

The image is a vertical composition. The top half shows a dense forest of tall, slender pine trees with vibrant green needles, reaching towards a clear blue sky. The bottom half shows a similar pine forest, but it is engulfed in a fire. Bright orange and yellow flames are visible in the background, with thick white smoke rising from the ground. In the foreground of the fire scene, several young pine saplings are scattered across a dark, charred forest floor.

Prescribed Fire in Florida Strategic Plan 2013-2020

Foreword

The future of prescribed fire in Florida is uncertain. Public perception, population growth, Federal regulations and related issues are challenging our ability to use the safest and best tool that we have available for applying a natural and essential process to the land.



Trees cannot survive such an intense wildfire, which feeds on fuels that have built to artificially-high levels.

Fire has shaped ecosystems for millennia. A natural and regular occurrence on the southern landscape, fires are mainly responsible for creating the association of plants and animals we see today. Native Americans and early settlers learned to mimic naturally-caused fires to stimulate lush new growth, attract wildlife and favor desirable plants.

In ecosystems that evolved in the presence of frequent fires, interaction between fire and the landscape is imperative. It is critical to nutrient cycling in the soil. It perpetuates a biologically diverse and healthy forest, renewing and restoring habitat for many species of wildlife. There is no substitute for this essential process. Fire by prescription, applied by professionals who use scientifically-sound practices, can assume the same role as natural fires, successfully and safely returning fire to the landscape.

About six of every ten acres in Florida—nearly 22 million acres—are considered fire-dependent. Research suggests that the optimum range of fire frequency ranges from one to five years, depending upon the types

of plant and wildlife communities. Currently, about two million acres are permitted for burning each year. If that number approximates what is actually being burned, we are achieving an average 11-year fire return interval, dramatically longer than what fire-dependent ecosystems require. The lack of more frequent, but less intense fires could mean serious consequences for fire-dependent species, natural communities, and ecosystems, leading to ecosystem dysfunction at a staggering level.

In addition to its environmental benefits, prescribed fire reduces the risk of catastrophic wildfires, ensuring a safer environment and a greater measure of protection for human lives and property. In many places around Florida, prescribed fire has aided immensely in controlling or preventing wildfires. Prescribed fire reduces the build-up of dangerous fuels from rapidly growing brush and forest litter. It also reduces the intensity of wildfires when they do occur.

The use of prescribed fire is perhaps most critical—and most controversial—in the wildland-urban interface, locations where people live within and in close proximity to forests. This interface continues to expand at an increasing rate in Florida. As we have seen in the southeast, and on many western landscapes, the incidence of catastrophic wildfires is increasing, placing people and their property increasingly at risk. The cost of suppressing wildfires and the economic value of properties lost continue to spiral upward.

Human health concerns cannot be easily dismissed. Smoke can cause difficulties for people with breathing problems. However, many scientists believe the quantity and nature of smoke from wildfires is quite different from that of well conducted prescribed fires. Prescribed fires must be set under specific conditions to allow for adequate combustion and smoke dispersal, reducing particulate matter in the air. In the long run, a well managed prescribed fire program produces less smoke, allowing better management of human health concerns.

In 2008, because of fire's importance to a healthy environment, and ultimately for human well-being, the Florida Forest Service, Tall Timbers Research Station and Land Conservancy, and the Georgia Forestry Commission organized a *Fire Summit: The Future of Fire in*

Florida and Georgia (now known as Fire Summit I).

The purpose and desired outcome of the Summit was to develop a vision for the future of prescribed fire in Florida and Georgia, and to develop the components for a specific five-year strategic plan to move us toward realizing that future.

Each of the Summit's 40 participants, representing more than 500 years of combined experience, were selected for their knowledge about prescribed fire and awareness of the increasing complexity of applying it. We sought broad involvement from both policy makers and practitioners to help develop both short and long term strategies to achieve our vision for prescribed fire by the year 2020.



Fires clear the way for many plants favored by wildlife. Photo: Ron Masters, Tall Timbers Research Station and Land Conservancy

The result of Fire Summit I was the *Prescribed Fire in Florida Strategic Plan 2008-2020* which consisted of seven broad goals broken down into twenty four specific objectives.

In the fall of 2012 this group met again to review the progress made during the first four years of that plan. The goals and objectives were put through a three question test:

- Should they be kept as is?
- Should they be kept but modified?
- Should they be removed?

The question was also asked, are there additional goals and objectives that need to be added to the plan.

