Polk County	Ongoing	Grant funding through FFS	Fuel Management	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Review areas mapped as LOC 9 to determine if the area is targeted for upcoming fuel management or has been treated since the map was created.	Polk County	Annually	Not needed	Fuel Management	X
FFS	Develop a plan for maintaining completed fuel management projects.	Polk County	Ongoing	Not needed	Fuel Management	X
FFS	Consider public outreach opportunities at grocery and garden stores near at-risk neighborhoods or near where prescribed fires are planned.	Polk County	2011-2015	Not needed, use existing resources	Community Outreach and Education	X
FFS	Continue FFS education program with Polk County schools.	Polk County	Annually	FFS budget	Community Outreach and Education	X
FFS	Determine if any volunteer organizations could assist with Firewise landscaping improvements for homeowners in need of help.	Polk County	2013- 2015	Not needed	Building Retrofit and Landscaping	X

## Myakka River District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Work with the following communities to be attain Firewise Communities/USA designation: Prairie Creek, Dan Padro Assoc., Fiddlers Green, Gator Creek, Miarcachee Road Community, North Port Estates, Myakka River Trails, Panther Ridge, The Pointe, Panther Ridge, The Highland, Panther Ridge, Foxwood, Panther Ridge Preserve, Panther Ridge, Winding Creek, Pamello Ranch, Pinebrook South, Harbor Cove, Lakewood Village, and Deer Creek.	Charlotte, Desoto, Hardee, Manatee and Sarasota Counties	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and Mechanical Treatment Tropical Gulf Acres, Charlotte County.	Charlotte County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment South Gulf Cove, Charlotte County.	Charlotte County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Fire and Mechanical Treatment Port Charlotte West.	Charlotte County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Tippecanoe II.	Charlotte County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Amberjack Park.	Charlotte County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Morgan Park.	De Soto County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Pat and Guy Labree.	?	2011	Budget allocations	Fuel Management	
FFS	Finalize Manatee County South CWPP.	Manatee County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Prescribed Fire and Mechanical Treatment Panther Ridge Buffer.	Manatee County	2011	Budget allocations	Fuel Management	
FFS	Finalize Sarasota County/City of North Port CWPP.	Sarasota County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Mechanical Treatment North Port (Ponce De Leon).	Sarasota County	2011	Budget allocations	Fuel Management	

## Okeechobee District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn Avon Park Estates (150 acres).	Highlands County	2011	Budget allocations	Fuel Management	X
FFS	Prescribed Burn Sun N Lakes Estates (250 acres).	Highlands County	2011	Budget allocations	Fuel Management	X
FFS	Prescribed Burn and Mechanical Treatment Highlands Park Estates (Burn 150 acres; mow/chop 100 acres).	Highlands County	2011	Budget allocations	Fuel Management	X
FFS; HOAs	Maintain the 3 Firewise Communities; Attend at-least one of their meetings.	Highlands County	Ongoing	Budget allocations; FFS, NFPA materials	Community Outreach and Education	X
FFS; HOAs	Establish more Firewise Communities/ USA based off CWPP list.	Highlands County	Ongoing	Budget allocations; FFS, NFPA materials	Community Outreach and Education	X
FFS; HOAs	Continue current outreach efforts.	Highlands County	Ongoing	Budget allocations; FFS, NFPA materials	Community Outreach and Education	X
FFS	Attend all LMS, EAR, Comprehensive Plan, CWPP meetings and provide input.	Highlands County	2011	Budget allocations	Community Outreach and Education	X
FFS	Mechanical Treatment Sea Pines of Hobe Sound (15 acres).	Martin County	2011	Budget allocations	Fuel Management	X
FFS	Mechanical Treatment Indianwood (10 acres).	Martin County	2011	Budget allocations	Fuel Management	X
FFS	Mechanical Treatment Booker Park.	Martin County	2011	Budget allocations	Fuel Management	X
FFS	Mechanical Treatment Sea Brach Community (individual lots 20 acres).	Martin County	2011	Budget allocations	Fuel Management	X
FFS	Mechanical Treatment off State Road 710 to protect Indianwood Community (30 acres).	Martin County	2011	Budget allocations	Fuel Management	X
Martin County Fire Rescue (MCFR); FFS	Meet annually to identify fuel management priorities for the year and develop a schedule. Participation should include: MCFR; FFS; Martin County (MC) Engineering Department; South Florida Water Management District (SFWMD); Florida Department of Environmental Protection (FDEP) Division of Recreation and Parks; and other land management agencies.	Martin County	Ongoing	Not needed	Fuel Management	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
MCFR; FFS	Put together a comprehensive contact list of Martin County land managers/property owners for use in reaching out to necessary parties concerning fuel management projects.	Martin County	Ongoing	MCFR and FFS Budgets	Fuel Management	X
FFS	Develop a procedure for land managers/property owners to contact FFS with fuel management assistance needs. Inform land managers/property owners of procedure.	Martin County	2011 - 2012	FFS Budget	Fuel Management	X
FFS	Update Level of Concern (LOC) maps so that the large parcels north and south of State Road 76 that are no longer agricultural present a more accurate reflection of risk.	Martin County	2012	MCEMA Budget	Fuel Management	X
FFS	Maintain Country Place and Indianwood Communities.	Martin County	2011	FFS budget	Policy/Planning/New Construction Regulations	X
FFS	Try to get involved in the inactive LMS, EAR, and Comprehensive Plan meetings.	Martin County	2011	N/A		X
FFS	Educate Sugar Hill Subdivisions -most at-risk subdivision in Martin.	Martin County	2011	FFS budget	Policy/Planning/New Construction Regulations	x
FFS	Continue to conduct Firewise workshops in high risk neighborhoods	Martin County	Ongoing	FFS budget	Community Outreach and Education	X
FFS	Continue outreach initiatives targeting schools.	Martin County	Ongoing	FFS budget	Community Outreach and Education	X
MCFR; FFS	Prioritize older subdivisions for public outreach initiatives and Firewise workshops.	Martin County	Ongoing	MCFR and FFS budgets	Community Outreach and Education	X
FDEP Division of Recreation and Parks; FFS	Continue to hold annual Fire Fest event in Jonathan Dickinson State Park.	Martin County	Ongoing	FDEP Division of Recreation and Parks and FFS Budgets	Community Outreach and Education	X
FFS	Continue to plan events for Wildfire Prevention Week.	Martin County	Ongoing	FFS Budget	Community Outreach and Education	X
FFS; MCEMA; MCFR; City of Stuart Fire Department	Attend local events and festivals (e.g., DuPuis Management Area's Earth Day/Health Fair Celebration) to distribute outreach materials.	Martin County	Ongoing	Agency budgets	Community Outreach and Education	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; MCEMA; MCFR; City of Stuart Fire Department	Develop a targeted public outreach plan to reach populations through alternative means of communication and community groups (e.g., not-for-profits and faith-based organizations).	Martin County	2011 - 2012	Not needed for plan development and identification	Community Outreach and Education	X
FFS; MCEMA; MCFR; City of Stuart Fire Department	Create outreach materials in Spanish.	Martin County	2012 - 2014	Agency budgets	Community Outreach and Education	X
FFS; MCEMA; MCFR; City of Stuart Fire Department	Educate local home improvement stores and nurseries about fire resistant plants and landscaping. Work with stores to label fire resistant plants and provide them with educational materials to share with customers.	Martin County	Ongoing	Agency budgets	Community Outreach and Education	X
MCFR; City of Stuart Fire Department; FFS; SFWMD	Discuss possibilities for coordinating radio communications.	Martin County	2011 - 2012	Not needed for initial conversations	Fire Response Improvements	X
FFS	Mechanical Treatment Okeechobee Little Farms (15 acres).	Okeechobee County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Pinelands (10 acres).	Okeechobee County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Viking (15 acres mowing; 150 acres mowing).	Okeechobee County	2011	Budget allocations	Fuel Management	
FFS	Set-up Mitigation Burns in the Prairie/Viking Community emphasis on burning & mowing; Assist DEP with mitigation work near the subdivision.	Okeechobee County	2011	Budget allocations	Fuel Management	
FFS	Set-up Mitigation Agreements/Hawkins Notifications in the Fort Drum & Pinelands Subdivisions.	Okeechobee County	2011	Budget allocations	Fuel Management	
FFS	Maintain Indian Hammock as a Firewise Community.	Okeechobee County	2011	Budget allocations	Community Outreach and Education	
FFS	Get involved in the LMS, EAR, Comprehensive Plan, CWPP meetings.	Okeechobee County	2011	Budget allocations	Policy/Planning/New Construction Regulations	



Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Educate Fort Drum, Pinelands & Prairie/Viking Subdivisions on National Firewise.	Okeechobee County	2011	Budget allocations	Community Outreach and Education	
FFS	Identify new at-risk subdivisions for mitigation and education.	Okeechobee County	2011	Budget allocations	Community Outreach and Education	
FFS	Identify critical training needs with cooperators and develop classes to fit those needs	Okeechobee County	2011	Budget allocations	Staff training	
FFS	Prescribed burn Muse Community (150 acres).	Glades County	2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Palmdale Community (150 acres).	Glades County	2011	Budget allocations	Fuel Management	
FFS	Maintain the seven Firewise Communities; Attend at-least one of their meetings.	Glades County	2011	Budget allocations	Community Outreach and Education	
FFS	Attend all LMS, EAR, & Comprehensive Plan meetings & provide input.	Glades County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Once every community is Firewise, start developing CWPPs by County Commissioner.	Glades County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Mechanical Treatment Oslo Park.	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Indian River County (Hobart tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment City of Vero Beach (Airport tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Indian River County (ORCA tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Indian River County (Wabasso Scrub tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Indian River County (NSCA tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn City of Sebastian (Airport tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn City of Sebastian (Stormwater Park tract).	Indian River County	2011	Budget allocations	Fuel Management	
FFS	Establish at least one National Firewise Community.	Indian River County	2011	Budget allocations	Community Outreach and Education	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Attend all LMS, EAR, & Comprehensive Plan meetings & provide input.	Indian River County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Update the 2000 CWPP.	Indian River County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Prescribed Burn and Mechanical Treatment Indrio Savannas and Spruce Bluff (100 acres).	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	PGA Village – mowing, prescribed fire.	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	City of Port Saint Lucie, 250 acres – prescribed burning.	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Savanna Club along Savannas Preserve State Park.	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment City of Port St. Lucie (site at intersection of Crosstown Parkway and I-95).	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment City of Port St. Lucie (Torino site).	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment St. Lucie County (Spruce Bluff tract).	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn St. Lucie County (Indrio Savannas tract).	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn St. James Golf Course	St. Lucie County	2011	Budget allocations	Fuel Management	
FFS	Maintain the 4 Firewise Communities; Attend at least one of their meetings.	St. Lucie County	2011	Budget allocations	Community Outreach and Education	
FFS	Attend all LMS, EAR, and Comprehensive Plan meetings and provide input.	St. Lucie County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS; St. Lucie County; FDEP	Develop a plan to educate and mitigate Walton Woods; Seek funding to make Walton Woods a Firewise showpiece.	St. Lucie County	2011	Budget allocations	Community Outreach and Education	

## Orlando District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and/or Mechanical Treatment concentrated heavily on North Brevard County by utilizing Region III Mitigation Team to reduce wildfire hazards.	Brevard County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Sarno Landfill, Melbourne (56 acres).	Brevard County	2011	Phase II Stimulus Funding	Fuel Management	
FFS	Mechanical Treatment Malabar West/East (85 acres).	Brevard County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Grant-Valkaria (90 acres).	Brevard County	2011	Budget allocations	Fuel Management	
FFS; Brevard County Fire Rescue (BCFR)	Hold annual meeting in August or September to discuss plans for prescribed burning. Participation should include but not be limited to: FFS, BCFR, SJRWMD, Brevard County Environmentally Endangered Lands (EEL) Program, and municipal fire departments.	Brevard County	Ongoing	Not needed	Fuel Management	X
FFS; BCFR	Update Communities At Risk List for the use in the prioritization of fuel management projects.	Brevard County	Ongoing	Budget allocations	Fuel Management	X
FFS; BCFR	Pursue additional funding opportunities for fuel management projects.	Brevard County	Ongoing	Budget allocations	Fuel Management	X
Brevard County Office of Emergency Management (BCOEM); BCFR; FFS	Update 2011 Florida Wildland Fire Risk Assessment System (FL FRAS) Level of Concern map using local knowledge.	Brevard County	As soon as 2011 FL FRAS is released to the counties	Budget allocations	Fuel Management	X
FFS	Continue to implement the Ready, Set, Go Program.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; BCFR	Target high-risk communities for Firewise workshops.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; BCFR; EEL Program	Hold an annual meeting for land managers, FFS, BCFR, etc. to coordinate plans for burn seminars.	Brevard County	Ongoing	Not needed	Community Outreach and Education	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; BCFR; EEL Program	Continue to organize prescribed fire workshops in high-risk communities.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS	Organize events during Prescribed Fire Awareness week.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS	Participate in local festivals and distribute public outreach materials.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS	Continue Smokey the Bear Program at University of South Florida.	Brevard County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; BCFR; Municipal fire departments; BCOEM	Include information about the financial benefits of wildfire mitigation into public outreach materials.	Brevard County	Ongoing	Not needed	Community Outreach and Education	X
FFS	Continue focus on and leading the aggressive Arson campaign with the Arson Task Force in Palm Bay, Malabar, Mims, Titusville, and Scottsmeer.	Brevard County	Ongoing	Budget Allocations	Community Outreach and Education	
FFS	Become a member of the Local Mitigation Strategy Board for the county and provide input on wildfire mitigation issues.	Brevard County	Ongoing	Not needed	Policy/Planning/New Construction Regulations	
FFS	Work with Great Outdoors to create an example of Firewise landscaping.	Brevard County	Ongoing	In-kind donations	Building Retrofit and Landscaping	X
FFS; Brevard County Building Code Department; Municipal building permitting agencies	Distribute Firewise educational brochures with building permit applications.	Brevard County	Ongoing	Not needed	Policy/Planning/New Construction Regulations	X
FFS	Prescribed Burn and/or Mechanical Treatment Tibet Butler Preserve.	Orange County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Hunter Creeks (multiple mitigation projects in the area).	Orange County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Orange County Landfill Properties.	Orange County	2011	Budget allocations	Fuel Management	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; Orange County Fire Rescue (OCFR)	Hold an annual strategy meeting each Fall to prioritize high-risk communities for fuel management projects. Participation should include FFS, County and municipal fire departments, large land managers, and other stakeholders.	Orange County	Ongoing Annually	Not needed	Fuel Management	X
FFS	Continue supporting the Wedgefield Firewise Community.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	
FFS	Continue to offer Firewise Workshops in high-risk communities.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS	Continue to implement the Ready, Set, Go Program.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; OCFR	Organize events during Prescribed Fire Awareness week and Fire Prevention Week.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; County, and municipal fire departments	Participate in local festivals and distribute public outreach materials.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; County and municipal fire departments	Continue outreach programs at local schools.	Orange County	Ongoing	Budget allocations	Community Outreach and Education	X
FFS; OCOEM	Assess critical infrastructure within WUI zones and identify appropriate wildfire mitigation projects.	Orange County	2012	Not needed for assessment and identification; Projects may be eligible for HMGP and PDM FEMA Grants	Building Retrofit and Landscaping	X
FFS; Orange County Division of Building Safety; Municipal building permitting agencies	Distribute Firewise educational materials with building permits applications.	Orange County	Ongoing	Not needed	Building Retrofit and Landscaping	X
FFS	Become a member of the Local Mitigation Strategy Board (once one is established) for the county and provide input on wildfire mitigation issues.	Orange County	2011	Not needed	Policy/Planning/New Construction Regulations	
FFS	Prescribed Burn and/or Mechanical Treatment Bay Lake Estates.	Osceola County	2011	Budget allocations	Fuel Management	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and/or Mechanical Treatment Goodman Road Happy.	Osceola County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment New Eden.	Osceola County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Bay Lake Ranches.	Osceola County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Pine Grove.	Osceola County	2011	Budget allocations	Fuel Management	
FFS	Continue moving forward efforts in Osceola County to get their first Firewise Community established.	Osceola County	2011	Budget allocations	Community Outreach and Education	
FFS	Establish an aggressive "Arson" campaign in the Suburban Estates area of Osceola County.	Osceola County	2011	Budget allocations	Community Outreach and Education	
FFS	Become a member of the Local Mitigation Strategy Board for the county and provide input on wildfire mitigation issues.	Osceola County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Prescribed Burn and/or Mechanical Treatment Carilon Community Seminole Woods Community.	Seminole County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Lake Jessup East Side Corridor.	Seminole County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Seminole County Landfill Properties.	Seminole County	2011	Budget allocations	Fuel Management	
FFS	Establish a minimum of one National Firewise Community in the Markham Woods Subdivision (Lake Harney Woods Estates).	Seminole County	2011	Not needed	Community Outreach and Education	
FFS	Continue attending Quarterly LMS meetings and discussing any Firewise issues that need to be addressed.	Seminole County	2011	Not needed	Policy/Planning/New Construction Regulations	
FFS with assistance from LMS working group	Continue to collaboratively draft an annual fuel management plan with specific projects prioritized and paired with available agency funding.	Seminole County	Annually	Not needed	Fuel Management	X
Each agency	Ensure the sustainment of current equipment and that it is part of the annual budgeting process.	Seminole County	Ongoing	Determined annually	Fuel Management	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
All land management agencies	Create a database to track wildfire incidents, prescribed burns and map progress of fuel land management activities.	Seminole County	Ongoing	Determined annually	Fuel Management	X
All land management agencies	Determine annually if additional agency capacity, equipment, or contractor funding is needed to meet fuel management goals.	Seminole County	Annually	Determined annually	Fuel Management	X
Each agency	Continue joint efforts to coordinate prescribed burns and fuel reduction measures.	Seminole County	Ongoing	Determined annually	Fuel Management	X
FFS in coordination with authority with jurisdiction	Continue community-specific education events and target additional at risk locations to hold these.	Seminole County	Ongoing	Determined annually	Community Outreach and Education	X
FFS	Coordinate with School Board to explore feasibility of using the FFS on-line interactive Wildfire Prevention Program for Grades 4-6.	Seminole County	2011-2013	Not needed	Community Outreach and Education	X
FFS	Provide County and municipal fire stations with Firewise education materials.	Seminole County	Annually	FFS will fund	Community Outreach and Education	X
FFS	Train members of the county and municipal fire departments as Firewise Community resources of Information.	Seminole County	2011-2013	Seek federal grant funding	Community Outreach and Education	X
FFS	Continue to coordinate with County University of Florida Institute of Food and Agricultural Sciences (IFAS) to schedule and conduct a "Firewise Home" and "Prescription Burn" education program as part of their annual public education curriculum.	Seminole County	Annually	Not needed	Community Outreach and Education	X