This strategic plan is the culmination of that effort. It includes specific tasks, goals, and objectives that will help to create a future where prescribed fire is a valuable contributor to public safety and ecosystem health. Additional goals, direction, and tasks were added to address needs that are specific to the State of Florida.

Goals for this first Summit were to:

- Discuss the future of prescribed fire, given the current situation.
- Set goals for the future of prescribed fire.
- Discuss media messages.
- Define data and information needs.
- Identify all issues related to the continued use of prescribed fire.
- Determine what questions need to be answered.
- Develop an acceptable future for prescribed fire.

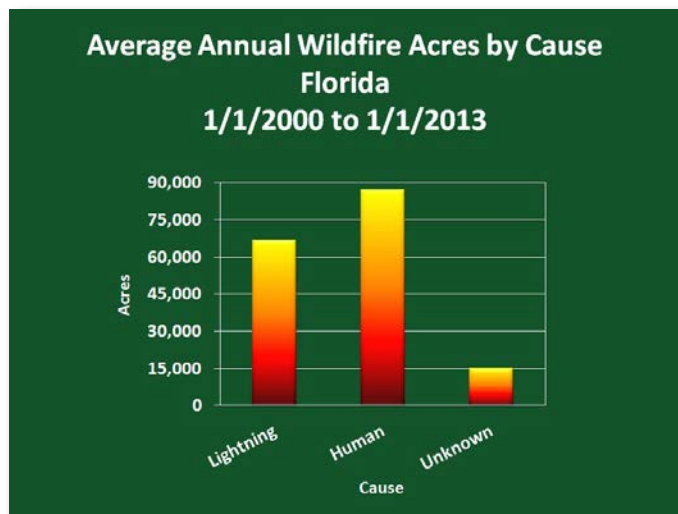


A Sense of Urgency

Unburned vegetation has reached dangerously high levels. As a result, wildfires are a greater threat to lives, property, and native species than ever.

The natural elements that gave rise to Florida's fire dependent ecosystems have changed little. What has changed is the growing impact of human activities on the number and severity of wildfires; and vice versa, the effect of wildfires on human health, lives and property. As the table shows, humans now cause more fires than lightning. Yet, fire-prone ecosystems are not being burned often enough to avoid the buildup of excessive fuels.

- Many of Florida's most rapidly growing population centers are also at high risk of catastrophic wildfires, such as along the Atlantic coast and in the central part of the state.
- As Florida's population has grown, more and more people are living and working in the Wildland/Urban Interface, where development has encroached on formerly rural forested areas.



Data from Florida Forest Service at:
<http://tlhforucs02.doacs.state.fl.us/fmis.publicReports/>

At the same time, the need for prescribed fires has become more urgent:

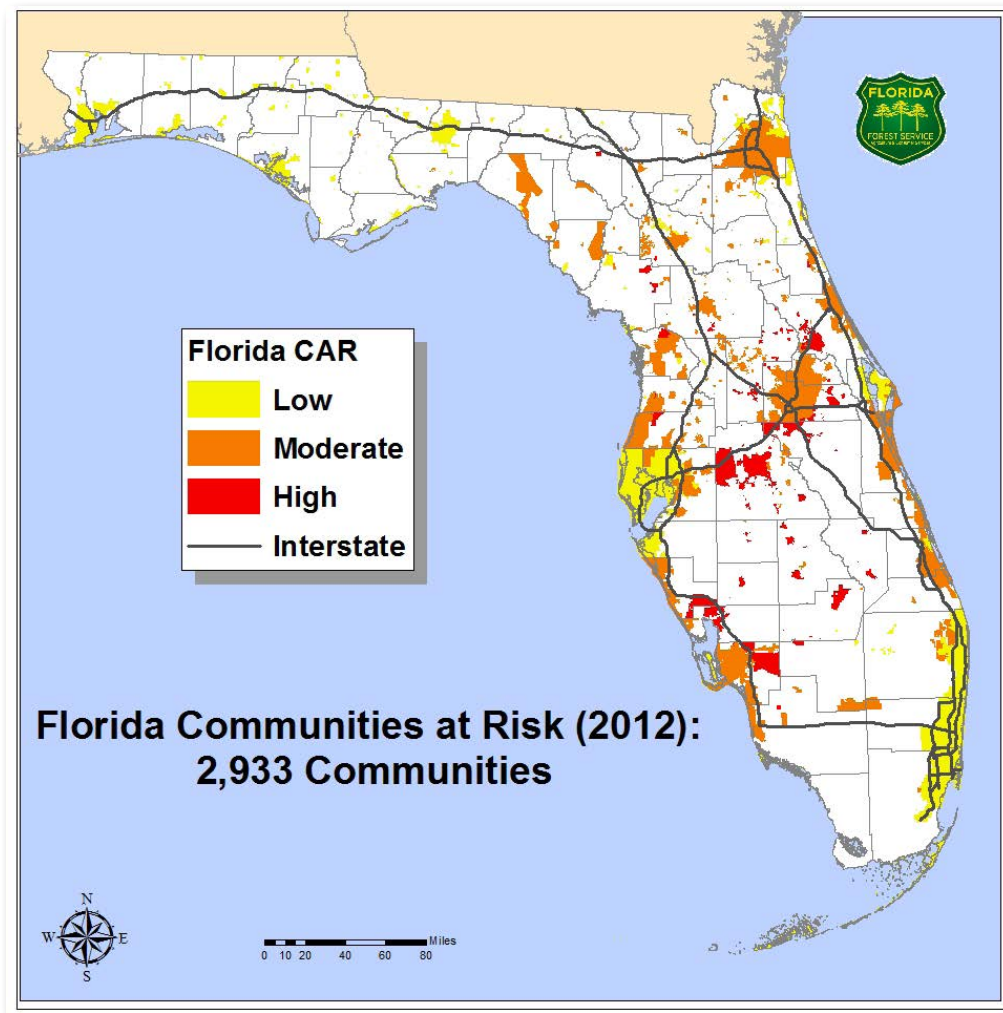
- Some of the state's most heavily populated areas are also some of the most fire-prone.
- Florida's population has nearly tripled since 1970.