## Perry District

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn Lovelace Lane Mitigation Project (12.5 acres).	Dixie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Pinner Mitigation Project (40 acres).	Dixie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Gunther/Ezzell Mitigation Project (2.5 acres).	Dixie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Bekham Mitigation Project (23 acres).	Dixie County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn McCallister Mitigation Project (23 acres).	Dixie County	2011	Budget allocations	Fuel Management	
FFS	Work with Ramblin' Woods to acquire status as a Firewise Community/USA.	Dixie County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn McClure Mitigation Project (30-50 acres).	Madison County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Maclver Mitigation Project (20 acres).	Madison County	2011	Budget allocations	Fuel Management	
FFS	Work with Blue Ridge Landing to acquire status as a Firewise Community/USA.	Madison County	2011	Budget allocations	Community Outreach and Education	
FFS	Distribute pamphlets on how to become Firewise and how to properly extinguish campfires to residents living in the areas around Hike Lake Road and San Pedro Bay.	Madison County	2011	Budget allocations	Community Outreach and Education	
FFS	Community outreach and education to Aucilla Plantation.	Madison County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and Mechanical Treatment Decatur Mitigation Project (150 acres).	Lafayette County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and Mechanical Treatment Ontario Mitigation Project (81 acres).	Lafayette County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Pickett Lake Mitigation Project.	Lafayette County	2011	Budget allocations	Fuel Management	
FFS	Community outreach and education in the Fort Atkinson Airpark subdivision.	Lafayette County	2011	Budget allocations	Community Outreach and Education	
FFS	Mechanical Treatment Ocean Pond.	Taylor County	2011	Budget allocations	Fuel Management	
FFS	Mechanical Treatment Secret Promise Leisure Retreats East.	Taylor County	2011	Budget allocations	Fuel Management	



Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Mechanical Treatment Secret Promise Jody Morgan/Whitetail Mitigation Project.	Taylor County	2011	Budget allocations	Fuel Management	
FFS	Work with Taylor County LMS group to develop a CWPP for Taylor County.	Taylor County	2011	Budget allocations	Policy/Planning/New Construction Regulations	

## Suwannee Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Finalize the Baker countywide CWPP development.	Baker County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Continue to work with Taylor in updating and implementing their CWPP and Firewise programs.	Baker County	2011	Budget allocations	Policy/Planning/New Construction Regulations	X
FFS	Continue to work with Taylor in implementing their Firewise programs.	Baker County	2011	Budget allocations	Community Outreach and Education	X
FFS	Prescribed Burn Moccasin Creek Circle.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Baxter.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Taylor.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Cuyler.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Margaretta.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Northern Baxter area as (400 acres).	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn golf course in the City of Macclenny (130 acres).	Baker County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn John M. Bethea State Forest.	Baker County	2011	Budget allocations	Fuel Management	
FFS	Develop a countywide CWPP.	Bradford County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Continue implementing Firewise Programs in Lakewood community.	Bradford County	2011	Budget allocations	Community Outreach and Education	
FFS	Work with Theresa to acquire designation as a Firewise Community/USA.	Bradford County	2011	Budget allocations	Community Outreach and Education	
FFS	Mechanical Treatment NE Graham.	Bradford County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Starke.	Bradford County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Theresa.	Bradford County	2011	Budget allocations	Fuel Management	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and/or Mechanical Treatment Saxton.	Bradford County	2011	Budget allocations	Fuel Management	
FFS	Develop a countywide CWPP.	Columbia County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	The communities of Deep Creek, Drew Grade, Suwannee Valley, Monroe Morrel Road, and Five Points should receive a wildfire risk assessment and will be approached to become CWPP and Firewise Communities.	Columbia County	2011	Budget allocations	Community Outreach and Education; Risk Assessment	
FFS	Conduct Community Wildfire Awareness Presentations in the following neighborhoods: Timber Ridge, Creste Point, Huntington Place, Blaine Estates, Three Rivers Estates, and Sun View Estates.	Columbia County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and/or Mechanical Treatment Deep Creek	Columbia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Drew Grade.	Columbia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Suwannee Valley.	Columbia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Monroe Morrel Road.	Columbia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Five Points.	Columbia County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Oak Woodlands.	Hamilton County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Twin Rivers.	Hamilton County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn Big Shoals State Forests.	Hamilton County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Ranchettes.	Suwannee County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Settlers Ridge.	Suwannee County	2011	Budget allocations	Fuel Management	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn and/or Mechanical Treatment Wellborn.	Suwannee County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Raiford.	Union County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Providence.	Union County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Ellerbee.	Union County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Suwannee River Water Management District lands.	Union County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Plum Creek tracts.	Union County	2011	Budget allocations	Fuel Management	

## Tallahassee Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed Burn St. James Bay Community.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Lanark Mitigation – Gyrotrak project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Harris project – Gyrotrak project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Fred Mitigation – Gyrotrak project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Gramercy Plantation project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Franklin County School project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Whispering Pines-Wilderness Road project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Completion of Watkins project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Dacky Ward project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment St. George Island project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Light House Point Estates project.	Franklin County	2011	Budget allocations	Fuel Management	
FFS	Plan a homeowner’s workshop for Gramercy residents.	Franklin County	2011	Budget allocations	Community Outreach and Education	
FFS	Distribution of brochures to homes in project areas.	Franklin County	2011	Budget allocations	Community Outreach and Education	
FFS	Work with Gramercy Plantation to become a “Firewise” community.	Franklin County	2011	Budget allocations	Community Outreach and Education	
FFS	Work with Alligator Point in the Bald Point State Park Area to become a “Firewise” community.	Franklin County	2011	Budget allocations	Community Outreach and Education	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Combine efforts with Franklin County Emergency Management and other cooperators to develop a CWPP for Franklin County including St. George Island.	Franklin County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Continue active participation by FFS in meaningful community and school events where prevention efforts may have the biggest impact.	Franklin County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and/or Mechanical Treatment Sunset Acres project (93 acres).	Gadsden County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and/or Mechanical Treatment Circle Drive project (36 acres)	Gadsden County	2011	Budget allocations	Fuel Management	
FFS	Teach homeowners how to make their homes more defensible from wildfire; Educate communities about Firewise designation.	Gadsden County	2011	Budget allocations	Community Outreach and Education	
FFS	Distribute wildfire prevention information to residents in Sunset Acres and Circle Drive.	Gadsden County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and/or Mechanical Treatment Cowles project.	Leon County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Disc Village project.	Leon County	2011	Budget allocations	Fuel Management	
FFS	Continue our prevention messages at schools.	Leon County	2011	Budget allocations	Community Outreach and Education	
FFS	Display the outdoor debris message on the District billboard.	Leon County	2011	Budget allocations	Community Outreach and Education	
FFS	Continue our prevention messages at schools.	Liberty County	2011	Budget allocations	Community Outreach and Education	
FFS	Display the outdoor debris message on the District billboard.	Liberty County	2011	Budget allocations	Community Outreach and Education	
FFS	Continue our prevention messages at schools.	Jefferson County	2011	Budget allocations	Community Outreach and Education	
FFS	Display the outdoor debris message on the District billboard.	Jefferson County	2011	Budget allocations	Community Outreach and Education	

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; United States Fish and Wildlife (USFS)	Develop CWPPs in communities along the coast in Wakulla County. This year we plan to write a CWPP for the entire county of Wakulla.	Wakulla County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS; USFS	Develop a countywide CWPP.	Wakulla County	2011	Budget allocations	Policy/Planning/New Construction Regulations	
FFS	Canvass Panacea, the City of Crawfordville, and Spring Creek with prevention materials.	Wakulla County	2011	Budget allocations	Community Outreach and Education	
FFS	Prescribed Burn and/or Mechanical Treatment Panacea.	Wakulla County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment in the City of Crawfordville and outlying areas.	Wakulla County	2011	Budget allocations	Fuel Management	
FFS	Prescribed Burn and/or Mechanical Treatment Spring Creek.	Wakulla County	2011	Budget allocations	Fuel Management	
FFS	Hold Smokey programs in area schools and participate in career days.	Wakulla County	2011	Budget allocations	Community Outreach and Education	
FFS	Work with Shell Point (south of Crawfordville) to become a Firewise Community.	Wakulla County	2011	Budget allocations	Community Outreach and Education	
FFS	Work with Panacea to become a Firewise Community.	Wakulla County	2011	Budget allocations	Community Outreach and Education	

## Waccasassa Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Prescribed burn SS Block (60, 85, and 40 acres).	Alachua County	Winter 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Wilbur Wood (100+ acres).	Alachua County	Winter and Spring 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Doc Coker (70+ acres).	Alachua County	Spring 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Van Murphy (35 acres).	Alachua County	Spring 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Kent Cannon (17 acres).	Alachua County	Winter 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Ann Phillips (50 acres).	Alachua County	Spring 2011	Budget allocations	Fuel Management	
FFS	Prescribed burn Doc Coker (70+ acres).	Alachua County	Spring 2011	Budget allocations	Fuel Management	
FFS	Plowing, burning, and mowing Waccasassa Lake.	Gilchrist County	2011	Budget allocations	Fuel Management	
FFS	Rosewood – plowing, burning, and mowing.	Levy County	2011	Budget allocations	Fuel Management	
FFS	Mowing Samuel Howard (56 acres).	Marion County	2011	Budget allocations	Fuel Management	
FFS	Mowing, chopping, and burning at Indian Lake State Forest (190 acres).	Marion County	2011	Budget allocations	Fuel Management	
All land management agencies	Continue to collaboratively draft an annual fuel management plan with specific projects prioritized and paired with available agency funding.	Marion County	Annually	Determined annually	Fuel Management	X
All land management agencies	Review need for additional agency capacity, equipment, or contractor funding needed to meet fuel management goals.	Marion County	Annually	Determined annually	Fuel Management	X
All land management agencies	Create a database to track wildfire incidents, prescribed burns and map progress of fuel land management activities.	Marion County	Ongoing	Determined annually	Fuel Management	X
FFS and USFS	Mow 33-66 ft control line between homes and wildland vegetation.	Marion County	Annually	Determined annually	Fuel Management	X
FFS	Thin silviculture areas adjacent to at risk Property.	Marion County	Annually	Determined annually	Fuel Management	X
FFS	Continue with fuel reduction along strategic corridors in community.	Marion County	Ongoing	Determined annually	Fuel Management	X
FFS; Marion County Fire Rescue (MCFR); and USFS	Continue community-specific education events and target additional at-risk locations to hold these events.	Marion County	Ongoing	Determined annually	Community Outreach and Education	X



Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; MCFR	Plan and conduct a series of fire station open house events with information on outdoor burning laws, Firewise practices, and home fire safety practices.	Marion County	Ongoing	Determined annually	Community Outreach and Education	X
FFS; MCFR	Continue to coordinate with the School Board to explore feasibility of using the FFS on-line interactive Wildfire Prevention Program for Grades 4-6.	Marion County	2011-2013	Determined annually	Community Outreach and Education	X
FFS	Coordinate with County IFAS to schedule and conduct a "Firewise Home" and "Prescription Burn" education program as part of their annual public education curriculum.	Marion County	Ongoing	Determined annually	Community Outreach and Education	X
FFS with input from all land agencies	Explore methodologies for identifying neighborhoods that need technical assistance to perform wildfire mitigation retrofits; List projects in the LMS in the event HMGP grant funds become available after a disaster.	Marion County	Ongoing	None for identifying projects; projects may be eligible for HMGP or PDM FEMA grants	Building Retrofit and Landscaping	X
FFS	Encourage individuals to visit the Firewise Building and Landscape demonstration field site in Alachua County.	Marion County	Ongoing	Determined annually	Building Retrofit and Landscaping	X
FFS	Assess the need to create a Firewise Building and Landscape demonstration field site in Marion County.	Marion County	2011	Potentially inmate labor	Building Retrofit and Landscaping	X
FFS	Mowing firebreaks Marcus Reeves (Hollister) (30 acres).	Putnam County	2011	Budget allocations	Fuel Management	
FFS	Mowing firelines and burning Phil Cooke (Melrose) (38 acres).	Putnam County	2011	Budget allocations	Fuel Management	
FFS	Mowing firelines and burning Mary Ellen Benidict (East Palatka) (44 acres).	Putnam County	2011	Budget allocations	Fuel Management	
FFS	Mowing Mike Phillips (Palatka) (33 acres).	Putnam County	2011	Budget allocations	Fuel Management	
FFS	Chopping firelines Rocky Motes (Hollister) (30 acres).	Putnam County	2011	Budget allocations	Fuel Management	

## Withlacoochee Forestry Center

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; South West Florida Water Management District (SWFWMD); Hernando County Fire Rescue (HCFR)	Identify specific fuel mitigation projects to reduce wildfire risk exposure for the East Hernando Communities At Risk (CARs): Hill N' Dale/ Ridge Manor/Masaryktown/ Garden Grove/Ayers.	Hernando County	2011	Not Needed	Fuel Management	X
FFS; South West Florida Water Management District (SWFWMD); Hernando County Fire Rescue (HCFR); Spring Hill Fire Rescue (SHFR); Hernando Beach Fire Department	Identify specific fuel mitigation projects to reduce wildfire risk exposure for the West Hernando CARs: Royal Highlands/ The Heather/Glen Lakes/Palm Grove/ Bayport/ Weeki Wachee/Hernando Beach/Pine Island.	Hernando County	2011	Not Needed	Fuel Management	X
FFS; SWFWMD; HCFR	Select and complete a fuels mitigation project in a East Hernando CAR.	Hernando County	2011	Federal Funding	Fuel Management	X
FFS; SWFWMD; HCFR; SHFR; Hernando Beach Fire Department	Select and complete a fuels mitigation projects in a West Hernando CAR.	Hernando County	2011	Federal Funding	Fuel Management	X
FFS; HCFR; Hernando County Fire Corps	Plan and conduct a woods arson awareness program focusing on the communities Royal Highlands and the Heather.	Hernando County	2011	Federal Funding	Community Outreach and Education	X
FFS; Hernando County Schools	Conduct Smokey Bear Elementary School programs to explain the dangers of experimenting with fire.	Hernando County	2011-2012	State Fire Prevention Funds	Community Outreach and Education	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS; IFAS	Coordinate with County IFAS to schedule and conduct a "Firewise Home" and "Prescription Burn" education program as part of their annual public education curriculum.	Hernando County	2011	TBD	Community Outreach and Education	X
FFS; HCFR; SHFR; Hernando County Fire Corps	Continue to evaluate county communities for wildfire hazard exposure and provide Firewise Community Certification mentoring.	Hernando County	2011	Not needed	Community Outreach and Education	X
FFS; HCFR; SHFR; High Point Fire Department; Hernando Beach Fire Department; Brooksville Fire Department	In coordination with FFS, establish a County Wildfire Prevention Working Team to focus intervention and prevention activities within county regions.	Hernando County	2011-2012	TBD	Community Outreach and Education	X
FFS with assistance from CWPP working group	Collaboratively draft an annual fuel management plan with specific projects prioritized and paired with available agency funding.	Pasco County	Annually	Not needed	Fuel Management	X
All land management agencies	Determine annually if additional agency capacity, equipment, or contractor funding is needed to meet fuel management goals.	Pasco County	Annually	Determined annually	Fuel Management	X
FFS	Continue community-specific education events and target additional at-risk locations to hold these.	Pasco County	Ongoing	FFS will fund	Community Education and Outreach	X
FFS	Coordinate with School Board to explore feasibility of using the FFS on-line interactive Wildfire Prevention Program for Grades 4-6.	Pasco County	2011-2013	Not needed.	Community Education and Outreach	X
FFS	Provide County and municipal fire stations with Firewise education materials.	Pasco County	Annually	FFS will fund	Community Education and Outreach	X
FFS	Train members of the county and municipal fire departments as Firewise Community resources of information.	Pasco County	2011-2013	Seek federal grant funding	Community Education and Outreach	X

Lead Agency	Project Title and Description	Geographic Area	Timeframe	Possible or Approved Funding Source	Project Type	CWPP Project
FFS	Coordinate with County IFAS to schedule and conduct a “Firewise Home” and “Prescription Burn” education program as part of their annual public education curriculum.	Pasco County	Annually	Not needed	Community Education and Outreach	X
FFS	Explore methodologies for identifying neighborhoods that need financial assistance to perform wildfire mitigation retrofits. Model after repetitive flood loss program where projects are listed in the LMS in the event HMGP grant funds become available after a disaster.	Pasco County	2012-2014	None for identifying projects, projects may be eligible for HMGP or PDM FEMA grants	Building Retrofit and Landscaping	X
FFS; Pasco County Fire Rescue	Hold meeting to determine feasibility of using FIN red line for radio communication between FFS and local fire services.	Pasco County	ASAP, 2011	Not needed	Fire Response Improvements	X
FFS; Pasco County Fire Rescue	Plan and implement a cooperater program to familiarize all agencies with joint wildfire/structure protection suppression tactics and combined operations practices.	Pasco County	2011-2013	Not needed	Fire Response Improvements	X
FFS; Pasco County Fire Rescue	Establish a County Wildfire Prevention Working Team to focus intervention and prevention activities within county regions.	Pasco County	2011-2012	Not needed	Fire Response Improvements	X

# Appendix F

## Example Community Wildfire Protection Plan

The Polk County Community Wildfire Protection Plan (CWPP) was developed as part of the Florida Division of Forestry's Statewide Community Wildfire Protection Plan Initiative. The Plan was approved in June 2011.

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# Polk County Community Wildfire Protection Plan

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*June 2011*



**POLK COUNTY BOARD OF COUNTY  
COMMISSIONERS  
330 WEST CHURCH STREET  
BARTOW, FL 33830**



**FLORIDA DIVISION OF FORESTRY  
LAKELAND DISTRICT OFFICE  
5745 SOUTH FLORIDA AVENUE  
LAKELAND, FL 33813**

## Executive Summary

The Community Wildfire Protection Plan (CWPP) is a unique opportunity to address the challenges of fire protection in the wildland-urban interface through locally-supported solutions. CWPPs are authorized by the Healthy Forests Restoration Act of 2003 and provide communities with a tremendous opportunity to influence: (1) where and how wildland fuel management projects are implemented on federally managed lands, and (2) how federal funds are distributed for fuel reduction projects on nonfederal lands. Having a CWPP gives the county priority status when applying for federal funding for wildfire mitigation projects.

The CWPP includes an assessment of the community's wildfire vulnerability, local organizations and resources available to assist with wildfire mitigation and response, and an action plan for reducing wildfire vulnerability in the county. Recommended actions to reduce wildfire vulnerability have been collaboratively developed for the following mitigation categories: 1) wildland fuel management, 2) community outreach and education, 3) Firewise building retrofit and landscaping, 4) policy and regulation recommendations, and 5) wildland fire response improvements. Details for implementing the actions, such as responsible agencies and funding considerations are included in the Plan.

The CWPP meets the minimum requirements of the Healthy Forests Restoration Act. The Plan was developed in a collaborative process with input from state and federal partners and other relevant stakeholders; it identifies and prioritizes areas for wildland fuel management, and includes actions that will inform residents of measures to reduce the ignitability of their homes and community. The CWPP also furthers the goals and mitigation strategies of the Local Mitigation Strategy (LMS) and is consistent with recommendations of the LMS Working Group.

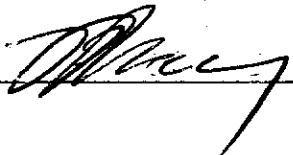


### Plan Approval

This Community Wildfire Protection Plan (CWPP) is a cooperative effort to improve wildfire protection and response. The individuals listed below comprise the core decision-making team responsibilities for the development of this plan and mutually agree on the plan contents.

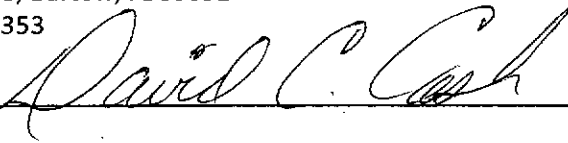
#### Local Government Representative

Pete McNally, Emergency Management Director  
Polk County Emergency Management  
1295 Brice Blvd.  
Bartow, FL 33830  
(863) 534-5605

Signature:  Date: 6/13/11


#### Local Fire Services Representative

David Cash, Fire Chief, Division Director  
Polk County Fire Rescue Division  
PO Box 1458, Bartow, FL 33831  
(863) 519-7353

Signature:  Date: June 9, 2011

#### Local Florida Division of Forestry Representative

Bill Delph, Fire Prevention Specialist  
Lakeland District, Florida Division of Forestry  
5745 S. Florida Avenue  
Lakeland, FL 33813  
863-648-3152

Signature:  Date: 6-10-11

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## 1. Community Background and Existing Situation

### Description of Community

Polk County is located in the center of the Florida peninsula on the Interstate-4 corridor, 25 miles east of Tampa and 35 miles southwest of Orlando. Sixty-two percent of Polk County's total population resides in the unincorporated area of the county. The other 226,448 people live in Polk County's 17 cities. Polk County's largest city is Lakeland, followed by Winter Haven. (U.S. Census Bureau, 2011).

Polk County is a mostly rural landscape with a great deal of land in agricultural and conservation uses. It has the 2nd largest amount of farmland in the state with an estimated 626,634 acres in 2002 and it remains the sixth most productive agricultural county in Florida. There are approximately 275,000 acres of publicly managed conservation lands. A major portion of northern Polk County, approximately 220,000 acres, is known as the "Green Swamp" – a series of wetlands, flat lands, and sand hills dispersed over a total area of some 850 square miles which support agriculture, wildlife habitat, conservation areas, and rural residential development.

### Community Statistics

#### Total Land Area

The total land area of Polk County is approximately 1,875 square miles or 1.2 million acres. Approximately 23% of the county's land area is held in conservation with the largest publicly managed tracts being the Avon Park Bombing Range, Lake Wales Ridge State Forest, and Green Swamp (see **Appendix B** for a map of publicly managed conservation lands in Polk County).

**County Jurisdictions' Population**

Jurisdiction	2010 Census Population
Auburndale	13,507
Bartow	17,298
Davenport	2,888
Dundee	3,717
Eagle Lake	2,255
Fort Meade	5,626
Frostproof	2,992
Haines City	20,535
Village of Highland Park	230
Town of Hillcrest Heights	254
Lake Alfred	5,015
Lake Hamilton	1,231
Lakeland	97,422
Lake Wales	14,225
Mulberry	3,817
Polk City	1,562
Winter Haven	33,874
Unincorporated Area	375,647
<b>Total Polk County</b>	<b>602,095</b>

Source: U.S. Census Bureau, 2011.

**Polk County Demographics**

Census People Quickfacts	Polk County	Florida
Persons 65 years old and over, percent, 2009	17.6%	17.2%
Living in same house in 1995 and 2000, pct 5 yrs old & over	51.1%	48.9%
Language other than English spoken at home, pct age 5+, 2000	12.1%	23.1%
Persons with a disability, age 5+, 2000	109,479	3,274,566
Housing units, 2009	284,447	8,852,755
Homeownership rate, 2000	73.4%	70.1%
Median household income, 2008	\$44,350	\$47,802
Persons below poverty level, percent, 2008	15.3%	13.3%

Source: U.S. Census Bureau QuickFacts, 2010.

**Wildfire Problem Statement**

Florida’s natural environment is adapted to fire and many forest ecosystems need regular cycles of fire to be healthy systems. Efforts to eliminate wildfires from the natural environment, have served to make these events much more severe when they do occur due to accumulated vegetative fuels. The severity of the resulting wildfires impacts the health of the ecosystem and puts neighboring developments in danger. Residents in Florida vary in their understanding and acceptance of the use of prescribed fire and mechanical fuel management methods. The role of wildfires in the natural environment needs to be integrated into public education programs and planning for development within the wildland-urban interface.

Polk County was selected as one of 10 counties to receive assistance in developing a CWPP because of its high wildfire vulnerability relative to other counties within Florida. The Polk County Local Mitigation Strategy (LMS) rates the County's vulnerability to wildfire as high due to the large amount of undeveloped green space (Polk County, 2009). During drought conditions much of the conservation lands and phosphate mining lands that have vegetation are at risk of wildfires. In addition, there are several communities outside of the urban cities that are within the wildland-urban interface, such as Indian Lakes Estates, Nalcrest, Tiger Creek Forest, and neighborhoods near Bradley and Pierce.

Polk County's population grew 24% since the 2000 census. Its total population is expected to grow another 12% to an estimated 675,408 by 2020 (Polk County, 2011). New developments amongst the county's green spaces, if built without Firewise considerations, could result in an increase in population and homes vulnerable to wildfire.

## 2. Planning Process

The CWPP planning process is a collaborative effort among local, regional, state, and federal government agencies with roles in protecting the community from wildfire and residents. This plan was produced through a project led by the Florida Division of Forestry (FDOF) with funding from the American Recovery and Reinvestment Act of 2009. A kickoff meeting was held via web conference on September 13, 2010 for all counties participating in the FDOF project. Additional meetings were held on November 5, 2010 and April 5, 2011. Summaries of meetings to develop this plan are included in **Appendix A**. The following individuals participated in the planning process and provided input in the preparation of this CWPP.

### *CWPP Working Group Members*

Representative	Name	Title/Department	Address	Phone	Email Address
<b>DOF Local Representative</b>	Bill Delph	WF Mitigation Specialist	5745 South Florida Avenue, Lakeland, FL 33813	863-648-3152	<a href="mailto:Bill.Delph@freshfromflorida.com">Bill.Delph@freshfromflorida.com</a>
<b>DOF Local Representative</b>	Gary Zipprer	Lakeland District Manager, Division of Forestry	5745 South Florida Avenue, Lakeland, FL 33813	863-701-1273	<a href="mailto:David.Zipprer@freshfromflorida.com">David.Zipprer@freshfromflorida.com</a>
<b>LMS Coordinator</b>	Paul Womble	LMS Coordinator, Polk County Emergency Management	1295 Brice Blvd., Bartow, FL 33830	863-298-7002	<a href="mailto:paulwomble@polkfl.com">paulwomble@polkfl.com</a>
<b>Emergency Management Representative</b>	Pete McNally	Director, Polk County Emergency Management	1295 Brice Blvd., Bartow, FL 33830	863-534-5605	<a href="mailto:PeteMcNally@polkfl.com">PeteMcNally@polkfl.com</a>
<b>Fire Services Representative</b>	David Cash	Fire Chief, Division Director, Polk County Fire Rescue	Polk County Fire Rescue Division, PO Box 1458, Bartow, FL 33831	863-519-7353	<a href="mailto:davidcash@polkfl.com">davidcash@polkfl.com</a>

Representative	Name	Title/Department	Address	Phone	Email Address
<b>Fire Services Representative</b>	Dan Bartle	Special Operations Chief, Polk County Fire Rescue	Polk County Fire Rescue Division, PO Box 1458, Bartow, FL 33831	863-581-0070	<a href="mailto:Danbartle@polkfl.com">Danbartle@polkfl.com</a>
<b>Fire Services Representative</b>	Rosa Driggs	Public Education Officer, Polk County Fire Rescue	Polk County Fire Rescue Division, PO Box 1458, Bartow, FL 33831	863-519-3473	<a href="mailto:rosadriggs@polkfl.com">rosadriggs@polkfl.com</a>
<b>Fire Services Representative</b>	Clifford Cofer	Deputy Chief, Frostproof Fire Department	47 North Lake Reedy Blvd. Frostproof, FL 33843	863-635-7863	<a href="mailto:w.cord@yahoo.com">w.cord@yahoo.com</a>
<b>Growth Management Representative</b>	Tom Deardorff	Director, Office of Planning and Development	330 West Church Street, Bartow, FL 33830	863-534-6467	<a href="mailto:TomDeardorff@polk-county.net">TomDeardorff@polk-county.net</a>
<b>Growth Management Representative</b>	Chanda Bennett	Principal Planner, Office of Planning and Development	330 West Church Street, Bartow, FL 33830	863-534-6484	<a href="mailto:chandabennett@polk-county.net">chandabennett@polk-county.net</a>
<b>Additional Participant</b>	Gaye Sharpe	Natural Areas Manager, Polk County Parks and Natural Resources Division	4177 Ben Durrance Road, Bartow, FL 33830	863-534-7377	<a href="mailto:gayesharpe@polk-county.net">gayesharpe@polk-county.net</a>

### 3. Vulnerability Assessment

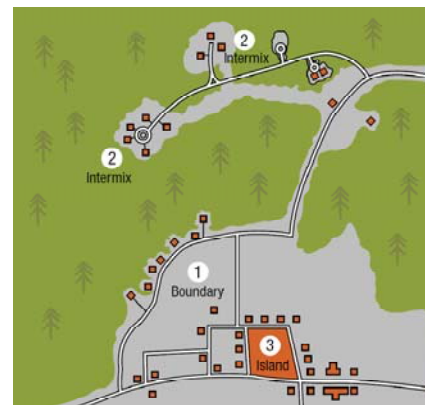
#### Wildfire Vulnerability Overview

The Florida Fire Risk Assessment System (FL FRAS), updated in January 2011, provides a spatial analysis of wildfire vulnerability across the state. The primary output of the risk assessment is the Level of Concern (LOC) Map discussed in the next section. The LOC rates areas based on their susceptibility to wildfire occurrence and estimated impact. **Appendix B** contains FL FRAS methodology, maps, and charts of wildfire vulnerability.

#### Estimated Wildland-Urban Interface (WUI) Area

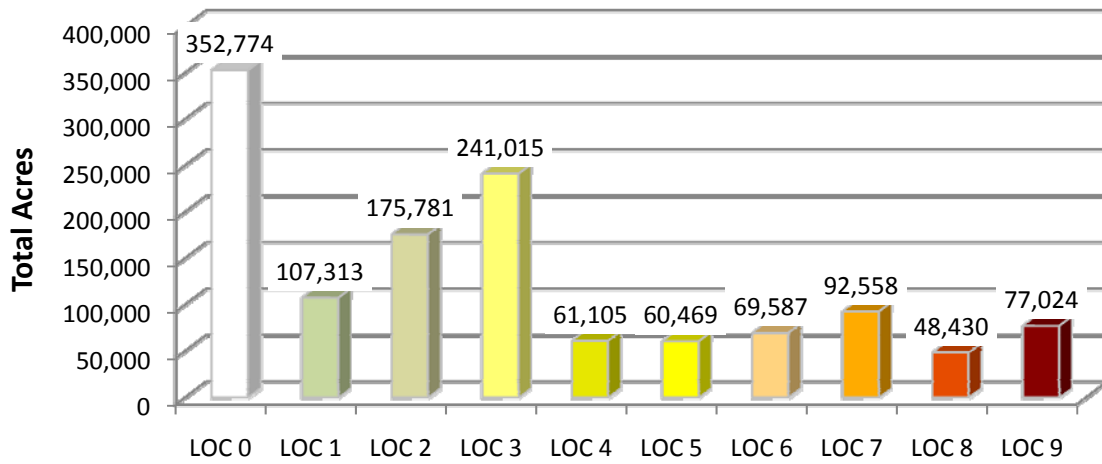
The wildland-urban interface (WUI) is defined in the National Fire Plan as the area where houses and wildland vegetation coincide. There are three types of WUI:

- 1) Boundary – areas where development is adjacent to public or private wildlands
- 2) Intermix – structures are scattered and interspersed among wildland areas
- 3) Island or occluded – area of wildland surrounded by development, i.e. a subdivision preserve

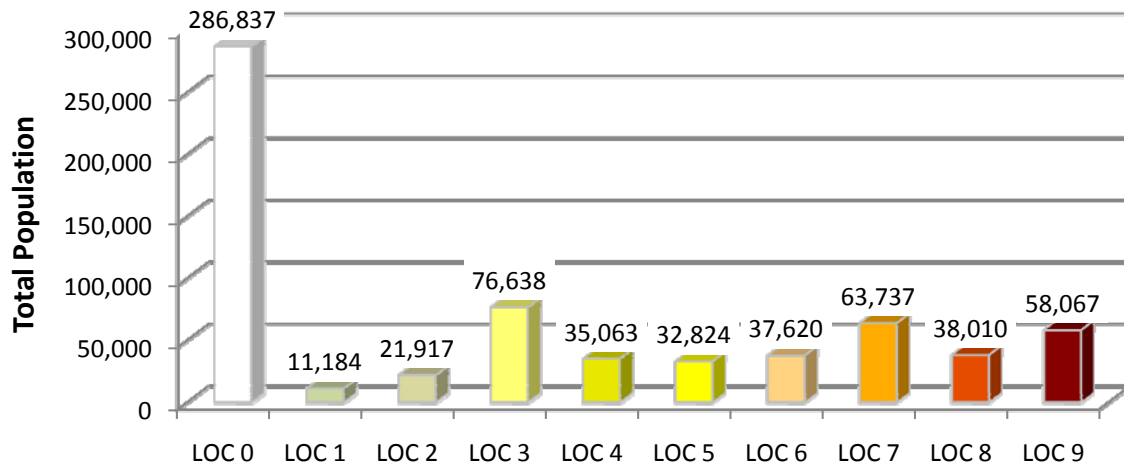


**Appendix B** includes a map of wildfire risk in Polk County presented as nine Levels of Concern (LOC). Levels 4 through 9 are considered medium to high risk and can be used to approximate the WUI area of the county. Approximately 32% of the land within the county is within Levels 4 through 9 and 40% of the population resides in these medium to high risk areas. Approximately 39% of the total value of structures within the county lies within areas classified as LOC 4 through 9.