Florida Population Growth 1970 to 2010		
Year	Population	Percent Change
1970	6.8 Million	37% from 1960-1970
1980	9.8 Million	30.4% from 1970-1980
1990	13.0 Million	24.5% from 1980-1990
2000	16.0 Million	18.9% from 1990-2000
2010	18.8 Million	17.6% from 2000-2010
2020	21.1 Million*	12.4% from 2010-2020

*Estimated

**Source: Florida Legislature, Office of Economic
& Demographic Research**

- The Florida Department of Environmental Protection estimates that more than 75% of Florida's land ecosystems benefit from—or need—frequent fires. The lack of fires places many species at risk, including the Red-cockaded Woodpecker.



Fires will continue to shape the Florida landscape for the foreseeable future. The question is:

Will we choose to use prescribed fires to sustain ecosystems and to protect human lives and property, or will we risk a future of costly, catastrophic wildfires?



A Vision for Prescribed Fire in Florida

Our vision for the year 2020 is a prescribed fire program that protects the right to burn, encourages the wise use of prescribed burning, and promotes public understanding of prescribed fire...



Prescribed fires like this one clear excess fuel but kill few trees. University of Florida photo

- Future generations share an educated perspective on prescribed fire, recognizing it as an essential tool for enhancing public safety, and vital to maintaining healthy ecosystems. Florida citizens accept more prescribed fires to reduce wildfire hazards on the millions of acres of untreated lands that have accumulated over the years.
- Federal, state, and local statutes protect the “right to burn”. The regulatory process strikes an appropriate balance between mitigating smoke and driver visibility concerns while encouraging the use of science-based prescribed fire. The regulatory process does not place an undue burden on prescribed fire practitioners.
- State legislators and regulators recognize that prescribed fire is critical to the management of the state’s natural resources and to public safety. Natural resource management agencies treat it as a high priority program.

- Natural fire cycles are being restored and maintained. Major fire adapted ecosystems are actively managed for restoration and maintenance with the appropriate fire regime.
- Prescribed fire matches the natural return intervals of ecosystems, or the land use objectives of land stewards, and reduces the risk of wildfire to lives and property.
- Investments in training, technology, and recruitment ensure the highest level of professionalism amongst practitioners. Professional standards and a code of ethics are in place, supported, and adhered to.



Firefighters keep a watchful eye on a prescribed fire. Florida Forest Service Photo



Goals and Objectives Toward Achieving the Vision

Each goal sets a benchmark for achieving our vision for the year 2020. Objectives describe more specific work that needs to be accomplished during the next seven years to make progress toward achieving the goals.

Each objective has a designated accomplishment year and an assigned group or agency that has agreed to provide the leadership needed to meet the objective. Lead groups will decide on the details for implementing objectives, submitting periodic progress reports to the State Forester. Adjustments and amendments to the plan will be made annually, as needed.



Prescribed burning personnel use drip torches to create “black lines” to keep flames within the prescribed fire boundary.

Goal One

Continue to mitigate smoke impacts on air quality and traffic by better smoke management.

- **Objective 1:** Brief State and Federal Environmental Protection Agencies periodically about the differences between emissions from prescribed fires and wildfires.
 - *When: Ongoing*
 - *Lead group: Florida Forest Service*
- **Objective 2:** Use the latest technology to model and track smoke plumes and monitor visibility in smoke sensitive areas.
 - *When: Ongoing*
 - *Lead group: Florida Forest Service*
- **Objective 3:** Integrate defensive driving tips for smoke and fog into the state licensing process. Provide handouts to car rental agencies
 - *When: By 2015.*
 - *Lead groups: Florida Forest Service and Division of Highway Safety and Motor Vehicles*
- **Objective 4:** Improve training and procedures for law enforcement personnel associated with prescribed fires.
 - *When: Ongoing*
 - *Lead groups: Florida Forest Service, Department of Transportation, and Florida Highway Patrol*
- **Objective 5:** Ensure newest smoke management tools are reviewed at every prescribed fire Council meeting
 - *When: Ongoing*
 - *Lead Group: Councils*

- **Objective 6:** Pursue most effective methods to inventory emissions from prescribed fire and wildfire using the latest technology.
 - *When: Ongoing*
 - *Lead Group: Tall Timbers and DEP Air quality*
- **Objective 7:** Support science-based research in development of effective tools to better predict low visibility on roadways for public safety.
 - *When: Ongoing*
 - *Lead Group: All*
- **Objective 8:** Encourage prescribed burners to monitor residual smoke. With emphasis on monitoring during the early morning hours.
 - *When: Ongoing*
 - *Lead Group: Councils and Florida Forest Service*
- **Objective 9:** Ensure that state forestry agencies are included in the Federal EPA review of air quality rules, regulations and policy changes. Also encourage Councils to participate in public review process.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service and Florida Department of Environmental Protection*
- **Objective 10:** Create a Smoke Management Guide.
 - *When: 2013*
 - *Lead Group: Florida Forest Service*

Goal Two

Sustain and enhance the public communication and education campaign to garner support, acceptance, and recognition of the value of prescribed fire.

- **Objective 1:** Continue to promote the “Take a Forest Break” brand through public outreach, advertising and social media.
 - *When: Ongoing*
 - *Lead Group: All*

Objective 2: Work with other States outside the southeast that are interested in being a part of the “Take a Forest Break” campaign.

- *When: Ongoing*
- *Lead Group: Tall Timbers and Florida Forest Service*



Workers use hand tools and heavy equipment to build fire breaks to contain the flames. Florida Forest Service photo

Objective 3: Expand the inclusion of fire weather forecasts in local television and radio news programs.

- *When: Ongoing*
- *Lead Group: Florida Forest Service and Councils*

Objective 4: Continue fire education in public school curricula using private and government personnel (Fire in Southern Ecosystems).

- *When: Ongoing*
- *Lead Group: Florida Forest Service*

Objective 5: Work with public officials keeping them informed on prescribed burn programs in their area.

- *When: Ongoing*
- *Lead Group: Councils*



Goal Three

Establish/Enhance partnerships and acquire sufficient resources to promote and implement increased prescribed fire operations

- **Objective 1:** Develop a needs assessment that summarizes required resources for meeting the workload.
 - *When: by 2014*
 - *Lead Group: Florida Forest Service*
- **Objective 2:** Form a coalition to: a) secure a dedicated source for prescribed fire funding, b) seek additional grants to implement prescribed fire on private land, and c) increase budgets for state fire agencies.
 - *When: by 2013*
 - *Lead Group: The Nature Conservancy*
- **Objective 3:** Encourage the development of implementation-level partnerships for prescribed fire modeled after existing groups such as GCPEP, ARSA (MOU) and the NE Florida Interagency Prescribed Fire Team (MOU).
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service, Councils and The Nature Conservancy*
- **Objective 4:** Utilize information technology to streamline planning and permitting/authorization processes for prescribed fire practitioners.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service*
- **Objective 5:** Clearly illustrate to lawmakers prescribed fire's roles/benefits in the three major elements of the National Wildland Fire Cohesive Strategy.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service and Councils*
- **Objective 6:** Seek creative solutions to recover lost capacity due to budget cuts.
 - *When: Ongoing*
 - *Lead Group: All*