*Countywide Total Acres by Wildfire Risk*

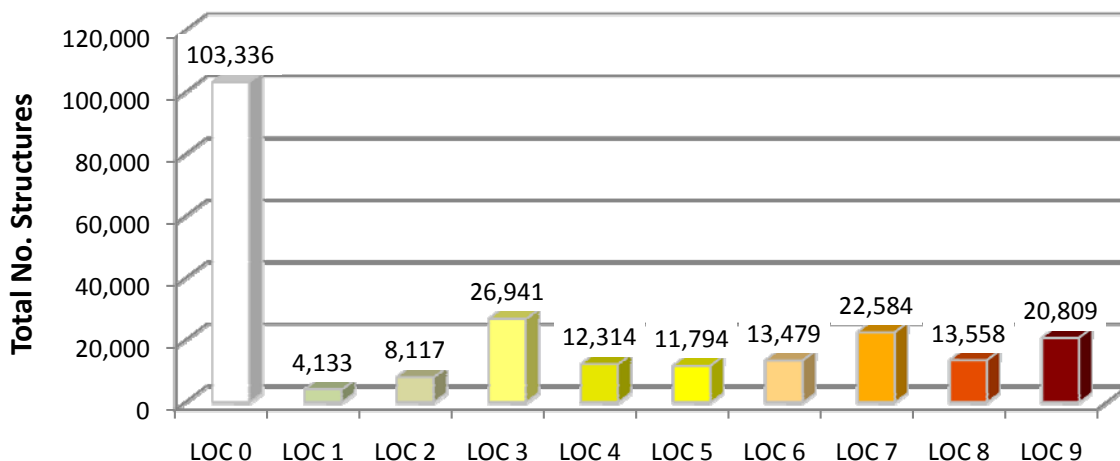


*Countywide Total Population by Wildfire Risk*



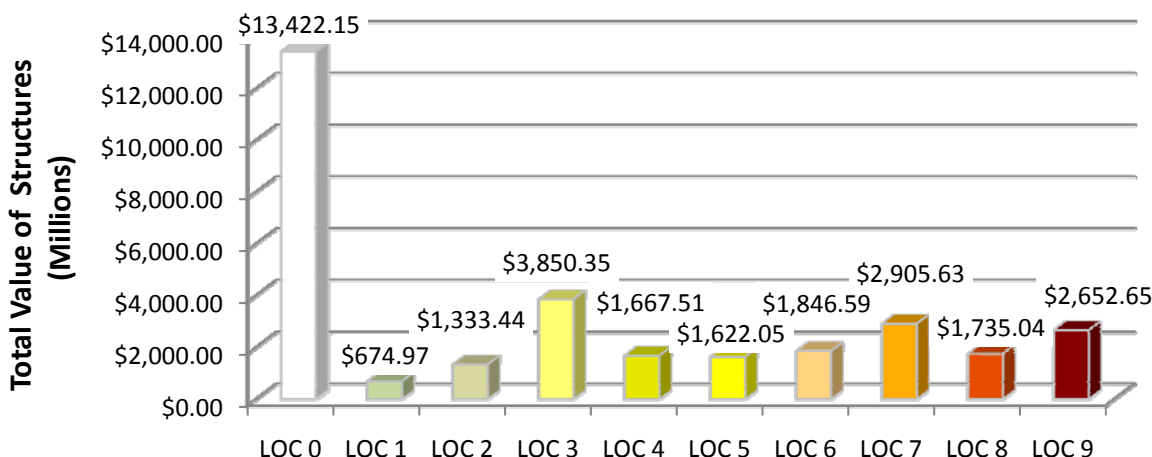
Source Data: 2010 Florida Assessor Data, 2000 Census Persons Per Household Statistics, 2010 Florida Dept of Revenue Parcel Data

**Countywide Total Structures by Wildfire Risk**



Source Data: 2010 Florida Assessor Data, 2010 Florida Dept of Revenue Parcel Data

**Countywide Value of Structures (millions) by Wildfire Risk**



Source Data: 2010 Florida Assessor Data, 2010 Florida Dept of Revenue Parcel Data

**Wildfire Vulnerability by Land Use**

The 2011 Wildfire Mitigation Annex to the State of Florida Hazard Mitigation Plan includes an analysis of wildfire vulnerability by land use for each county. The LOC Map was used in conjunction with 2010 Florida Assessor and Florida Department of Revenue Parcel data to develop the following estimates of vulnerable population, structures, and structure value. More details on the methodology can be found in **Appendix B**.

Approximately 66% of the population (175,295 people) living in medium to high risk wildfire areas (LOC 4-9) occupy single family residences. A majority of the structures within high risk wildfire zones (LOC 7-9) are single family homes, accounting for about \$4 million of the \$7 million of property value within high risk zones. There are 38,911 single family homes within high wildfire risk zones and about 15.6% of the total countywide population lives in these structures.



Following single family homes in structures most at risk from wildfire are mobile homes with a total of 10,688 within high-risk zones (LOC 7-9). There are also a considerable number of commercial and industrial structures within high-risk zones, 1,877 and 1,116, respectively.

*Countywide Population by Wildfire Risk and Land Use*

	Risk	Total Pop	% of Total Pop	Single Family Residential	Multi-Family Residential	Mobile Homes	Agricultural	Other
Low	LOC 0	286,837	43.3%	166,890	44,994	38,741	2,182	34,029
	LOC 1	11,184	1.7%	8,579	1,546	588	123	347
	LOC 2	21,917	3.3%	16,099	2,596	2,322	459	442
	LOC 3	76,638	11.6%	49,603	16,768	5,611	668	3,988
	<b>Subtotal</b>	<b>396,576</b>	<b>59.9%</b>	<b>241,170</b>	<b>65,904</b>	<b>47,263</b>	<b>3,433</b>	<b>38,807</b>
Medium	LOC 4	35,063	5.3%	23,172	7,053	1,963	271	2,604
	LOC 5	32,824	5.0%	23,056	4,742	2,306	296	2,424
	LOC 6	37,620	5.7%	26,145	4,451	4,040	406	2,578
	<b>Subtotal</b>	<b>105,507</b>	<b>15.9%</b>	<b>72,372</b>	<b>16,246</b>	<b>8,309</b>	<b>973</b>	<b>7,607</b>
High	LOC 7	63,737	9.6%	42,692	7,117	9,011	790	4,127
	LOC 8	38,010	5.7%	25,162	4,046	6,460	498	1,844
	LOC 9	58,067	8.8%	35,068	4,671	13,579	1,145	3,605
	<b>Subtotal</b>	<b>159,815</b>	<b>24.1%</b>	<b>102,922</b>	<b>15,834</b>	<b>29,050</b>	<b>2,433</b>	<b>9,576</b>
<b>TOTAL</b>	<b>661,898</b>	<b>100.0%</b>	<b>416,465</b>	<b>97,984</b>	<b>84,622</b>	<b>6,839</b>	<b>55,989</b>	

Source Data: 2010 Florida Assessor Data, 2000 Census Persons Per Household Statistics, 2010 Florida Dept of Revenue Parcel Data

*Countywide Structures by Wildfire Risk and Land Use*

	Risk	No. Structures	% of Total Pop	Single Family Residential	Multi-Family Residential	Mobile Homes	Vacant Residential
Low	LOC 0	103,336	43.6%	65,731	8,360	15,625	0
	LOC 1	4,133	1.7%	3,354	368	240	0
	LOC 2	8,117	3.4%	6,403	500	879	0
	LOC 3	26,941	11.4%	20,129	2,771	2,191	0
	<b>Subtotal</b>	<b>142,528</b>	<b>60.1%</b>	<b>95,617</b>	<b>11,999</b>	<b>18,935</b>	<b>0</b>
Medium	LOC 4	12,314	5.2%	9,265	1,196	749	0
	LOC 5	11,794	5.0%	9,093	836	865	0
	LOC 6	13,479	5.7%	10,191	776	1,494	0
	<b>Subtotal</b>	<b>37,587</b>	<b>15.9%</b>	<b>28,548</b>	<b>2,809</b>	<b>3,108</b>	<b>0</b>
High	LOC 7	22,584	9.5%	16,247	1,289	3,330	0
	LOC 8	13,558	5.7%	9,538	690	2,402	0
	LOC 9	20,809	8.8%	13,126	928	4,957	0
	<b>Subtotal</b>	<b>56,951</b>	<b>24.0%</b>	<b>38,911</b>	<b>2,907</b>	<b>10,688</b>	<b>0</b>
<b>TOTAL</b>	<b>237,066</b>	<b>100.0%</b>	<b>163,076</b>	<b>17,715</b>	<b>32,732</b>	<b>0</b>	

	Risk	Agricultural	Commercial	Institutional/ Government	Industrial	Vacant Commercial/ Industrial/ Institutional	Misc/ Undefined
Low	LOC 0	817	8,039	1,508	3,090	46	120
	LOC 1	46	47	56	9	1	10
	LOC 2	165	63	54	34	3	15
	LOC 3	251	992	329	260	8	11
	<b>Subtotal</b>	<b>1,281</b>	<b>9,140</b>	<b>1,947</b>	<b>3,393</b>	<b>59</b>	<b>157</b>
Medium	LOC 4	100	578	242	174	7	3
	LOC 5	110	500	212	170	4	3
	LOC 6	153	478	180	202	4	2
	<b>Subtotal</b>	<b>363</b>	<b>1,557</b>	<b>634</b>	<b>545</b>	<b>15</b>	<b>9</b>
High	LOC 7	296	776	231	393	10	11
	LOC 8	183	387	101	244	7	6
	LOC 9	417	714	179	479	3	6
	<b>Subtotal</b>	<b>896</b>	<b>1,877</b>	<b>511</b>	<b>1,116</b>	<b>20</b>	<b>24</b>
<b>TOTAL</b>	<b>2,540</b>	<b>12,574</b>	<b>3,092</b>	<b>5,055</b>	<b>93</b>	<b>189</b>	

Source Data: 2010 Florida Assessor Data, 2010 Florida Dept of Revenue Parcel Data

*Countywide Structure Value (millions) by Wildfire Risk and Land Use*

	Risk	Millions	% of				Vacant Residential
			Total Pop	Single Family Residential	Multi-Family Residential	Mobile Homes	
Low	LOC 0	\$13,422.15	42.3%	\$6,506.55	\$618.59	\$723.29	\$246.27
	LOC 1	\$674.97	2.1%	\$477.99	\$25.86	\$13.24	\$18.59
	LOC 2	\$1,333.44	4.2%	\$906.38	\$49.62	\$47.34	\$43.88
	LOC 3	\$3,850.35	12.1%	\$2,463.43	\$215.02	\$111.63	\$89.15
	Subtotal	<b>\$19,280.91</b>	<b>60.8%</b>	<b>\$10,354.36</b>	<b>\$909.08</b>	<b>\$895.50</b>	<b>\$397.88</b>
Medium	LOC 4	\$1,667.51	5.3%	\$920.72	\$82.40	\$37.65	\$35.05
	LOC 5	\$1,622.05	5.1%	\$937.38	\$75.68	\$44.73	\$38.46
	LOC 6	\$1,846.59	5.8%	\$1,079.89	\$62.51	\$74.33	\$52.63
	Subtotal	<b>\$5,136.15</b>	<b>16.2%</b>	<b>\$2,937.99</b>	<b>\$220.60</b>	<b>\$156.71</b>	<b>\$126.14</b>
High	LOC 7	\$2,905.63	9.2%	\$1,656.38	\$128.17	\$167.37	\$90.12
	LOC 8	\$1,735.04	5.5%	\$988.34	\$63.05	\$116.89	\$53.83
	LOC 9	\$2,652.65	8.4%	\$1,423.45	\$78.58	\$228.31	\$94.87
	Subtotal	<b>\$7,293.32</b>	<b>23.0%</b>	<b>\$4,068.17</b>	<b>\$269.81</b>	<b>\$512.57</b>	<b>\$238.83</b>
<b>TOTAL</b>		<b>\$31,710.38</b>	<b>100.0%</b>	<b>\$17,360.51</b>	<b>\$1,399.49</b>	<b>\$1,564.78</b>	<b>\$762.84</b>

	Risk	Vacant					
		Agricultural	Commercial	Institutional/ Government	Industrial	Commercial/ Industrial/ Institutional	Misc/ Undefined
Low	LOC 0	\$866.02	\$2,178.48	\$1,004.16	\$684.75	\$483.12	\$110.92
	LOC 1	\$56.79	\$13.65	\$17.67	\$3.15	\$30.77	\$17.27
	LOC 2	\$137.23	\$26.29	\$25.74	\$26.28	\$39.29	\$31.38
	LOC 3	\$214.97	\$245.43	\$233.52	\$82.48	\$143.71	\$51.01
	Subtotal	<b>\$1,275.01</b>	<b>\$2,463.85</b>	<b>\$1,281.09</b>	<b>\$796.67</b>	<b>\$696.89</b>	<b>\$210.59</b>
Medium	LOC 4	\$71.37	\$168.80	\$176.49	\$72.46	\$82.51	\$20.07
	LOC 5	\$76.25	\$175.17	\$121.69	\$64.06	\$70.79	\$17.84
	LOC 6	\$99.89	\$192.50	\$110.53	\$71.59	\$82.29	\$20.42
	Subtotal	<b>\$247.51</b>	<b>\$536.47</b>	<b>\$408.71</b>	<b>\$208.11</b>	<b>\$235.59</b>	<b>\$58.33</b>
High	LOC 7	\$155.51	\$241.18	\$146.09	\$165.73	\$122.95	\$32.12
	LOC 8	\$95.55	\$121.17	\$81.81	\$127.29	\$69.50	\$17.60
	LOC 9	\$184.25	\$199.90	\$144.35	\$160.08	\$108.68	\$30.17
	Subtotal	<b>\$435.31</b>	<b>\$562.25</b>	<b>\$372.25</b>	<b>\$453.10</b>	<b>\$301.13</b>	<b>\$79.89</b>
<b>TOTAL</b>		<b>\$1,957.83</b>	<b>\$3,562.57</b>	<b>\$2,062.05</b>	<b>\$1,457.88</b>	<b>\$1,233.61</b>	<b>\$348.81</b>

Source Data: 2010 Florida Assessor Data, 2010 Florida Dept of Revenue Parcel Data

### Communities at Risk

The Healthy Forests Restoration Act of 2003 defined at-risk communities as interface communities within the vicinity of Federal lands that are at high risk from wildfire. These communities were intended to prepare CWPPs and would then receive priority for Federal funding to implement hazardous fuel reduction projects as described in the Act. The concept of at-risk communities has been expanded since the passage of the Act to include vulnerable communities that are not adjacent to Federal lands and the responsibility to identify at-risk communities has been given to the States. The Florida Division of Forestry maintains a list of Communities at Risk (CAR) that is based on vulnerability information from the FL FRAS. The communities located within Polk County are provided in the table below.

#### *Polk County Communities at Risk, 2009*

Community at Risk	Rank	Community at Risk	Rank
Bereah	High	West Lake Wales	Medium
Crooked Lake Park	High	Willow Oak	Medium
Fedhaven	High	Alcoma	Low
Galloway	High	Alturas	Low
Green Pond	High	Auburndale	Low
Hesperides	High	Babson Park	Low
Indian Lake Estates	High	Bartow	Low
Kossuthville	High	Cacema Town (historical)	Low
Money Tree	High	Connersville	Low
Pine Dale	High	Crystal Lake	Low
Poinciana	High	Cypress Gardens	Low
Poinciana Place	High	Dundee	Low
Poyner	High	Eagle Lake	Low
Rock Ridge	High	Eastwood	Low
Royster	High	Eaton Park	Low
Tiger Lake	High	Gibsonia	Low
Tranquility Park	High	Haines City	Low
Withla	High	Highland City	Low
Wolfolk	High	Highland Park	Low
Berry	Medium	Hillcrest Heights	Low
Combee Settlement	Medium	Hitchapukasse (historical)	Low
Davenport	Medium	Inwood	Low
East Mulberry	Medium	Jan Phyl Village	Low
Eva	Medium	Jones Corner	Low
Floritan	Medium	Lake Alfred	Low
Fox Town	Medium	Lake Hamilton	Low
Fussels Corner	Medium	Lake of the Hills	Low
Gordonville	Medium	Lakeland Highlands	Low
Homeland	Medium	Lyle Corner	Low
Lake Wales	Medium	Lynchburg	Low
Lakeland	Medium	Maxcy Quarters	Low
Loughman	Medium	Mountain Lake Station	Low

Lucerne Park	Medium	Neilson	Low
Medulla	Medium	Oponys Town (historical)	Low
Mulberry	Medium	Pittsburg	Low
Polk City	Medium	West Frostproof	Low
Providence	Medium	West Scenic Park	Low
South Lake Wales	Medium	Winston	Low
Wahneta	Medium	Winter Haven	Low
Waverly	Medium		

Source: FDOF

**Critical Facilities Vulnerability**

The Polk County Emergency Management maintains a countywide list of critical facilities. Critical facilities are chosen by each jurisdiction, but generally include utilities, emergency operations buildings, government facilities, medical centers, roads, and communication sites. Due to the sensitive nature of some of the critical facilities, a comprehensive list is not included in this plan. To obtain a comprehensive copy of the critical facilities list, please contact Polk County Emergency Management.

Once the 2011 FL FRAS data is available to the County in GIS format, the Polk County Emergency Management staff will map the most current critical facilities within high risk wildfire zones and provide this analysis to the CWPP Working Group upon request.

**Predominant Wildland Fuel Types**

FDOF maintains a Fire Activity Report database that includes information on all wildfires that FDOF responded to dating back to 1980. It does not include brush fires that were suppressed by local firefighters without FDOF assistance. According to these records, 40% of the total acres that have burned in Polk County have been associated with palmetto-gallberry fuels which are typical of Florida Scrub ecosystems. The largest number of fires has been in grass wildlands which accounts for 36% of the total acres burned. Polk County has also had 425 muck fires which are fires that smolder underground in muck soils. Muck fires are difficult to suppress and can smolder for much longer than fires in other fuel types.