Goal Four

Take a strategic, proactive role in growth management and transportation planning to mitigate future impacts of increasing urbanization on prescribed fire

- **Objective 1:** Incorporate pro-prescribed fire language in all County comprehensive plans supported by the Association of Counties.
 - *When: Ongoing*
 - *Lead Group: Councils*
- **Objective 2:** Introduce smoke disclosure language in deed transfers and homeowner association agreements with county planning
 - *When: Ongoing*
 - *Lead Group: Councils*
- **Objective 3:** Develop a smoke easement template
 - *When: by 2015*
 - *Lead Group: Florida Forest Service*
- **Objective 4:** Work with DOT, during the highway planning process, to include message boards and signs in areas with frequent smoke issues.
 - *When: by 2013*
 - *Lead Group: Florida Forest Service and Councils*



Florida Today Photo



Choosing proper weather conditions for a prescribed fire allows for good smoke dispersion.

- **Objective 4:** Implement a retention system for prescribed fire staff.
 - *When: Ongoing*
 - *Lead Group: Agency specific*
- **Objective 5:** Work with research entities on economic analysis of benefits of prescribed fire.
 - *When: Ongoing*
 - *Lead Group: Joint Fire Science Program, University of Florida and Tall Timbers*



Frequent low intensity fires encourage the growth of a wide variety of plants.
Photo: Masters; Tall Timbers

Goal Five

Establish and sustain a high priority for prescribed fire on public lands.

- **Objective 1:** Provide continuous funding to hire and train new prescribed fire personnel
 - *When: Ongoing*
 - *Lead Group: Agency-specific*
- **Objective 2:** Reflect the high priority of prescribed fire in manager's performance standards
 - *When: Ongoing*
 - *Lead Group: Agency Specific*
- **Objective 3:** Review the state prescribed fire certification program. Improve and enhance as necessary.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service*

Goal Six

Enhance the credibility and professionalism of our prescribed fire practitioners

- **Objective 1:** Develop and implement a standard code of ethics for all prescribed fire professionals
 - *When: by 2013*
 - *Lead Group: Councils*
- **Objective 2:** Expedite the transfer of new prescribed fire technology to field use.
 - *When: Ongoing*
 - *Lead Group: Councils and Joint Fire Science Program*
- **Objective 3:** Start a formal technology transfer program.
 - *When: Ongoing*
 - *Lead Group: Councils and Joint Fire Science Program*

Goal Seven

Increase incentives and financial assistance to land managers using prescribed fire

- **Objective 1:** Increase the amount of funding available through grants and cost share programs to private individuals to implement prescribed burning
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service and Natural Resources Conservation Service*
- **Objective 2:** Continue seeking appropriate avenues and coordinate with other stakeholders to inform private landowners of incentives (financial & non-financial) that is available for prescribed burning and alternative fuel treatments.
 - *When: Ongoing*
 - *Lead Group: Councils*
- **Objective 3:** Aggressively educate/inform lawmakers on conservation benefits of prescribed fire and the need for incentives for property owners to safely conduct prescribed fires.
 - *When: Ongoing*
 - *Lead Group: Councils*
- **Objective 4:** Elevate the priority of prescribed fire in ranking of competing cost share allocations.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service and Natural Resources Conservation Service*
- **Objective 5:** Work through the Cohesive Strategy and Longleaf Initiative to address increased funding for burning on private lands.
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service and The Nature Conservancy*
- **Objective 6:** Seek creative solutions to increase capacity of private sector prescribed burn practitioners..
 - *When: Ongoing*
 - *Lead Group: Florida Forest Service, The Nature Conservancy and Natural Resources Conservation Service*

Monitoring & Evaluation

Lead organizations will develop a detailed work plan specifying what will be done, when it will be completed, and by whom. This information will be reported to the Prescribed Fire Councils.



In May of 2008, wildfires damaged or destroyed nearly two dozen homes and consumed 12,000 acres near Palm Bay and Malabar.

Photo: Florida Today

In addition, each lead entity will email progress reports every six months to the Florida Forest Service for compiling and distribution. The Florida Forest Service will conduct an internal review annually, including a comparison of acres burned by prescribed fire compared to the average over the last 5 years.

All partners will meet annually, in person or by conference call, to:

- Assess progress to date
- Make needed amendments
- Promote Accomplishments
- Send Accomplishments to VIP's



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***Uncontrolled wildfire
Associated Press Photo***



***Prescribed fires help maintain healthy vegetation levels which reduces the potential for
intense wildfires. Photo: Florida Forest Service***

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