***Fires by Fuel Type, 1980-2010***

Fuel Type	Fires	Acres
Palmetto-Gallberry	1,981	106,230.6
Grass	3,854	95,380.9
Swamp	471	34,504.7
Dense Pine	222	12,948.2
Muck	425	6,224.5
Other	590	6,127.0
Blow Leaf	152	1,461.6
Unspecified	51	561.2
<b>Total</b>	<b>7,746</b>	<b>263,438.7</b>

Source: FDOF

**Appendix B** includes a map of surface fuels from the FL FRAS. Polk County has many unique and endangered natural habitats, all of which are adapted to wildfire. The Lake Wales Ridge ecosystem that runs through eastern Polk County consists of scrub, scrubby flatwoods, pine flatwoods, bayheads, and depression marshes and seasonal ponds. The Green Swamp in northwestern Polk County includes sandhills, flatwoods, oak hammocks, river swamp, and cypress ponds.

### Wildfire History

In the past 30 years there have been 263,439 acres burned from wildfires in Polk County. A majority of the fires have been relatively small in size, under 10 acres. This amount does not include brush fires that were suppressed by local firefighters without FDOF assistance. Polk County Fire Rescue also keeps statistics on brush fires.

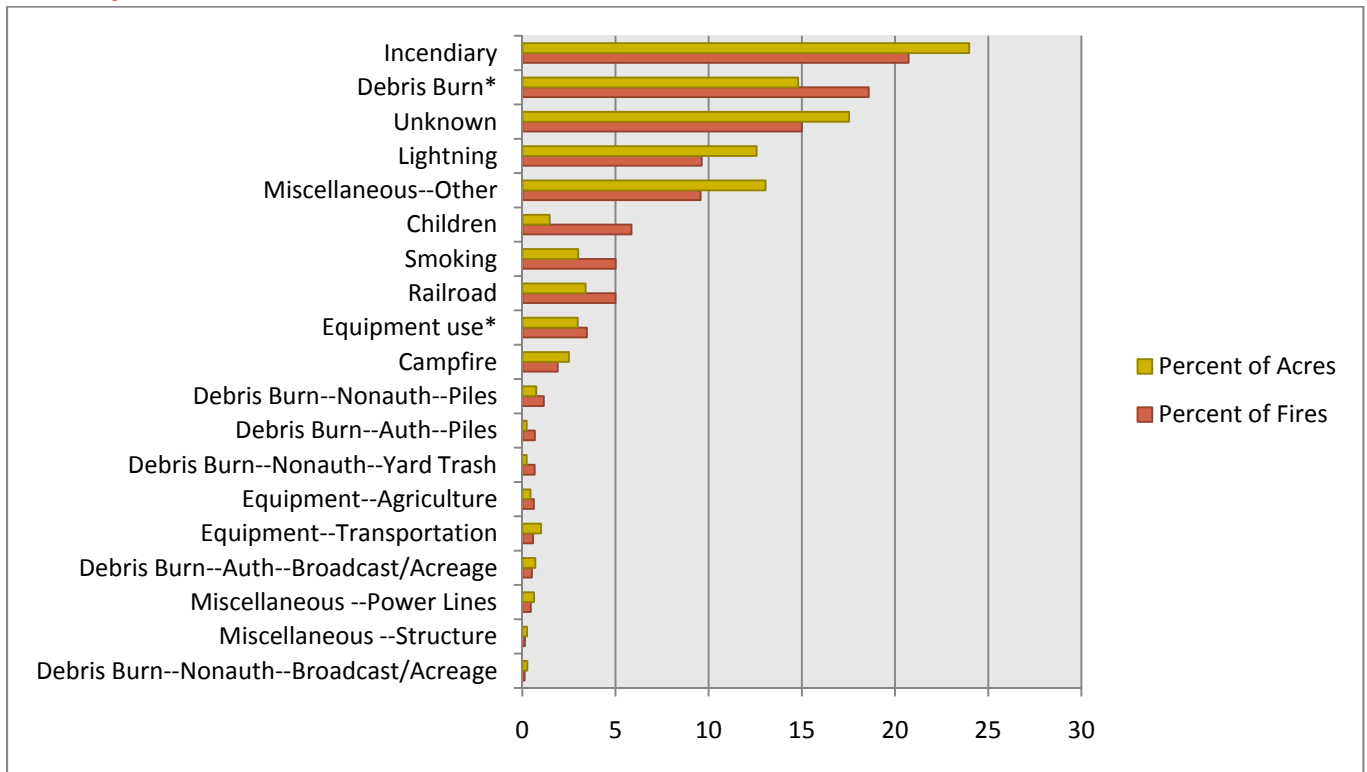
#### *Fires Classified by Fire Size, 1980-2010*

Fire size	Fires	Acres
0.1- 1.2 acres	1,299	141.5
0.3- 9 acres	3,840	9,784.8
10-99 acres	2,073	65,339.9
100-299 acres	354	56,234.0
300-999 acres	151	66,359.5
1000-4999 acres	27	47,460.0
5000 and greater acres	2	18,119.0
<b>Total</b>	<b>7,746</b>	<b>263,439</b>

Source: FDOF

The leading causes of wildfire in Polk County have been incendiary and debris burning. Both of these are preventable, to a degree, through public awareness and education programs. Another leading cause is lightning and these fires often burn a larger number of acres due to remoteness in conservation lands.

*Fires by Causes, 1980-2010*



\* Fire cause no longer used  
Source: FDOF

Polk County has had a number of serious fires threatening the safety of its residents. In 2001, a large wildfire burned over 11,000 acres of mainly grass, scrub trees and shrubs along and north of the Interstate 4 corridor over mainly rural portions of northern Polk County. A ten mile stretch of Interstate 4 was closed between Polk City and Lakeland due to the wildfire for nearly ten days (Polk County, 2009).

In March of 2007, the “53 Big Pine Fire” prompted a federal Fire Management Assistance Declaration for the suppression effort. More than 130 residences were threatened in the Blue Jordan Subdivision in the community of Indian Lake Estates (FEMA, 2007).

#### 4. Local Capacity and Current Wildfire Protection Activities

##### Organizations and Resources

###### Local Emergency Management

The County’s emergency management services are the responsibility of the Polk County Emergency Management Division. The Division is responsible for countywide Emergency Management Operations, the Special Care Program, E9-1-1 Systems, E9-1-1 Addressing, Radio Services, and Emergency Management Public Education Programs. The Comprehensive Emergency Management Plan (CEMP),

specifically the Firefighting Emergency Support Function (ESF) #4, describes how local emergency response concerning wildfire will be conducted.

***Polk County Emergency Operations Center***

1890 Jim Keene Rd.  
 Winter Haven, FL 33880  
 (863)534-5600

***Local Disaster Support Agencies***

Agency	Address	Phone
American Red Cross	147 Ave A NW, Winter Haven, FL 33881	863-294-5941
United Way of Central Florida	5605 US Hwy 98 S, Highland City, FL 33846	863-648-1500

The American Red Cross – Mid-Florida Region provides volunteer services in relation to wildland fires including opening shelters when residents are evacuated. Polk County also has 24 Community Emergency Response Teams (CERT) with over 400 members. There may be opportunities to use the CERT network for public awareness outreach on wildfire mitigation or for additional volunteer support in the aftermath of a wildfire.

**Local Fire Services**

The Polk County Fire Rescue Division is the fire service branch of the Polk County Board of County Commissioners. They provide fire services for the unincorporated portions of Polk County through a network of 34 fire stations and a series of interlocal agreements with most of the 17 municipalities in Polk County. A map of fire station locations is included in **Appendix B**. The interlocal agreements exist in the form of Automatic Aid, Mutual Aid, and contracted service. Polk County Fire Rescue also provides service for the City of Eagle Lake, City of Polk City, City of Mulberry, Town of Lake Hamilton, and Town of Hillcrest Heights (Polk County, n.d.).

More information on fire services is included in the **Wildland Fire Response Capabilities** section.



**County Fire Stations**

<b>Fire Station</b>	<b>Address</b>	<b>City</b>	<b>Staffing</b>
Babson Park Fire Station	714 SCENIC HWY N	BABSON PARK	Volunteer
Alturas Fire Station	2535 3RD ST	BARTOW	Volunteer
Peace Creek Fire/MD 59 Station	100 RIFLE RANGE RD	BARTOW	Career
Loughman Fire Station	510 RONALD REAGAN PKWY	DAVENPORT	Career
Outpost 27 Fire Station	101 ADVENTURE CT	DAVENPORT	Career
Northridge Fire/MD 211 Station	6525 RONALD REAGAN PKWY	DAVENPORT	Career
Eagle Lake Fire/MD 46 Station	185 3RD ST S	EAGLE LAKE	Career
Baker Dairy Fire Station	1702 BAKER AVE E	HAINES CITY	Career
Sun Air Fire/MD 681 Station	7800 WATKINS RD	HAINES CITY	Career
Highland City Fire Station	4101 CLUBHOUSE RD	HIGHLAND CITY	Career
Lake Hamilton Fire Station	75 BROADWAY ST	LAKE HAMILTON	Career
Timberlane Fire Station	4925 TIMBERLANE RD	LAKE WALES	Volunteer
Caloosa Lake Fire Station	14684 HWY 27	LAKE WALES	Career
Grape Hammock Fire Station	1322 SHADY LN	LAKE WALES	Volunteer
Indian Lake Est Fire Station	20 HOGAN RD	LAKE WALES	Career
Harbor Station Fire Station	10511 MONROE CT	LAKE WALES	Volunteer
Camp Lester Fire Station	3801 CAMP LESTER RD	LAKE WALES	Volunteer
Fedhaven/Nalcrest Fire Station	610 CLUB CIR	LAKE WALES	Career
Golfview Park Fire/MD 87 Station	2902 HWY 60 E	LAKE WALES	Career
Crystal Lake Fire Station	2450 MAIN ST E	LAKELAND	Career
Medulla Fire Station	2523 EWELL RD	LAKELAND	Career
Medulla 2 Fire Station	4525 EWELL RD	LAKELAND	Volunteer
Providence Fire Station	8936 HWY 98 N	LAKELAND	Career
Sleepy Hill Fire Station	3030 SLEEPY HILL RD	LAKELAND	Career
Bradley Fire Station	6949 OLD HWY 37	MULBERRY	Career
Willow Oak Fire Station	4210 WILLIS RD	MULBERRY	Career
Mulberry Fire Station	900 5TH ST NE	MULBERRY	Career
Solivita Fire/MD 671 Station	1201 CYPRESS PKWY	POINCIANA	Career
Polk City Fire/MD 131 Station	200 COMMONWEALTH BLVD SW	POLK CITY	Career
Cypress Gardens Fire/MD 58 Station	2101 REGISTER RD	WINTER HAVEN	Career
Jan Phyl Fire/MD 45 Station	333 AMERICAN SPIRIT RD	WINTER HAVEN	Career

Note: Most career stations also have a small contingent of volunteers.  
Source: Polk County Fire Department, 2011

*City Fire Stations*

Fire Station	Address	City
Auburndale FD	100 ARIANA AVE	AUBURNDALE
Bartow FD	110 CHURCH ST E	BARTOW
Dundee FD	105 CENTER ST	DUNDEE
Davenport FD	112 PALMETTO ST W	DAVENPORT
Fort Meade FD	12 ALBRITTON ST N	FORT MEADE
Frostproof St 1 FD	47 LAKE AVE N	FROSTPROOF
Haines City FD	138 11TH ST N	HAINES CITY
Bowling Green Station #3	620 MAIN ST W	BOWLING GREEN
Hardee Co Fire Rescue Station #1	149 K D REVELL RD	WAUCHULA
Zolfo Spg Station (TEMP) #2	104 FIFTH ST W	ZOLFO SPRINGS
Lake Alfred Rd	185 POLEMO ST E	LAKE ALFRED
Lakeland St 1 FD	755 ROSE ST E	LAKELAND
Lakeland St 2 FD	2104 FLORIDA AVE S	LAKELAND
Lakeland St 3 FD	110 BELLA VISTA ST W	LAKELAND
Lakeland St 4 FD	215 BRUNNELL PKWY N	LAKELAND
Lakeland St 5 FD	3101 LAKELAND HIGHLANDS AVE	LAKELAND
Lakeland St 6 FD	5050 HWY 33 N	LAKELAND
Lake Wales St 1 FD	253 CENTRAL AVE W	LAKE WALES
Lake Wales St 2 FD	1965 THOMPSON NURSERY RD #1/2	LAKE WALES
Winter Haven St 1 FD	301 AVENUE G SW	WINTER HAVEN
Winter Haven St 2 FD	4700 HWY 544	WINTER HAVEN
Winter Haven St 3 FD	6600 CYPRESS GARDENS BLVD SE	WINTER HAVEN

Source: Polk County Fire Department, 2011

**Florida Division of Forestry**

FDOF provides wildfire prevention/mitigation and response services in collaboration with local fire services. Polk County is located in FDOF's Lakeland District. The Wildfire Mitigation Specialist for the Lakeland District is a resource for Firewise education and planning assistance as well as coordinating and implementing fuel management needs. See the **Firewise Communities** section and **Wildland Fuel Management Capabilities** section for more details on FDOF public education and fuel reduction projects.

The Polk County Forest Area Supervisor directs FDOF fire suppression activities. More details on FDOF and local wildfire suppression are discussed in the **Wildland Fire Response Capabilities** section.

FDOF also has direct land management responsibilities for the Lake Wales Ridge State Forest.

*FDOF Work Stations*

Work Station	Address	Phone
Lakeland District Office and Forestry Station	5745 S. Florida Avenue Lakeland, FL 33813	863-648-3160
Dundee Forestry Station	102 Lincoln Avenue Dundee, FL 33838	863-421-3702
Lake Wales Ridge State Forest	851 CR 630 East Frostproof, FL 33843	863-635-7801

## Community Development

Each jurisdiction within Polk County has a comprehensive plan detailing future land uses and land development codes that include standards for construction activity. These tools can also be used to help educate the public to mitigate wildfire impacts for future development.

The Polk County Comprehensive Plan includes three sections that address or support wildfire mitigation. The following policy, to be adopted in August 2011 as part of the Comprehensive Plan update is part of the Conservation Development Program in which additional wildfire mitigation considerations could be integrated that may further strengthen the intent of the Program. This policy directly addresses wildfire mitigation by encouraging Firewise development practices on parcels contiguous to environmental lands.

POLICY 2.1251-C7: PARCELS CONTIGUOUS TO ENVIRONMENTAL LANDS – The Conservation Development Program shall include incentives to encourage the use of conservation planning principles on parcels contiguous to public or privately-owned environmental lands. It shall provide an attractive alternative to large lot subdivisions in order to minimize fragmentation of wildlife habitat. The program incentives shall also encourage the use of other sustainable development practices such as Low Impact Development, Dark Skies, Water Star and Firewise.

(Polk County, 2010)

There are also policies, as listed below, that provide a basis for wildfire mitigation in the Comprehensive Plan or within the County's Land Development Code through reference of the LMS.

### SECTION 2.123-G: LOCAL HAZARD MITIGATION STRATEGY

OBJECTIVE 2.123-G: Polk County shall coordinate future land use designations to eliminate or reduce inconsistencies with the goals, objectives, and recommendations of the adopted Local Mitigation Strategy.

POLICY 2.123-G1: The County, through the implementation of its land development regulation, will ensure that development approvals are consistent with the objectives and policies of the Local Mitigation Strategy. If the site is such that all beneficial use of the property is precluded due to the hazard identification/determination, then the County will consider purchasing the property for preservation purposes through the use of moneys from environmental lands preservation programs, grants or other similar sources of funding.

(Polk County, 2010)

The third area that could support wildfire mitigation is the Special-Area Overlay Districts (Section 2.122) that includes the LMS as one of the criteria for designating and mapping Development-Limitation Area overlays (Policy 2.122-A1,a.2.e). The overlay areas are included in the Future Land Use Map Series. The Wildfire Risk (LOC) Map or Wildfire Susceptibility Index Map included in **Appendix B** could be added to the Future Land Use Map Series to provide Polk County planners an opportunity to educate residents

and developers of wildfire susceptibility in response to land development requests and as a guide to direct incentive-based development regulations.

The Wildfire Susceptibility Index Map can also be used in conjunction with the customer services provided by the Polk County Fire Marshall office. The Polk County Fire Marshall reviews development plans in accordance with the County's fire protection standards. Proposed subdivisions are to have an all weather driving surface, able to withstand the weight of fire apparatus and provide access to all buildings being constructed. Underground fire mains and fire hydrants are to be installed and operational, with the proper fire flow, prior to any building construction. If there are no public utilities available in an area proposed for a subdivision, then other means of fire extinguishment must be met (Polk County, n.d.).

The municipalities' comprehensive plans were not reviewed during this planning process. It is suggested that cities with high-risk wildfire areas within their jurisdictions should also examine opportunities for amending their comprehensive plans to include wildfire mitigation.

The CWPP Working Group discussed pursuing policies that encourage wildfire mitigation and increase awareness of wildfire risk prior to development rather than requiring mandatory mitigation. See **Section 7** for recommended policy actions.

### **Local Mitigation Strategy Working Group**

The Polk County Local Mitigation Strategy (LMS) is a multi-jurisdictional plan that assesses the vulnerability of the county and its jurisdictions to hazards and evaluates local mitigation efforts that should be taken. Through adoption of the LMS, the county and its jurisdictions are eligible for federal funds to carry out their mitigation actions through the Hazard Mitigation Grant Program and Pre-disaster Mitigation Grant Program. The LMS Working Group oversees the implementation of the plan and includes several of the agencies represented on the CWPP Working Group (Polk County Emergency Management, Fire Rescue, and Office of Planning and Development). (Polk County, 2009)

The LMS Goals and Objectives do not directly address wildfire hazards, however, they do support public education and other all-hazards efforts that are consistent with wildfire mitigation and the goals of this plan. The LMS rates the county's overall wildfire vulnerability as high. It also rates the following cities as moderate to high level of risk: Auburndale, Davenport, Haines City, Village of Highland Park, Town of Hillcrest Heights, and Polk City. (Polk County, 2009)

LMS Goals and Objectives supported by the CWPP:

- Objective 1.1, Inform and educate the public about potential hazards and property protection measures.
- Objective 1.2, Ensure new development and redevelopment complies with all applicable federal, state and local regulations.
- Objective 2.5, Continue to develop the capacity to mitigate, prepare, respond, and recover from all hazards.
- Goal 6, Encourage the protection of Natural Resources.

### **Conservation Land Agencies**

There are approximately 275,000 acres of publicly managed conservation lands within Polk County. See **Appendix B** for a map of conservation lands with pineland types. Managing agencies include Polk County, FDOF, Florida Department of Environmental Protection, Florida Fish and Wildlife Conservation Commission, South Florida Water Management District, Southwest Florida Water Management District (SWFMWD), U.S. Department of Defense, and U.S. Department of the Interior as well as several municipalities and non-governmental organizations. A majority of the managing agencies have specific land management plans for each tract and conduct regular fuel management on their lands.

### ***Non-Governmental Organizations***

The Lake Wales Ridge Ecosystem (LWRE) Working Group was established in 1991 to coordinate land management activities along the Lake Wales Ridge protected areas network. The network spans Highlands and Polk Counties and protects a suite of threatened and endangered species. Since the mid-1980s, the U.S. Fish and Wildlife Service, the State of Florida, The Nature Conservancy, and other government and private entities (e.g., Archbold Expeditions, Inc., and Bok Tower Gardens Foundation, Inc.) have invested tens of millions of dollars in purchasing scrub parcels.

Under the LWRE Working Group, wildland fuel management is augmented by the Lake Wales Ridge Prescribed Fire Team – an interagency team, created by The Nature Conservancy (TNC) to assist land managers with safe and effective prescribed burning in conservation areas to restore habitat. Land managers also conduct their own burns and retain the responsibility to get burn authorizations.

TNC's local fire team consists of six trained individuals. TNC has mutual aid agreements in place with FDOF to assist with mitigation activities if requested. They have also initiated wildfire mitigation outreach and education projects; past efforts include support to establish Tiger Creek Forest as a Firewise Community in Polk County, and help homeowners to assess their homes and landscape.

### **Firewise Communities**

There are four established Firewise Communities in Polk County: Tiger Creek Forest (2008), Indian Lake Estates (2009), Blue Jordan Forest (2010), and Westgate, River Ranch (2010). There are also several in the process of becoming Firewise. Phase 1 of River Ranch Resorts is expected to complete the process in 2011 and FDOF is also assisting Pine Ridge and Tiger Lake with their processes including outreach within the neighborhood. The Firewise Communities have been successful in raising resident awareness of risk and Firewise methods around their homes. Well-attended annual Firewise workshops have been held in Indian Lake Estates in 2009 and 2010 and another one is scheduled for November 2011. Firewise Community status has also assisted Indian Lake Estates in obtaining grant funding to conduct fuel management within their community.

### ***Wildland Fire Response Capabilities***

The Polk County Fire Rescue, FDOF, and Polk County Emergency Management will coordinate responses to wildland fires to ensure effective suppression. FDOF has statutory responsibility for the suppression of wildland fires in the State. All fire departments in Polk County are signatories of a mutual aid

agreement. In addition, Polk County Fire Rescue participates in the Florida State Emergency Response Plan (Polk County, 2008).

Polk County firefighters are trained to respond to wildland fires. The majority of firefighters have received S-190 and S-130 training or equivalent. Volunteers are trained using “Fire in the Field”.

The Polk County CEMP contains procedures on evacuation. Reverse 911, local media, and law enforcement are typically utilized in wildfire evacuations. Polk County Emergency Management also maintains a list of shelters in addition to designated hurricane shelters that may be used if residents are asked to evacuate their homes. The American Red Cross – Mid-Florida Region operates the shelters.

### Wildland Fuel Management Capabilities

FDOF conducts fuel management on state forests and can also implement projects on other public and private lands as requested if funding is available. In the past year (July 2010 - April 2011), FDOF conducted fuel management projects on 10,449 acres within the Lakeland District which includes Hillsborough, Pinellas, and Polk Counties.

The County Environmental Lands Division has staff trained to conduct fuel management, as well. The Lake Wales Ridge Prescribed Fire Team also conducts burns within Polk County.

### Experience Implementing Wildfire Protection Programs

FDOF is very active in implementing wildfire protection programs in Polk County. They have been most successful in working with at-risk neighborhoods to become Firewise Communities, thereafter targeting these areas for fuel management projects.

## 5. Goals and Objectives

The following goals and objectives were developed by the CWPP Working Group to guide the implementation of the CWPP.

**Goal 1:** Continue to reduce the risk of wildfires and maintain the quality of sensitive habitats in Polk County through fuel management programs on conservation lands.

**Objective 1.1:** Increase public awareness and acceptance of the use of prescribed fire to manage wildland fuels.

**Objective 1.2:** Support interagency coordination and public-private partnerships that share resources and information regarding wildland fuel management on conservation lands.

**Objective 1.3:** Continue to identify priority fuel management projects and seek funding to implement and maintain fuel breaks for high-risk neighborhoods.

**Goal 2:** Reduce the vulnerability of existing neighborhoods to wildfire through education and mitigation programs.

**Objective 2.1:** Expand the knowledge and practice of Firewise mitigation principles by Polk County residents through public education programs.

**Objective 2.2:** Continue assisting at-risk neighborhoods to become Firewise Communities.

**Objective 2.3:** Continue to seek funding resources and permission from property owners to conduct fuel management activities on private lands with high wildland fuel loads.

**Goal 3:** Advance community resiliency to wildfire for new development through community development tools.

**Objective 3.1:** Evaluate potential for amendments to the County and municipalities' comprehensive plans and development codes to support or incentivize wildfire mitigation through Firewise methods of development.

**Objective 3.2:** Encourage development standards consistent with National Fire Protection Agency standards for water supply and access in suburban and rural communities at risk from wildfire.

**Goal 4:** Continue to improve local fire services' wildfire suppression capabilities and interagency coordination and communications.

## 6. Implementation and Plan Maintenance

The CWPP is to be implemented as resources become available to incrementally mitigate community wildfire vulnerability. The Polk County Emergency Management Division will oversee implementation and maintenance of the CWPP in collaboration with the CWPP Working Group. An action plan has been collaboratively developed by the CWPP Working Group to guide implementation efforts over the next 5 years. An action as listed in this Plan is a strategy, project, or program that reduces wildfire vulnerability in the community. Each action will be assigned a lead agency or organization that will be responsible for implementation. Interagency and public-private partnerships in CWPP implementation are encouraged.

### Potential Funding Sources

Project funding and/or local and state agency staff time should be continually sought in order to implement the CWPP Action Plan. The CWPP Working Group should meet annually to discuss budget requests among the partner agencies and determine potential grant opportunities that can be applied for during the year. Descriptions of major federal and state funding sources applicable to wildfire

mitigation and response improvements are available in the Florida State Hazard Mitigation Plan in the Wildfire Mitigation Annex.

### Plan Maintenance and Evaluation

The CWPP should be reviewed on an annual basis to ensure information is current, monitor progress of the Plan, and alter Plan content as necessary. Every 5 years the plan should receive a major update in which the vulnerability assessment is updated and the action plan is evaluated for its effectiveness over the past 5 years and its suitability for the next 5 years. A resource for evaluating the plan is the *Community Wildfire Protection Plan Evaluation Guide* prepared by the University of Oregon Resource Innovations Institute for a Sustainable Environment in 2008. The FDOF has adapted evaluation questions from this resource to guide Florida communities in assessing the CWPP during a major plan update. The organizational representation from the Working Group should be reconvened, at a minimum, to conduct the major update. The 5-year update should ideally occur prior to or simultaneously with the 5-year update to the Local Mitigation Strategy. Only the 5-year update requires new plan approval signatures (**page ii**).

## 7. Action Plan

This section describes implementation strategies or actions that will advance the goals and objectives of this CWPP. The actions are organized by mitigation category: 1) wildland fuel management, 2) community outreach and education, 3) Firewise building retrofit and landscaping, 4) policy and regulation recommendations, and 5) wildland fire response improvements. The following action recommendations are listed in priority order within each mitigation category based upon ability to most significantly decrease wildfire vulnerability in the community. Detailed information for high priority actions, including participating agencies and evaluation criteria, can be found in **Appendix C**.

### Wildland Fuel Management

Fuel management projects help reduce the size and intensity of wildland fires and may also decrease the likelihood that a wildfire will start in an area. These actions can increase the safety of people and property while reducing response and suppression costs. Fuel management methods, which can be used alone or in combination with other methods to achieve site-specific benefits, include:

- Prescribed burning;
- Mechanical treatment (e.g., mowing, mulching, disking, fire line plowing, and chopping);
- Chemical treatment (herbicide application);
- Biomass removal (e.g., pine straw harvesting, vegetation or tree thinning, and timber harvesting); and
- Biomass conversion (grazing).



Fuel management treatments designed to reduce wildfire risk are temporary and in most cases reduce the hazard in the treated area for three to five years. Periodic management is required on a regular basis to maintain fuels at an acceptable level to reduce wildfire risk.

### ***Wildland Fuel Management Actions***

<b>Action</b>	<b>Lead Agency</b>	<b>Timeframe</b>	<b>Potential Funding</b>
Continue programs to reduce fuel loads in at-risk neighborhoods (e.g. Indian Lakes) by applying for funds and requesting permission from neighboring homeowners	FDOF	Ongoing	Grant funding through FDOF
Review areas mapped as LOC 9 to determine if the area is targeted for upcoming fuel management or has been treated since the map was created	FDOF	Annually	Not needed
Continue implementing land management plans for County-owned properties	Polk County Parks and Natural Resources	Ongoing	Budget allocations
Develop a plan for maintaining completed fuel management projects	FDOF	Ongoing	Not needed

### ***Community Outreach and Education***

Outreach and education initiatives are designed to raise awareness and improve community knowledge of wildfire risk and mitigation strategies. A good example of an education program is the Florida Firewise Communities Program. Education and outreach programs can influence attitudes and opinions and lead to behavioral changes, such as homeowners' participation in fuel management strategies.

### ***Community Outreach and Education Actions***

<b>Action</b>	<b>Lead Agency</b>	<b>Timeframe</b>	<b>Potential Funding</b>
Look into using Reverse 911, digital signs, and/or other public notification outlets to alert residents of a prescribed fire being conducted	Polk County Fire Rescue	2011	To be determined
Apply for grants to obtain a digital sign to be used for prescribed fire awareness	Polk County Parks and Natural Resources	2011-2014	Maybe apply for Fire Prevention and Safety Grant
Consider public outreach opportunities at grocery and garden stores near at-risk neighborhoods or near where prescribed fires are planned	FDOF	2011-2015	Not needed, use existing resources
Incorporate wildfire mitigation education into Fire Prevention Week activities	Polk County Fire Rescue	Oct. 9-15, 2011; annually if successful	Request materials and staff assistance from FDOF

Action	Lead Agency	Timeframe	Potential Funding
Incorporate wildfire mitigation education into Water, Wings, and Wild Things festival at Circle B Bar Reserve	Polk County Fire Rescue	Oct. 8, 2011; annually if successful	Request materials and staff assistance from FDOF
Incorporate wildfire mitigation education into annual Hurricane Expo	Polk County Fire Rescue	Annually (June)	Request materials and staff assistance from FDOF
Continue FDOF education program with Polk County schools	FDOF	Annually	FDOF budget
Determine if wildfire education can be incorporated into the Fire Explorers Program	Polk County Fire Rescue	2011-2015	Request materials and staff assistance from FDOF
Add wildfire posters to educational boards at Polk County Environmental Lands	Polk County Parks and Natural Resources	2011-2013	Request materials from FDOF
Consider running Public Service Advisories (PSAs) on PGTV or other media outlets	Polk County Fire Rescue	2011-2015	FDOF or NFPA/Firewise may have PSAs to use/adapt
Distribute Firewise landscape design and plant lists materials to local organizations, at public meetings where appropriate, and post on the Fire Rescue website	Polk County Fire Rescue	2011-2015	Request materials from FDOF or NFPA/Firewise

### Firewise Building Retrofit and Landscaping

Projects that reduce the ignitability of community facilities and private structures decrease community wildfire vulnerability and provide Firewise models that can assist in community awareness. Grant funding, such as the FEMA Hazard Mitigation Grant Program, can be sought to retrofit public or private buildings in high-risk wildfire zones with Firewise building materials. Other project examples could include public-private partnerships supplying Firewise landscaping materials while volunteer programs could assist in making Firewise improvements to the structure ignitability zone.

#### *Firewise Building Retrofit and Landscaping Actions*

Action	Lead Agency	Timeframe	Potential Funding
List projects for high-risk neighborhoods on the LMS Project List in case grant funding becomes available	Polk County Emergency Management	Prior to 2012 LMS annual update	Not needed for adding to list; HMGP may be available after a disaster
Determine if any volunteer organizations could assist with Firewise landscaping improvements for homeowners in need of help	FDOF	2013- 2015	Not needed

## Policy and Regulation Recommendations

Updating local government plans, policies, and regulations is another effective way to advance wildfire mitigation goals. By modifying requirements for development, high risk wildfire zones can be avoided or new development can be proactively designed to reduce wildfire risk and therefore make living and working in these areas safer. The lead agency in the below actions is the Polk County Office of Planning and Development as they may provide model policy language for other jurisdictions to utilize. Any jurisdiction with wildfire risk is encouraged to also implement the following actions as they update their policies and codes.

### Policy and Regulation Actions

Action	Lead Agency	Timeframe	Potential Funding
Recommend amending the comprehensive plan to add more direct references to wildfire mitigation opportunities for conservation developments or overlay zones	Polk County Office of Planning and Development	2012-2015	Not needed
Consider including the Wildfire Risk Map (LOC) or Wildfire Susceptibility Map in the Future Land Use Map Series or map equivalent	Polk County Office of Planning and Development	2012-2015	Not needed
Consider inclusion of fuel management requirements in the Management Plan for a Conservation Development	Polk County Office of Planning and Development	2012-2015	Not needed
Evaluate opportunities for including Firewise neighborhood design and landscape techniques, i.e. home ignition zone setbacks from wildlands, in the land development code. Consider incentives for developers who incorporate Firewise methods.	Polk County Office of Planning and Development	2012-2015	Not needed
Review standards for multiple, separate ingress/egress and for private gate widths to ensure these meet firefighting requirements	Polk County Office of Planning and Development	2011-2012	Not needed
Provide information on Firewise building materials and methods to applicants for building permits	Polk County Fire Marshall's office	Ongoing	Materials can be obtained from FDOF or Firewise website/catalog

## Wildland Fire Response Improvements

Opportunities to improve wildland fire response capabilities are also critical to reducing the risk of wildfire damage to people and property. Improvements in response capabilities can include advanced

training, increasing staff or volunteer fire fighting resources, and developing new procedures or protocols.

**Wildland Fire Response Improvement Actions**

Action	Lead Agency	Timeframe	Potential Funding
Seek funding for 214 training for firefighters (or 214 instructor)	Polk County Fire Rescue	2011-2013	To be determined
Assist Planning with land development code recommendations to increase road access and water supply for fire fighting	Polk County Fire Rescue	2011-2012	Not needed

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## Appendix A: Planning Process Meetings

Meeting summaries from the CWPP planning process are included in this appendix.

### Working Group Meeting #1, November 5, 2010

**Attendees:** Pete McNally, Polk Emergency Management (EM); Paul Womble, Polk EM; Dan Bartle, Polk Fire Rescue; Chanda Bennett, Polk Long Range Planning; Bill Delph, Division of Forestry (DOF); Gary Zipprer, DOF; Robin Whitaker, DOF; Rickey W. Britt, DOF; Allison Boyd, CSA International.

#### Meeting Summary:

The Polk County Community Wildfire Protection Plan (CWPP) Working Group met to begin providing input on a draft CWPP. The purpose of this first Working Group meeting was to review background information, preliminary risk information, and draft capacity assessment portions of the CWPP. Allison Boyd provided a brief description of the project and expected benefits. The discussion then focused around the 8 step planning process that was provided as a handout. A copy of the draft CWPP and information request were also provided as handouts at the meeting.

The group was asked to consider whether there are other stakeholders that should be invited to participate in the planning process. Several recommendations were provided including Polk County Parks and Natural Resources (Chris Price or Gaye Sharpe), US Fish and Wildlife Service (local land manager), the Nature Conservancy, Frostproof Fire Department, Fort Meade Fire Department, Central Florida Regional Planning Council (Chuck Carter), Avon Park Bombing Range (Paul Ebersbach), Builders Association, Public Safety education staff (Rosa), and private burning contractor (Sam Van Hook).

Efforts to incorporate wildfire mitigation into the comprehensive plan and land development codes were discussed in relation to the institutional capacity assessment. Chanda explained that the Fire Smoke Protection District code was put on hold to ensure it was vetted through the most appropriate public participation process. The comprehensive plan was just updated through the Evaluation and Appraisal Reporting process and one new item was conservation subdivisions. Language on these has not been updated in the land development code yet so this could be an opportunity to include Firewise design principles. The current development review committee has the Fire Marshall on it but wildfire not a focus. With the current economic climate it is important to ensure that any policy efforts do not burden development opportunities.

Other input provided for the institutional capacity included comments on education efforts. Homeowner firewise workshops have been held recently including one the previous night. A Firewise workshop for government staff has not been held for maybe 10 years. Pandion will be providing a workshop for community leaders in Polk County in December. Firefighters in the county are required to have the S130 training.

Additional data resources on wildfire are available from the county. DOF pointed out that escaped authorized burns are very low percentage.

Issues brought up during the meeting include the following:

- Fuel management on conservation land.
- Prescribed burning is encouraged. 1-4 smoke liability discourages many however. Law enforcement is needed for smoke mitigation. DOF needs message signs for burns. Cost about \$12,000. Sheriff's office may have some.
- Not enough money and windows for prescribed burning are small.
- Existing development in need of retrofits. Properties need more defensible space via landscape maintenance.
- Future development vulnerability from large lot subdivisions
- Water supply issues - some insurance premiums are high because a hydrant is not within 1000 ft (i.e. \$800 increase annually). An online fire hydrant map is used by the fire department. DOF would like access to the data.
- Potential fire evacuation issue – many residents don't have home phones so reverse 911 wouldn't help them.

#### **Upcoming Meetings:**

- The Firewise Workshop provided by Pandion is scheduled for December 8, 2010.
- The next CWPP Working Group meeting will be scheduled for early February. The purpose of the meeting is to provide input and come to agreement on the CWPP's action plan. A detailed agenda will be provided once a date has been set.

### **Working Group Meeting #2, April 5, 2011**

**Attendees:** Pete McNally, Polk Emergency Management (EM); Paul Womble, Polk EM; Rosa Driggs, Polk Fire Rescue; Kris Price, Polk Natural Resources; Dan Bartle, Polk Fire Rescue; Chanda Bennett, Office of Planning and Development; Clifford Cofer, Frostproof Fire Department; Bill Delph, Division of Forestry (DOF); Allison Boyd, CSA International

#### **Meeting Summary:**

The Polk County Community Wildfire Protection Plan (CWPP) Working Group met to discuss the current draft of the CWPP and work on drafting goals, objectives, and actions for the plan. Discussion began with the implementation procedures and structure of the CWPP. It was agreed that the CWPP should be integrated as an appendix to the Local Mitigation Strategy (LMS). This will make it easier to adopt and maintain the CWPP. Since the municipalities adopt the LMS then in future LMS updates, after the CWPP has been integrated, they will also be adopting the CWPP. Since the CWPP will be housed within the LMS, the Polk County Emergency Management Department will be the lead agency for implementing the CWPP.

Issues brought up during the meeting include the following:

- Sometimes fuel management projects can be delayed by environmental permitting. DOF is having trouble getting permits on a project right now that the grant will expire on soon.
- Investments in conservation lands often acquire lands with high fuel loads for the land management agencies and non-profits to deal with
- Have ability to do reverse 911 for prior notification for prescribed fires
- Wildfire mitigation in the county would benefit if there was someone who could concentrate on it full-time
- Public outreach ideas: Could do PSAs (DOF can provide some), incorporate wildfire mitigation into Fire Prevention Week and Hurricane Expo (need speaker- maybe Pandion?)
  - If Nov-March is the burn season, then need to do annual awareness Sept-Oct
  - Posters for Environmental Lands boards
  - Polk schools- DOF does a program (send curriculum to Rosa)
  - Local grocery store as outreach location prior to prescribed fires
  - Other outlets: Fire explorers program; garden stores; Water, Wings, and Wild Things festival at Circle B Bar Reserve in October
- Arson prevention- have a graphic on website, DOF has arson posters
- Apply for grant to get digital signs to use for prescribed fire awareness
- DOF should continue applying for state grants for fuel management and Firewise projects, look at private grants maybe
- Planning regulations: Fire-Smoke district language needs more vetting
  - Conservation developments are new in recent comp plan update and could be tied to Firewise methods through the land development code update
  - Comp plan also has section referencing the LMS which could be a place to tie in wildfire considerations
  - Could come up with incentive-based policies encouraging Firewise design
  - Could reference wildfire risk map in comprehensive plan or include in map series as a source of educating Polk County customers, developers, and citizens
- Wildland fire training: Need a 214 training instructor (\$130/190 in good standing)
  - Need funding for training for cities
- Road access to some communities is a problem. i.e. Indian Lakes Estates
  - Codes say if over 200 homes then 2 separate ingress/egress locations required
  - Private lots – gate width standards need to be reviewed

#### **Next Steps:**

A new draft of the CWPP incorporating the discussion from this meeting will be sent to the group via email to review and comment. A final draft will need to be completed by the end of May for approval and signatures in order to meet the grant deadlines.

## **Appendix B: Wildfire Vulnerability Assessment**

This Appendix includes the following:

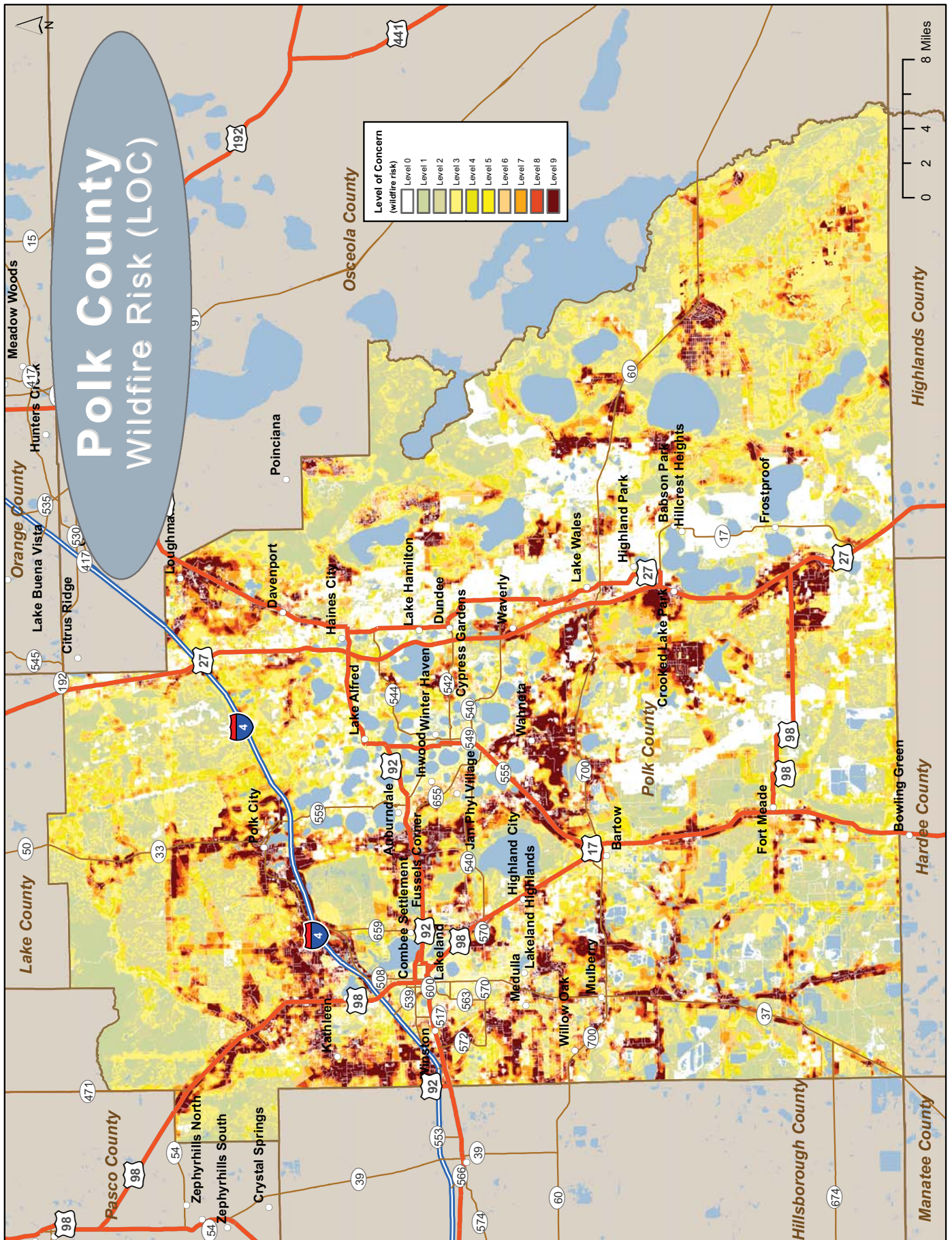
### **MAPS**

- POLK COUNTY WILDFIRE RISK (LOC)
- POLK COUNTY SURFACE FUELS
- POLK COUNTY WILDFIRE SUSCEPTIBILITY INDEX
- POLK COUNTY CONSERVATION LANDS
- POLK COUNTY EMERGENCY OPERATIONS CENTER AND FIRE STATIONS

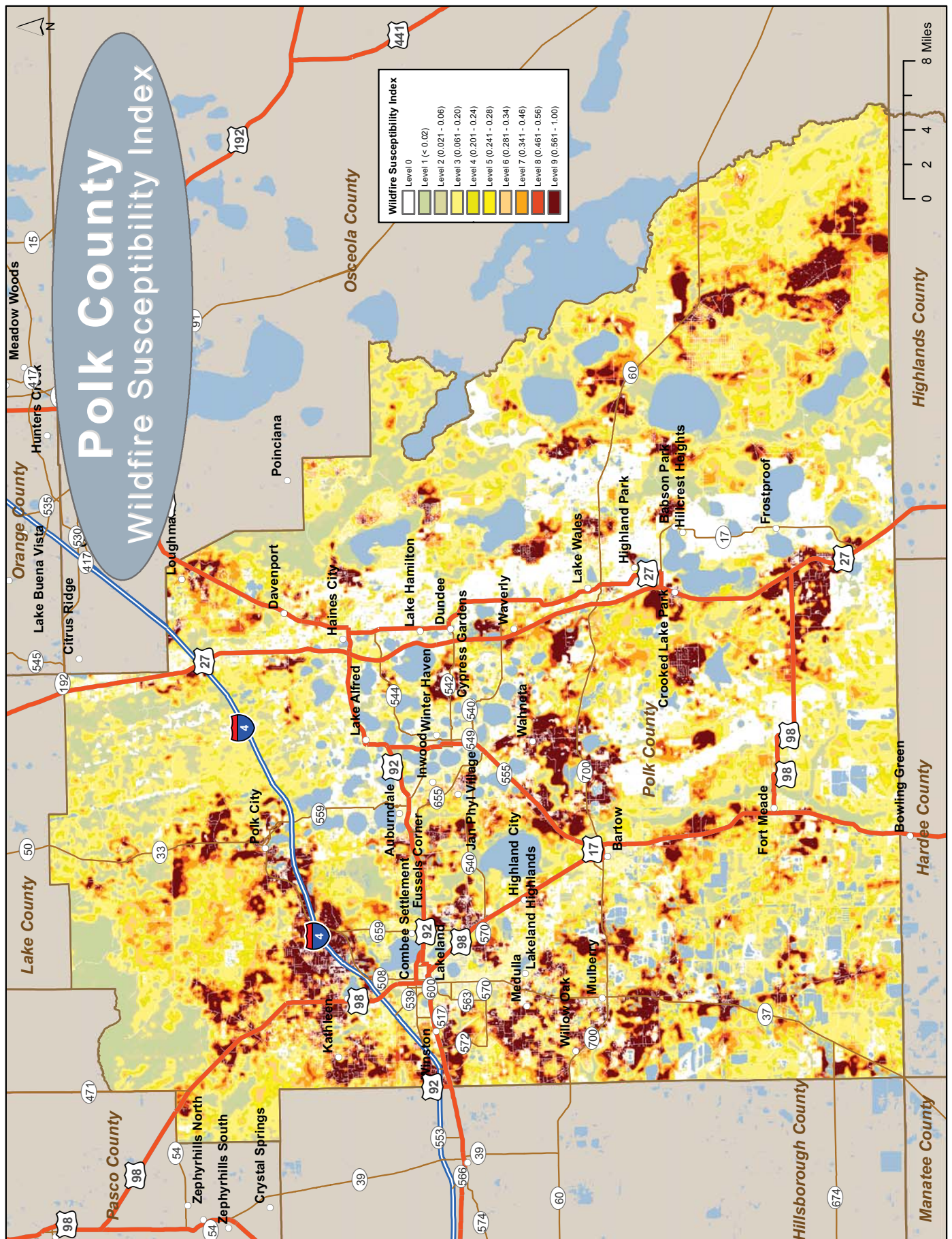
### **METHODOLOGY SUMMARIES**

- FLORIDA FIRE RISK ASSESSMENT SYSTEM (FL FRAS)
- METHODS FOR DETERMINING POPULATION AND STRUCTURES AT RISK





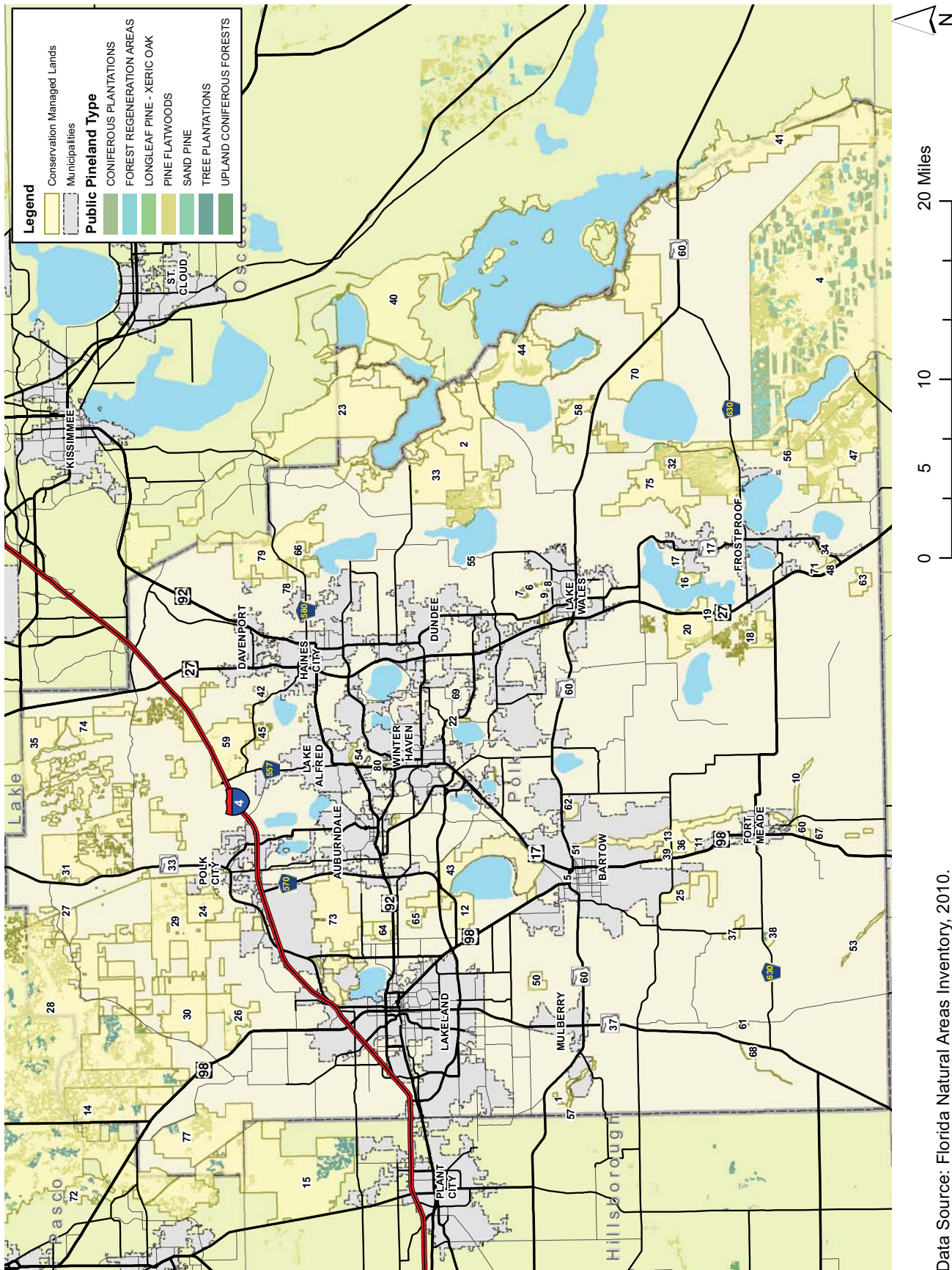
Sanborn Map Company, 2011



Sanborn Map Company, 2011



Conservation Lands in Polk County

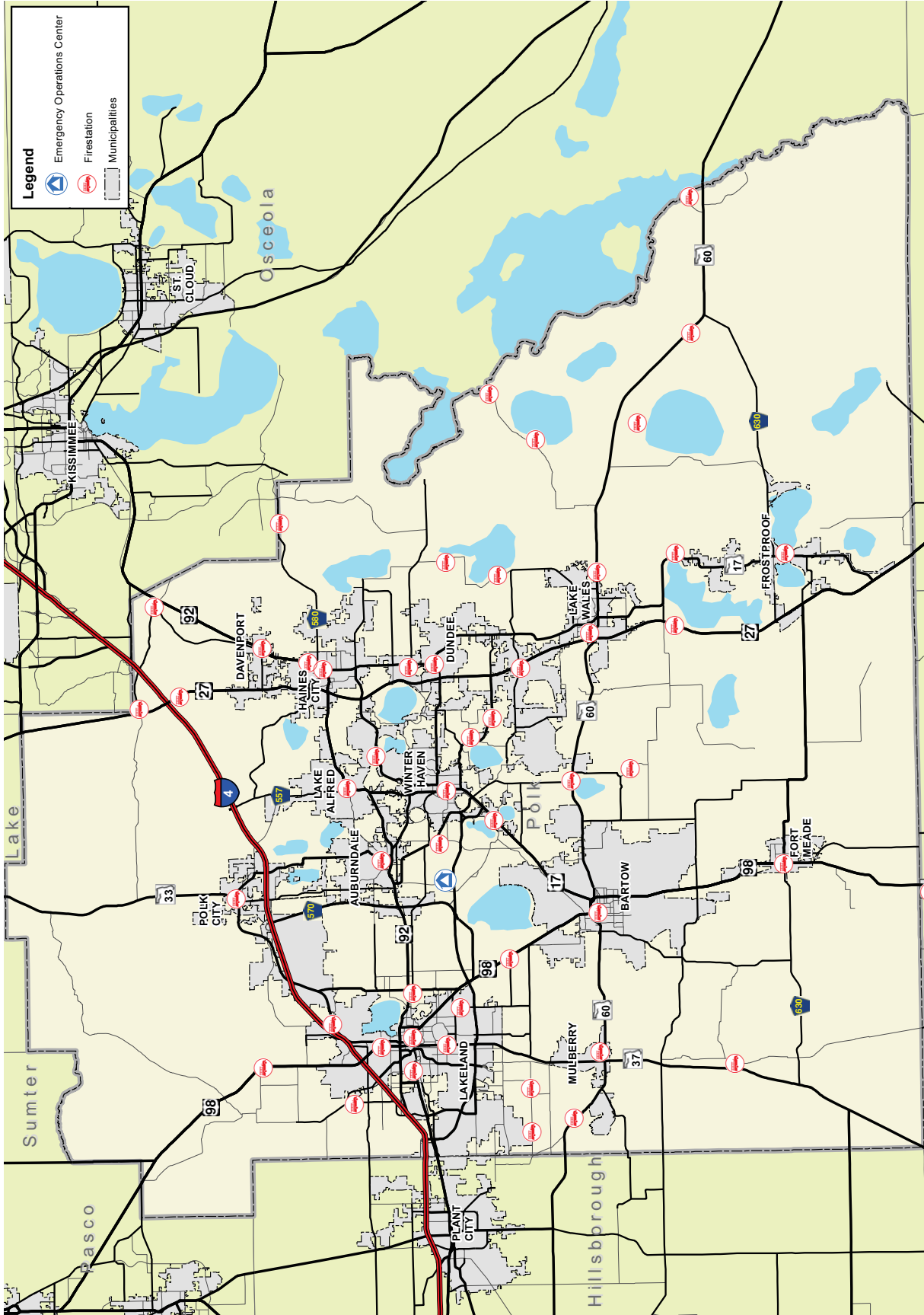


Data Source: Florida Natural Areas Inventory, 2010.

Conservation Lands Map Key

Map ID	Conservation Land	Managing Agency	Map ID2	Conservation Land2	Managing Agency2
1	ALAFIA RESERVE	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	41	KISSIMMEE RIVER	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
2	ALLEN DAVID BROUSSARD CATFISH CREEK PRESERVE STATE PARK	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF RECREATION AND PARKS	42	LAKE BONNET MARSH	POLK COUNTY
3	APPLETON AND GURVOY PARCEL	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	43	LAKE HANCOCK	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
4	AVON PARK AIR FORCE RANGE	US DEPT. OF DEFENSE, AIR FORCE	44	LAKE KISSIMMEE STATE PARK	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF RECREATION AND PARKS
5	BARTOW TRAILHEAD AT FORT FRASER	CITY OF BARTOW PARKS AND RECREATION	45	LAKE LOWERY MARSH	POLK COUNTY
6	BOX TOWER GARDENS KNOLL	BOX TOWER GARDENS FOUNDATION, INC.	46	LAKE WALES RIDGE NATIONAL WILDLIFE REFUGE	US DEPT. OF THE INTERIOR, FISH AND WILDLIFE SERVICE
7	BOX TOWER GARDENS PINE RIDGE PRESERVE	BOX TOWER GARDENS FOUNDATION, INC.	47	LAKE WALES RIDGE STATE FOREST	FL DEPT. AGRICULTURE AND CONSUMER SERVICES, DIV. OF FORESTRY
8	BOX TOWER GARDENS PLANTED PINES	BOX TOWER GARDENS FOUNDATION, INC.	48	LAKE WALES RIDGE WILDLIFE AND ENVIRONMENTAL AREA	FL FISH AND WILDLIFE CONSERVATION COMMISSION
9	BOX TOWER GARDENS PRESERVE	BOX TOWER GARDENS FOUNDATION, INC.	49	LAKE WALES TRAILWAYS	CITY OF LAKE WALES
10	BOWLEGS CREEK	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	50	LAKELAND HIGHLANDS SCRUB	POLK COUNTY
11	CAMP MEETING GROUND BRANCH CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	51	LAURENT/PEACE RIVER	POLK COUNTY
12	CIRCLE B BAR RESERVE	POLK COUNTY	52	LITTLE GATOR CREEK WILDLIFE AND ENVIRONMENTAL AREA	FL FISH AND WILDLIFE CONSERVATION COMMISSION
13	CLEAR SPRINGS	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	53	LITTLE PAYNE CREEK	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
14	COLT CREEK STATE PARK	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF RECREATION AND PARKS	54	MACKAY GARDENS AND LAKESIDE PRESERVE	CITY OF LAKE ALFRED
15	COME RANCH	HILLSBOROUGH COUNTY	55	MARY MALE SANCTUARY	FLORIDA AUDUBON SOCIETY, INC.
16	CROOKED LAKE PRAIRIE	POLK COUNTY	56	MORGAN CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS
17	CROOKED LAKE SANDHILL	POLK COUNTY	57	NORTH PRONG ALAFIA RIVER	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
18	CROOKED LAKE WEST	POLK COUNTY	58	NORTH/WALK-IN-WATER CREEK	POLK COUNTY
19	CROOKED LAKE WEST - BRITT TRACT	POLK COUNTY	59	OSPREY UNIT	FL FISH AND WILDLIFE CONSERVATION COMMISSION
20	CROOKED LAKE WEST - STUART TRACT	POLK COUNTY	60	PEACE RIVER HAMMOCK	POLK COUNTY
21	CROOKED LAKE WILDLIFE AND ENVIRONMENTAL AREA	FL FISH AND WILDLIFE CONSERVATION COMMISSION	61	PICKLE WETLAND SOUTH PRONG ALAFIA RIVER CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
22	CYPRESS GARDENS CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS	62	POLK LAKE	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
23	DISNEY WILDERNESS PRESERVE	THE NATURE CONSERVANCY	63	SADDLE BLANNET SCRUB PRESERVE	THE NATURE CONSERVANCY
24	FL DEP GREEN SWAMP CONSERVATION EASEMENTS	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS	64	SADDLE CREEK COUNTY PARK	POLK COUNTY
25	IPC HINES CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	65	SADDLE CREEK SANCTUARY	FLORIDA AUDUBON SOCIETY, INC.
26	GATOR CREEK RESERVE	POLK COUNTY	66	SHERWOOD L STOKES PRESERVE/LAKE MARION	POLK COUNTY
27	GENERAL JAMES A. VAN FLEET STATE TRAIL	FL DEPT. OF ENVIRONMENTAL PROTECTION, OFFICE OF GREENWAYS AND TRAILS	67	SOUTH PEACE RIVER	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
28	GREEN SWAMP	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	68	SOUTH PRONG ALAFIA RIVER	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
29	GREEN SWAMP LAND AUTHORITY LAND PROTECTION AGREEMENTS	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS	69	STREET SANCTUARY	FLORIDA AUDUBON SOCIETY, INC.
30	GREEN SWAMP/BASS CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS	70	SUMICA	POLK COUNTY
31	GREEN SWAMP/CHAI INVESTMENTS COMPANY CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF STATE LANDS	71	SUN RAY SCRUB	THE NATURE CONSERVANCY
32	HANCOCK COMMONS TRACT	THE NATURE CONSERVANCY	72	SUNSHINE GREEN SWAMP CONSERVATION EASEMENTS	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
33	HATCHINEHA RANCH	THE NATURE CONSERVANCY	73	TENOROC FISH MANAGEMENT AREA	FL FISH AND WILDLIFE CONSERVATION COMMISSION
34	HICKORY LAKE SCRUB COUNTY PARK	POLK COUNTY	74	THE JAHNA RANCH CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION
35	HILGOSHEE WILDLIFE MANAGEMENT AREA	FL FISH AND WILDLIFE CONSERVATION COMMISSION	75	TIGER CREEK PRESERVE	THE NATURE CONSERVANCY
36	HOMELAND	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	76	TINC/DELLOCK	THE NATURE CONSERVANCY
37	HOOKERS PRAIRIE LINK CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	77	UPPER HILLSBOROUGH	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
38	HOOKERS PRAIRIE SOUTHEAST CONSERVATION EASEMENT	FL DEPT. OF ENVIRONMENTAL PROTECTION, DIV. OF WATER RESOURCE MANAGEMENT, BUREAU OF MINING AND MINERALS REGULATION	78	UPPER LAKE MARION CREEK WATERSHED	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
39	IMC - PEACE RIVER PARK	POLK COUNTY	79	UPPER LAKES BASIN WATERSHED	SOUTH FLORIDA WATER MANAGEMENT DISTRICT
40	KISSIMMEE CHAIN OF LAKES	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	80	WINTER HAVEN TO LAKE ALFRED TRAIL	CITY OF WINTER HAVEN

# Polk County Emergency Operations Center and Fire Stations

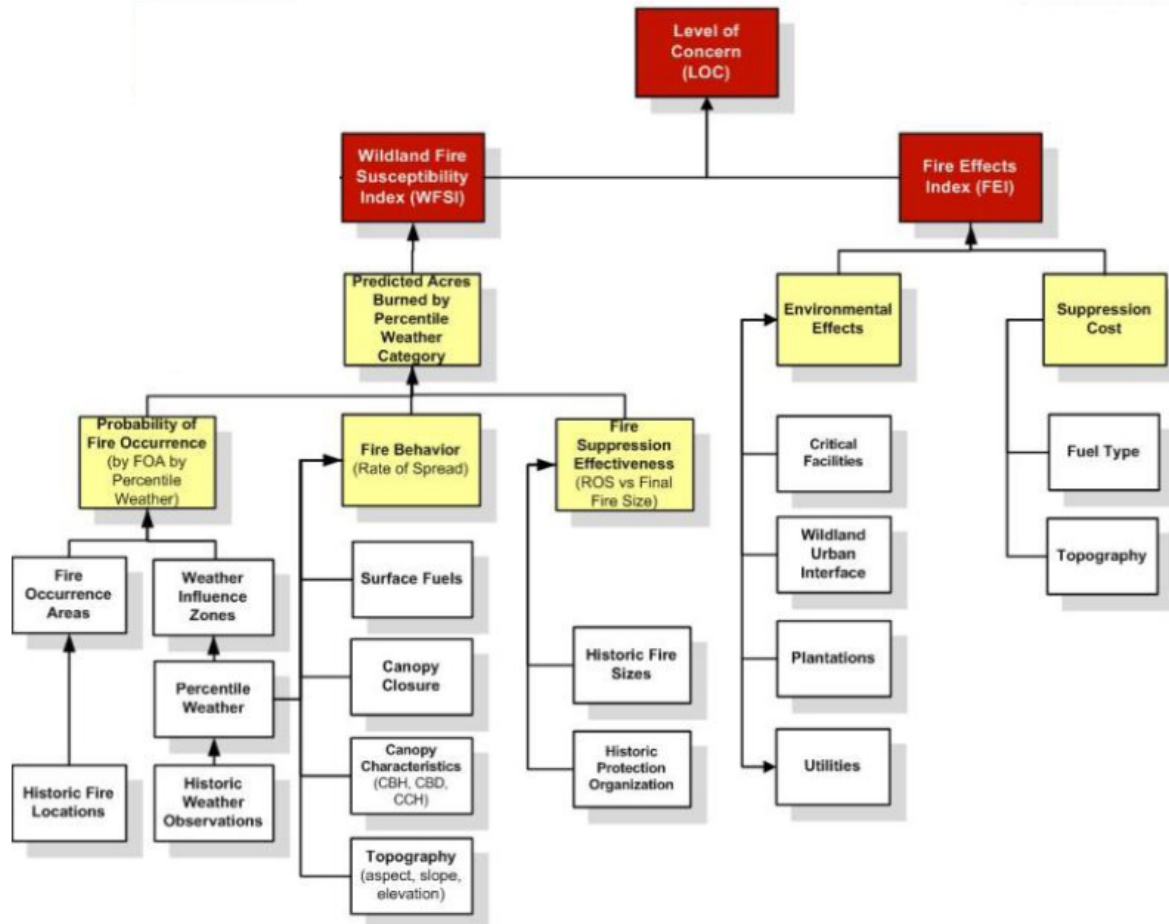


Data Source: Polk County Emergency Management, 2011.

### Florida Fire Risk Assessment System

The Florida Fire Risk Assessment System (FL FRAS) provides up to date wildfire occurrence, hazard, and risk data. This data is available as a 30 meter resolution dataset in GIS format. For this project, maps of surface fuels, Wildland Fire Susceptibility Index (WFSI), and Level of Concern (LOC) were generated for the County. Tabulations of acres within each LOC were also generated.

The LOC Data Flow



The LOC model integrates the WFSI output with the Fire Effects Index (FEI) to derive an overall LOC. LOC is calculated by simply multiplying WFSI x FEI. The output values were assigned to nine LOC categories ranging from Level 1 to Level 9. The LOC output can be used to prioritize areas for further analysis. The LOC results can be used to complete a more detailed analysis at the local level and communicate wildland fire management concerns.

Source: Florida Fire Risk Assessment System, FLFRAS v9.3 User Guide, 2011, Sanborn.

### Methods for determining population and structures at risk

The population and structure risk assessment was conducted for all Florida counties as part of a project to develop a Wildfire Mitigation Annex for the State of Florida Hazard Mitigation Plan. The following is a summary of the methodology used. A full methodology can be found in the State Wildfire Mitigation Annex.

The assessment combined FL FRAS LOC outputs with parcel and assessor data obtained from the Florida Division of Revenue (DOR). Data was combined to generate summaries consistent with FEMA Hazard Mitigation Planning methodologies that defined:

- total population by wildfire risk zone in each county
- total number of structures by wildfire risk zone in each county
- total value (\$) of structures by wildfire risk zone in each county

The primary sources of data for this assessment were as follows:

- FL FRAS, 2011 update
- Parcel Data – Florida Department of Revenue, 2010
- Assessor data – Florida Department of Revenue, 2010
- Census data – Census Bureau, Summary File 1(SF1) table, 2000 (2010 was not available at the time analysis was conducted)

The population was determined on a parcel basis by generalized land use code. The assessor data was utilized to assign a generalized land use code to each parcel based on the detailed DOR code for the parcel. The population was calculated as follows:

$$\text{Population of Parcel} = \text{PPH} \times \text{Res\_Units}$$

where:

PPH = persons per household in the census tract containing the parcel (derived from 2000 census figures)

Res\_Units = the number of residential units in the parcel as identified in the assessor data (derived from 2010 assessor data)

Certain caveats and assumptions exist with respect to the estimation of population. These include:

- *Parcels* - Each county provides their parcel data to the Florida Department of Revenue - each county's property appraiser is different and has different work flows and different base data. The information provided by one county may be different than the information provided by another. We can only work with the data that was provided and if the property appraiser did



not populate the number of units for a property we cannot determine the population of that parcel.

- *PPH Factors* - The people per household factors were calculated based on 2000 Census Tract data. The 2000 Census data was all that was available at the time of this project. In addition, due to the volume of data for the entire state the Census Tracts were used instead of Block Groups. The differences between using the Block Group level data and Tract level data would probably not be that great, but this was not tested. The PPH values are calculated based on data from the 2000 census so some tracts resulted in zero PPH values since they didn't have information in the 2000 census to determine the PPH values. In this case these tracts were given the average PPH of the state.
- *Population Control Totals* - The population is being compared to Florida Bureau of Economic and Business Research (BEER) quality control totals that those control totals are estimates based off of 2000 census data and that not every county accepts the BEER control totals.
- Population values are created as Integer so there are no partial people calculated - of course this means there is rounding in the population.
- The Commercial/Industrial generalized land use class includes the "Mixed Use" DOR Code which by definition includes "store and office or store and residential or residential combination". It is therefore reasonable for this class to have a population count.

A summary of the number of structures and the dollar value of structures for each parcel was also calculated using methods similar to the population summary described above. The assessed dollar value for each parcel and the number of structures on each parcel were available in the Assessor data<sup>1</sup>.

Source: Florida Division of Forestry, State Hazard Mitigation Plan Annex Project Documentation, Sanborn, 2011.

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<sup>1</sup> As with population, the quality of the assessor data varies from county to county.

## Appendix C: CWPP Projects

Projects included in this appendix are priorities as described in the Action Plan of the CWPP. These Project Detail Sheets can be used in adding projects to the Local Mitigation Strategy Project List and applying for grant funding. The following information will be provided for each project, as available.

*Project Name*

*Project Type*

[i.e. fuel mitigation, education, policy/regulations, or response improvement]

*Timeframe for Implementation*

*Agency Responsible for Implementation*

*Project Description*

*Estimated Cost*

*Potential Funding Source*

*Target Population Benefited*

Estimated Size:

Method for determining:

*Partnerships for Implementation*

*Project Evaluation Criteria*